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'ALL OUR PEOPLE ARE DYIN'': DIET AND STRESS IN AN
URBAN ABORIGINAL COMMUNITY

by
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A thesis submitted for the degree of
Doctor of Philosophy
at the Australian National University.

August 1988

DECLARATION

Except where indicated otherwise this thesis
is my own work.

Beverly Sibthorpe

Beverly Sibthorpe

August 1988

PREFACE AND ACKNOWLEDGEMENTS

This was primarily a study of food intake and the social, economic and historical factors which influenced dietary practices. In view of contemporary perceptions of Aboriginal dietary practices and social conditions and their relation to health, I expected to find that people in the community studied ate a very poor diet and that this was largely for economic reasons. During my time in the field however, I was continually puzzled by the apparent inconsistencies in what I saw and heard. It was ultimately apparent that the majority of people were not living on diets of 'damper-syrup-and-tea', that they had incomes adequate to purchase all necessities, that they were living in reasonable housing, and that they had access to a wide range of social and medical facilities. Their health was nevertheless extremely poor and their mortality rate high. It was not until I returned from the field, performed my dietary analysis and thought about these inconsistencies, that I came to the realisation that the almost palpable sense of social distress which permeated the entire community, and the many stories of past injustices and hardships, needed to be considered as possible keys to some of the health problems there. So although it was not my original intention to consider the role of stress as a major health factor, and I did not attempt to measure it in the field in any way, the results of the dietary study have been interpreted in the context of a broader look at the underlying factors in poor Aboriginal health in settled Australia.

Many people have helped me with this research. In the planning stages I had useful discussions with Dr Nancy Palmer, Dr Ingrid (Coles) Rutishauser, Dr Ian Darnton-Hill and Karen Cashell. Karen continued to give me support and encouragement on my return from the field and it was

largely through her that I was able to use the (then) Department of Health's facilities to code and analyse my data. She also read one of the draft chapters. I must also thank Pauline Armarrego and Joan Chidgey for their cheerful help with my numerous data coding questions. The permission of the Department of Health to use their data base and nutrient analysis program is acknowledged.

Dr Neil Thomson arranged my introduction to Durri Aboriginal Medical Service in Kempsey and took a continuing interest in my work. I thank Mr Hector Dungay, Chairman of the Board of Directors for permission to work at the Service. In the field I am especially grateful to Patricia (Patty) Donovan, who acted as research assistant, guide and mentor throughout. She shared a great deal with me that was not always easy for an Aboriginal person to share with a white. I appreciate the funding support provided by the Australian Institute of Aboriginal Studies which enabled me to fund her participation. Special thanks also go to Sr Noelene Graham who helped smooth my way into the community. Her support was critical to my being accepted at the medical service. I also wish to thank Dr Christine Ahern, Dr John Beard, Stephen Blunden (ADC), Annette Dickson, Alice Dotti, Robert Draffan (DAA, Port Macquarie), Hector Dungay, David Huggonson (ADC), Dr Harold Johnston, Dr John McKeown, Andrew Reiner and Keith Roberts for their kindness and support. My thanks go also to the many people in the community who gave me their time and quite considerable patience, often making me welcome in their homes.

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ABSTRACT

This is primarily a study of dietary practices and nutrient intakes in relation to health in an urban Aboriginal community in New South Wales. It examines the assumption that poor diet is one of the major, if not the major, contributing factors in poor Aboriginal health. The data indicate that in the community studied dietary patterns were consistent with those of the wider society. Intakes of nutrients were not always optimal compared with recommended dietary intakes (RDIs) for Australia, but compared to the rest of the Australian population, and different sub-sections within it, they were not as poor as expected. In particular, the high fat, high sugar, largely vitamin deficient diet frequently assumed to be ubiquitous in Aboriginal communities is not supported by this study. Consequently, it is argued that the importance of the role of diet in poor Aboriginal health may have been over-stated.

In re-evaluating the current emphasis on diet and other 'lifestyle' factors it is suggested that the scope of the analysis needs to be considerably broadened to include other factors which may be more ambiguous in terms of their effects on health. What seems particularly important is the high level of stress evident in the community studied. This stress seems to be derived from a particular set of historical and contemporary social conditions which, it is argued, need to be more fully considered as part of the totality of environmental factors which impinge on the health of Aborigines in settled Australia.

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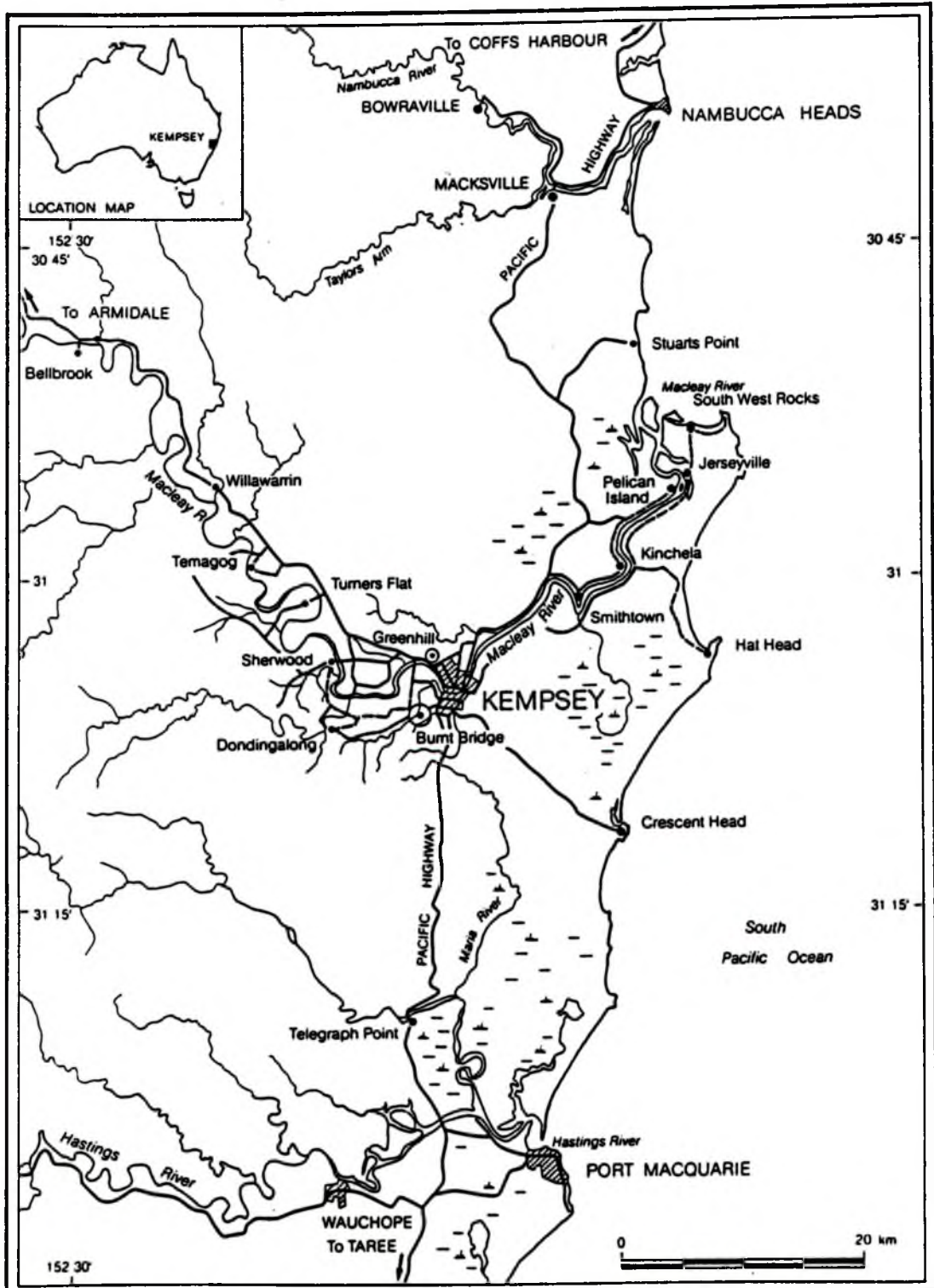
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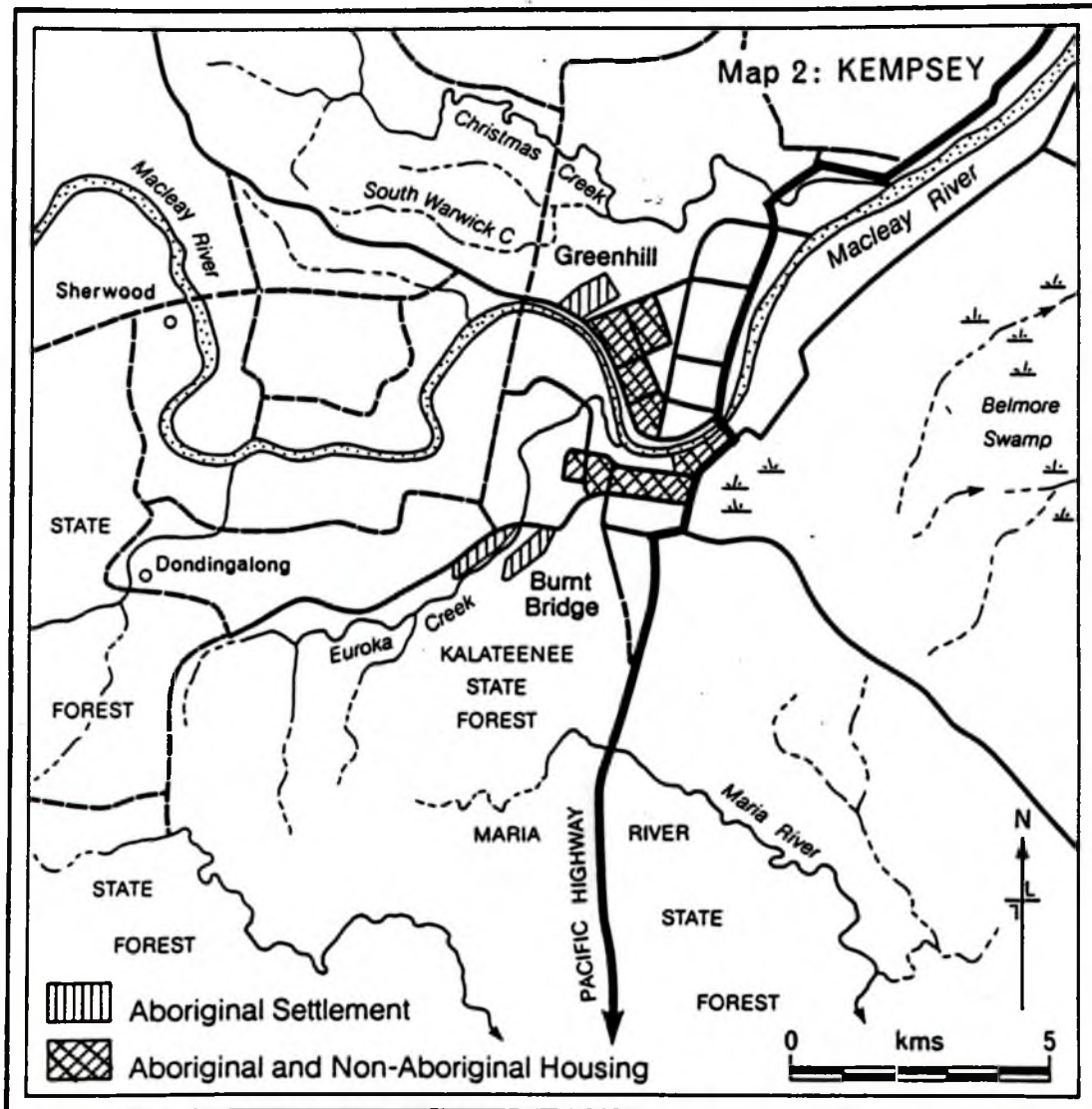
ABBREVIATIONS USED

AAPA - Australian Aborigines Progressive Association
ADC - Aboriginal Development Corporation
ALT - Aboriginal Lands Trust
AMS - Aboriginal Medical Service
APA - Aborigines' Progressive Association
APB - Aborigines Protection Board (later AWB)
AWB - Aborigines Welfare Board
CES - Commonwealth Employment Service
CWA - Country Womens Association
DAA - Department of Aboriginal Affairs (Federal)
DAETC - Dunghutti Aboriginal Elders Tribal Council
FCATSI - Federal Council for the Advancement of Aborigines and
Torres Strait Islanders
GHPA - Greenhill Progress Association
KLALC - Kempsey Local Aboriginal Land Council
KAYCC - Kempsey Aboriginal Youth and Cultural Centre
NSW - New South Wales
RDA - Recommended daily allowance
RDI - Recommended dietary intake
SLA - Statistical local area
NAIHO - National Aboriginal and Islander Health Organisation
WHO - World Health Organisation
UAM - United Aborigines Mission

Map 1. The Kempsey region



Map 2. The town of Kempsey showing the location of Aboriginal housing



Research: B. SIBTHORPE, del. J.R.G., A.N.U., 1988

CHAPTER ONE

THE ABORIGINAL HEALTH DEBATE

There is currently a major re-evaluation of public health and health services taking place in Australia, amidst escalating health care costs and increasing Commonwealth budgetary restraint. In this context explanations are being sought for the continued poor health of Aborigines. For over the last decade or more there has been quite considerable government expenditure on Aboriginal health, both indirectly through improved housing and utilities and directly in the provision of special health services. In spite of this however, Aborigines remain at a severe health disadvantage when compared to the rest of the Australian population.

Aborigines comprise a small but socially heterogeneous minority of the population. For those living in remote communities, an adequate water supply, shelter, power and sanitation continue to be major public health issues. For the urban majority in settled Australia however, physical conditions have become decreasingly relevant as health variables with the provision of fully serviced housing to most of the population. So although some continue to live in or near urban centres with grossly inadequate facilities, the health problems of urban dwellers differ in important respects from those of remote communities. It is with the health of urban Aborigines, particularly those living in New South Wales, that I am primarily concerned in this thesis.

The 1986 national census enumerated a total Aboriginal and Torres Strait

Island¹ population of 227,645, which was a significant increase (42.4%) over that enumerated in 1981. Although Aboriginal fertility exceeds that of non-Aboriginal Australia, this apparent population explosion cannot be explained biologically. Rather it can be understood largely in terms of increased self-identification, improved field procedures including census awareness campaigns in Aboriginal communities, and improved data processing with respect to Aboriginal responses (ABS 1987).

Of the total, 25.9% (59 011) lived in New South Wales, second only to Queensland with 26.9% (61 268) of the population. Nationally, 66.5% of Aborigines lived in urban environments; 24.4% in major urban centres (population of 100 000 persons and over), and 42.1% in other urban centres (population 1 000 to 99 999 persons). However, in New South Wales the proportion living in urban centres was much higher than the national average, at 82.6%.

The health status of Aborigines in New South Wales

In spite of the fact that Aborigines in New South Wales have been subject to close and continuous government supervision for almost one hundred years it was not until the late sixties that a profile of their health began to emerge. At this time 'a few bits, a few pieces, several hunches, many impressions and wide generalisations' were all that was 'known' of the health of the Aboriginal population (Tatz 1966:52).

Yet:-

¹ The accepted definition of an Aborigine or Torres Strait Islander is 'a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community with which he/she is associated' (ABS 1987:1).

The lack of data on Aboriginal health indices and their trends is not always because the information has not been gathered. Often it appears that important data have been collected but have lain untouched, gathering dust in² government offices and archives, never collated and analysed. In other cases, detailed but otherwise impersonal reports have been written,³ but have remained confidential and thus forgotten in the service³ that originated them (Moodie 1973:viii) [emphasis in the original].

Throughout this period, the Aborigines Welfare (previously Protection) Board, which had jurisdiction over Aboriginal welfare, consistently maintained that Aboriginal health was no cause for concern, in spite of the fact that it had information to the contrary (Parliament of New South Wales 1981).

The lack of any publicly available empirical basis on which to evaluate Aboriginal health in New South Wales became apparent following the appointment in 1965 of the Joint Committee of the Legislative Council and Legislative Assembly to inquire into all matters relating to Aboriginal welfare. In its report the Committee stated that the absence of official health statistics made it impossible to assess possible health differences between Aborigines and the rest of the community (Parliament of New South Wales 1981). Interestingly, this criticism of lack of statistics has since been reiterated in every major Aboriginal health review (see Parliament of the Commonwealth of Australia 1979; Parliament of New South Wales 1981; New South Wales Task Force on Aboriginal Health 1983).

A change in the social and political climate in the late sixties and

² The Aborigines Welfare Board in fact had figures for the annual populations, and births and deaths for the stations under its jurisdiction which Moodie (1973:102) 'extracted and tabulated for the period 1954-5 to 1963-4'!

³ Moodie (1973) is alluding here to religious organisations.

early seventies focused attention on Aboriginal social and economic disadvantage which was documented in an increasing number of publications (see for example Rowley 1972, Taft 1975, Gale 1972, Moodie 1973, Broom and Jones 1973) and Aborigines were specifically identified in the Australian Government Commission of Inquiry into Poverty (Department of Sociology, University of New England 1974, Brown et al 1974, Hill 1975, Commission of Inquiry into Poverty 1975, 1976). While housing, employment, income, education, and legal protection were all areas in which Aborigines could be seen to fare poorly when compared with other Australians, health remained extremely difficult to evaluate (Moodie 1973; Broom and Jones 1973).

Moodie (1973) undertook the first comprehensive evaluation of Aboriginal health in New South Wales. Using a multi-faceted approach in order to identify Aborigines in death registers, he looked at deaths in non-metropolitan New South Wales (i.e. excluding Sydney) for the period 1950 to 1964. These data showed that Aboriginal death rates in all age groups exceeded death rates in the general population. In particular, Aboriginal death rates in the 0-4, 30-39, and 40-49 age groups were approximately three times the rates for the non-metropolitan population as a whole (Moodie 1973:108). A comparison of causes of death also revealed some striking differences, although most were influenced to some extent by the different age structures of the populations. In summary, Aborigines were much more likely to die from infectious diseases (or their sequelae) and diseases associated with infancy, and much less likely to die from cardio-vascular diseases and cancers. At that time available mortality data for the different states also suggested an inverse relationship between urbanisation and mortality which led Broom and Jones (1973) to predict a decline in Aboriginal

mortality because of their increasing urbanisation.

Although there is still no national system of Aboriginal health statistics,⁴ there has since been a significant increase in the amount of published data on Aboriginal health in both remote and urban communities. For New South Wales, a recent study by Smith et al (1983) which replicated Moodie's work to some extent, suggests that there has been little overall improvement in Aboriginal health in the last 30 years. Based on data for 1980-81, Smith and his co-workers calculated life expectancies at birth for Aborigines in New South Wales country regions (i.e. excluding Sydney, Newcastle and Wollongong) which range from 48.1 to 49.2 years for males and 55.2 to 57.3 years for females.⁵ This compares with life expectancies in the New South Wales general population of 70.9 for males and 77.7 for females. Thus Aborigines can expect to live 20 years less than the population as a whole. Similar data are reported for Queensland but none are available for the other states or territories (Thomson 1984a).

Disaggregation of the data by age and cause of death indicates that there has been a significant fall in Aboriginal infant mortality in New South Wales, in line with a national trend which has shown a marked decline from an estimated 100 infant deaths per thousand live births in the early seventies to 26.4 deaths per thousand live births in 1981. The infant mortality rate for the New South Wales data (1980-81) is 'tentatively estimated' to be 25 per thousand live births (Julienne et

⁴ This is now considered to be the highest priority of the Aboriginal Health Branch of the newly created Australian Institute of Health.

⁵ These Aboriginal life expectancies are in the ranges recorded in 1881-1890 for the total male population, and in 1901 to 1910 for the total female population (Thomson 1984a).

al 1983:13). This is probably largely attributable to improved living conditions and the expansion of health services for Aborigines (see below). However, the national rate is still 2.8 times higher than the estimated (national) non-Aboriginal rate of 9.6 per thousand (Thomson 1984a).

Opinions differ as to the relative severity of adult mortality.

Although it has been claimed there were 'encouraging decreases' in morbidity and mortality during the 1970s (Reid 1979:2), later studies have shown that adult mortality in particular may be increasing (Julienne et al 1983; see also Reid and Kerr 1983; Thomson 1984a), while Gray (1987a) maintains that it has remained at crisis level since at least the 1960s. In any case adult mortality is extremely high, particularly amongst younger adults for whom the relative risk of death⁶ for males is 9.8 for ages 30-34, 11.2 for ages 35-39 and 13.5 for ages 40-44, while female relative risk shows a marked peak to 18.6 at ages 35-39 (Julienne et al 1983).

There has also been a significant shift in the main causes of death in adults. Whereas Moodie found that infectious diseases were largely responsible for adult mortality, the later study, using 1980-81 data, shows that disease of the circulatory system was by far the leading cause of death. Furthermore the rate of Aboriginal deaths from circulatory disease is much higher than the rate for New South Wales - the overall relative risk of death from these causes being 5.4 for Aboriginal males and 3.9 Aboriginal females (Julienne et al 1983). In the age groups 25-34 years and 35-44 years the age-specific Aboriginal

⁶ The percentage ratio of Aboriginal death rates to total New South Wales rates standardised to eliminate the effects of the different age structures of the population.

circulatory system death rates for both males and females were twenty times the total rates (Thomson 1984a). Injuries and respiratory diseases followed as leading causes of death, then 'ill-defined conditions',⁷ and neoplasms.

Other health statistics including high rates of hospitalisation (Thomson 1984a), infant death (Thomson 1983; Julienne et al 1983), childhood infections (Thomson 1984a), diabetes (Wise et al 1976; Stanton et al 1985) and parasitic infestations (Owusu-Ansah 1981) confirm the continuing poor health of Aborigines both nationally and in New South Wales.

There are no studies which compare Aboriginal health statistics with the health statistics of other Australians disaggregated on the basis of socio-economic status or class. Other data suggest however, that Aboriginal health statistics would compare most unfavourably with Australian statistics, even if the comparisons were made only with other economically disadvantaged groups in the Australian community. For example, McMichael's (1985) figures for the association between mortality and class in Australian males show less than a twofold gradient in mortality from the highest to the lowest class with standardised mortality ratio (SMR) increasing from 0.70 for Class A to 1.31 for Class D. On the other hand, Smith et al (1983) show a four-and-a-half fold increase in SMR between non-Aborigines and Aborigines in New South Wales country regions. It thus seems unlikely that the mortality differential between Aborigines and the general population can be explained purely on the basis of economic factors.

⁷ From discussions with Thomson it is clear that causes of death in Aboriginal medical records and on Aboriginal death records were often poorly defined.

Contemporary explanations for poor Aboriginal health

Not surprisingly, the continuing crisis in Aboriginal health has stimulated considerable debate as to its causes. It has become an issue of both national and international importance and has been the subject of numerous research projects, conferences, government enquiries and official reports.

From these analyses two broad categories of explanation have emerged. The first is a behavioural explanation which views a number of health variables, particularly the so-called 'lifestyle' factors, as largely the outcome of personal choice. The second, more structural, approach focuses on these same 'lifestyle' factors as proximal causes of ill-health which are grounded in the wider social conditions under which Aborigines live.

(a) the behavioural approach.

As a health concept, 'lifestyle' has gained remarkably rapid popularity in both the scientific and popular literature (Coreil et al 1985).⁸ Its empirical support is derived primarily from epidemiological studies which have consistently identified a number of variables which correlate with the prevalence of the diseases largely responsible for adult mortality in industrialised nations. These so-called 'diseases of affluence' appear to be influenced to a some degree by such factors as high fat diet, cigarette smoking, obesity and sedentism, all of which can be related to the behavioural characteristics of individuals and communities.

⁸ In tracing the origins of the 'lifestyle' concept through Veblen and Weber to Marx, Coreil et al (1985) show that its contemporary meaning is in fact antithetical to its original formulation in which 'lifestyle' was viewed as the outcome of a particular set of social conditions.

A recently released major review of Australian health attests to the importance of the individualist 'lifestyle' concept in contemporary health philosophy. Proposing a hierarchical model of 'responsibility' for health, the report states that it may be 'tackled' at four levels:-

- first, there are actions that are within the power of individuals to take to improve their health, in the spirit of self-reliance;
- second, there are strategies that can be adopted by local communities with little outside help, that can materially improve their member's chances of achieving better health;
- third, there are changes which [organisations] can make to ensure that healthy choices are easier choices;
- fourth, the Commonwealth Government and national organisations could take specific actions which present evidence suggests would improve health (Better Health Commission 1986a (vol 1):7) [emphasis added].

It is therefore not surprising that a 'lifestyle' health model has been applied to Aboriginal health problems (McIlraith et al 1982; Thomson 1984a; Gracey 1985). It is argued for example that there are serious signs of deterioration in Aboriginal health:-

particularly in areas relating to individual and community behaviour, such as the so-called 'lifestyle' diseases (Gracey 1985:S44) [emphasis added].

Significantly however, it is also a consistent finding of epidemiological studies that health is inversely related to social class.⁹ Taylor (1979) reviews a number of Australian studies which show not only an inverse relation between infant mortality, adult morbidity

⁹ There are few data relating to the health profile of ethnic minorities in Australia. Dasvarma's (1980) study shows that Australian-born males have significantly higher mortality than any of the immigrant groups, the migrant advantage diminishing with increasing duration of Australian residence. He notes however, that migrants have health screening before being accepted for immigration.

and adult mortality and social class, but also social patterning in causes of death. A study by McMichael (1985:220) of adult male mortality in the years 1970-72 and 1975-77 found that:-

for all-causes mortality and for each of the nine major cause-of-death groupings, excepting endocrine disorders, age-standardised death rates were higher in the lower social classes.

Similar findings are reported by Broadhead (1985) and Broom (1985), and in Gibson and Johansen's (1979) morbidity/mortality 'map' of metropolitan Sydney. The Australian findings are also consistent with those of many overseas studies (see for example DHSS; Powles 1977; Windschuttle 1979; Dowding 1981; Moser et al 1984; Marmot et al 1984).

It could be inferred that 'lifestyle' factors known to be deleterious to health are differentially distributed between social classes and there is some evidence from Australia to support this (e.g. McMichael and Hartshorne 1982; Better Health Commission 1986a).¹⁰ However, it also raises the possibility that certain sets of social conditions are more conducive to health-threatening behaviour than others.

The causation of disease has several dimensions and since there is clear evidence that behavioural factors are important it would be unreasonable to dismiss outright the 'lifestyle' component of health. However, such

¹⁰ There are in fact rather few Australian data which provide evidence of a relationship between social class and lifestyle factors and a small number of studies suggest that there is no clear association between the two. Gibson et al (1977) have compared cigarette smoking in two large population samples in Sydney and found that smoking rates in the lower socio-economic sample (51.4% of males and 42.5% of females) were similar to those in the higher status group. Frequency of alcohol consumption in Gibson et al's (1977) lower status sample, of which 30.5% of males and 11.2% of females drank alcohol every day or most days, compares with 34% of males and 17% of females, for all occupational categories combined in the Risk Factor Prevalence Study, who consumed alcohol with that frequency (National Heart Foundation of Australia 1980).

an approach tends to obscure the contribution of structural factors to ill health, by emphasising an 'unrealistic behavioural model' of disease (Crawford 1977:671). Within such a model, dietary practices, alcohol consumption, analgesic abuse and other 'lifestyle' factors are seen, not as behaviours which occur in the context of a particular set of social conditions, but as choices made by individuals and communities.

When disadvantageous social conditions and their consequent poor health are seen as self-perpetuating rather than as imbedded in the wider social framework, the 'lifestyle' concept is applied to the lifeways of entire classes\cultures. Thus:-

It is more likely that the reasons for these health gradients across social classes will be found in the behavioural patterns and lifestyle which are an integral part of the makeup of the various classes (Taylor 1979:27).

Such a 'culture of poverty' model of health (see for example Nurcombe 1970; Kessler and Cleary 1980) has come under increasing attack.

Indeed, some critics argue that its ready acceptance and elaboration in recent years is largely a political response by governments and public health bodies to the increasing politicisation of health, and the documentation of stark class differentials in health status in industrialised nations (Crawford 1977; Doyal 1981; Windschuttle 1979).

There is also a potential for class/culture discrimination in the practical application of a 'lifestyle' health model as discussed by Crawford (1977). He shows that in the United States¹¹ for example some politicians, health insurers and large employers support the concept of punitive systems of health insurance, taxation and employment for those

¹¹ These issues are also occasionally raised in Australia with respect to health insurance and life insurance.

not following a healthy 'lifestyle'. It is easy to see that the working class and cultural minorities, already disproportionately burdened by poor health, would bear the brunt of such policies should they be instituted.

(b) the structural approach.

Many writers have recognised the complex social and historical antecedents of poor Aboriginal health (e.g. Moodie 1973; Commission of Enquiry into Poverty 1976; Parliament of the Commonwealth of Australia 1979; Reid 1979; McIlraith et al 1982; Thomson 1984a). Its origins are traced to the social destruction which accompanied white settlement of Australia and to the contemporary social, economic and political marginality.

In the past, supporters of a structural model were rightly concerned with the physical living conditions of Aborigines in settled Australia, because up until the late 1960s, the majority, both on and off Aboriginal reserves, lived in extreme poverty. Housing consisted of dilapidated government- or mission-built cottages or makeshift huts constructed of scrap materials. Sanitation and water supply were grossly inadequate, electricity was seldom connected and income was low. It was not difficult to see that such conditions were primary causes of the high morbidity and mortality from infectious diseases which characterised the population during this period.

In the last two decades however, millions of dollars have been spent improving Aboriginal living conditions and health services (Holding 1985). For example, Commonwealth Government outlays on Aboriginal housing alone between 1968/69 and 1984/85 have amounted to an average of

\$34,000 (adjusted to 1984/85 values) for every Aboriginal family in Australia (Gray 1986b). In New South Wales in 1986, 93.9% of Aboriginal dwellings were houses or flats of some type. Only 3.4% of dwellings were categorised as caravans or impoverished dwellings (ABS 1987).

As a result there has been a significant reduction in morbidity and mortality from infectious diseases. As shown above however, this has been counterbalanced by a rise in mortality from the diseases characteristic of urban populations in industrialised nations. It thus became apparent that in the urban setting the old structuralist focus on physical conditions was inadequate to explain high Aboriginal mortality. Indeed Reid (1979:11) argues that in spite of the urgent need for improved living conditions for Aborigines in remote communities:-

it is not clear that these changes will effect a profound or lasting change in either physical or emotional health.

More recently therefore, explanations for the poor health status of Aborigines have shifted from a focus on physical conditions to 'lifestyle' factors as proximal causes of poor Aboriginal health. Health variables such as poor diet and heavy alcohol consumption are now depicted as 'intermediaries' between social inequality and poor health (Thomson 1984a:715). This shift in emphasis clearly has superior explanatory potential, in that it recognises that behaviour takes place in the context of a set of social conditions which both produce and are produced by individual actors. Within this framework Aboriginal health problems can be evaluated both in the context of a particular cultural environment, and in the context of the interaction of the group with the wider society. As such it formed the basis for the formulation of my research project.

A framework for research

The most frequently cited 'intermediaries' between Aboriginal social conditions and health are poor diet and alcohol abuse. Both are widely viewed as 'lifestyle' variables which make major, if not the major contributions to poor Aboriginal health in settled Australia. It seemed therefore that an analysis of the social, cultural, economic and historical factors which informed contemporary dietary behaviour could elucidate the relationship between social conditions (distal causes) and poor diet (proximal cause) in Aboriginal health. I therefore aimed to collect data both about these variables and the actual dietary intake of Aborigines in an urban community. Based on the dietary evidence currently available, I expected to find that diet was extremely poor and of major significance to Aboriginal health. I also expected to find that poverty was the major social factor in poor Aboriginal nutrition. This would have provided further support for the structural model of health outlined above.

The Aboriginal community with which I ultimately worked lives in Kempsey, a rural town of over 10 000 people on the mid-north coast of New South Wales. Situated on the banks of the Macleay River (see Maps 1 and 2), Kempsey has occupied a central place in the Aboriginal history of the north coast region as the location of one of the state's largest Aboriginal stations and the Kinchela Boys Home, both run by the Aborigines (Protection) Welfare Board. Poor race relations have characterised the town for the past eighty years.

My observations and investigations of diet, and of the historical and contemporary social conditions of Aborigines in Kempsey have ultimately led me to challenge contemporary explanations of poor Aboriginal health.

I found that while the diet was not optimal, neither was it as poor as I had expected. Although analysis of reported dietary intakes had to wait until after I returned from the field, it ultimately became clear that people were not living on the diet of 'damper-syrup-and-tea' which has gained popular acceptance as an Aboriginal universal.

Nor were the economic and physical conditions under which the majority of the community lived severely impoverished. Only sixteen out of a total of 141 dwellings were shacks or caravans. Most of these were situated at the old Aboriginal station on the outskirts of the town where conditions were indeed very poor. The remaining households however, lived in regular suburban dwellings with all modern utilities. As far as I could ascertain, all households had an assured basic income, albeit low in most of them and subject to the vagaries of bureaucratic control because it was predominantly from welfare. Nevertheless, it seemed adequate in most instances to provide food, clothing, heating, and transport. Housing costs were reduced by low rentals and people had access to free medical and dental care, schooling, legal aid and technical\ professional education.

What finally demanded recognition was the almost palpable sense of social stress which permeated the entire community. This seemed to be generated by a conjunction of circumstances and events - financial crises, arrests, imprisonments, inter-personal violence, deaths and discrimination - added to the mundane problems of daily life faced by all poor people. It was reflected in high levels of tension, anxiety, depression, aggression, violence, and alcohol and drug abuse. Thus it became apparent that the role of physical conditions, and of diet as an intervening variable between social conditions and health, may be

overstated and that psychosocial factors might also need to be considered as important health variables.

This has led me to reconsider the structuralist focus on lifestyle factors as proximal causes of poor Aboriginal health. Such an approach clearly incorporates too narrow a perspective on the health environment. What seems to be lacking is a way of relating social stress, both historical and contemporary, to current health status. I suggest therefore that the scope of the analysis needs to be considerably expanded to include a range of variables which are more ambiguous in terms of their effect on health. Ultimately my understanding is that unemployment, feelings of hopelessness and despair, loss of children, poverty, widowhood, leadership struggles, dispossession, bureaucratic interference, boredom, racial discrimination and the like have to be considered as potential disease variables in their own right. What evidence is there then to support an hypothesised link between psychosocial factors and disease?

Thesis outline

The following chapter (chapter two) provides a history of the Kempsey community. It describes the profound social disruption to which Aborigines on the Macleay have been subjected. This analysis is critical to an understanding of the historical basis of contemporary social conditions. Significantly, it is a history that is very much alive in the minds of today's adults and a source of considerable grievance.

In chapter three the social, cultural and economic conditions of the

contemporary community are described and discussed, both from a local and regional perspective. It will be seen that in spite of significant improvements in their social conditions over the last decade, Aborigines in Kempsey (and elsewhere) are largely excluded from the social, economic and political mainstream of the dominant society.

In chapter four I review the available literature on urban nutrition and describe the dietary survey undertaken in Kempsey. As will be shown, the empirical data upon which assertions about poor diet in adults have been based are extremely limited and have at times been presented in such a way as to confirm popular preconceptions about Aboriginal diet. It will also be apparent that the shortage of empirical data on urban Aboriginal nutrition is due at least in part to the considerable difficulties in undertaking this kind of research.

In chapters five and six the results of the dietary study are reported and discussed, using the recently released results of the recent national dietary survey (in Australian capital cities) for comparison. This will show that the dietary practices of the dominant society prevailed amongst Kempsey Aborigines, although there were some features of the diet which were distinctive. It will also show that while the Aboriginal diet was not optimal when compared to recommended dietary intakes in Australia, nor was it as comparatively poor as predicted. In particular, the relative proportions of energy derived from the major nutrient groups (protein, carbohydrate, and fat) were similar to those of the general population. Furthermore, low energy intake (most likely due to a combination of under-reporting and voluntary control of food consumption) seemed to have had the most significant effect on the intakes of vitamins and minerals. The combinations of foods consumed

were probably adequate in most cases to provide a nutritious diet according to Australian standards.

The health of the local community is described in chapter seven in conjunction with an evaluation of the role of its Aboriginal Medical Service. It will be shown that the health status of Kempsey Aborigines remained poor, in spite of the fact that they had access to a community-controlled health service for almost a decade. For a variety of reasons the service did not operate effectively. However, its failure to bring about significant improvements in health in its client population is seen as the outcome of a complex set of social conditions which impinge on health, many of which are not readily amenable to improvement at the level of primary health care.

In chapter eight I consider the possible role of psychosocial factors in Aboriginal health and propose that a stress model of disease offers the most cogent explanation for the hypothesised link between psychosocial factors and disease. Drawing primarily on data from studies which have documented the association of cultural upheaval, rapid social change and stressful life events with physical and mental ill-health, I argue for a shift in focus from a health model which assumes the importance of intervening variables as disease agents, to one which focuses on some of the 'underlying factors' themselves. I suggest that the various forms of psychosocial stress observed in Aboriginal communities are symptomatic of a particular set of social conditions which are critical components of Aborigines' continuing poor health.

CHAPTER TWO

INCORPORATION AND RESISTANCE TO 1969

An historical approach to Aboriginal health and nutrition commonly takes the form of a description of 'traditional' life, followed by a highlighting of contrasts with the present (see for example Thomson 1982; Kirk 1983; Gay 1984). This approach is used, either explicitly or implicitly, to develop the thesis that Aborigines are poorly adapted, both biologically and culturally, to modern industrial society. While it may be true that Aborigines have some limited genetic predispositions to disease,¹ I would argue that there is sufficient evidence to indicate that contemporary factors may be of greater and more immediate significance to health. Thus it is not the 'traditional' way of life but the lived experience of today's adults which should be the focus of an historical perspective, because to a large extent that experience constitutes the sociocultural context in which the diseases responsible for their current high morbidity and mortality have developed. This chapter deals with that experience.

I will begin by discussing the early resistance and incorporation of Aborigines on the Macleay, from the time of first contact in the 1830s to the turn of the century. As I will show, this period was marked by violent clashes between the original residents and the new settlers and Aborigines were progressively dispossessed of their land.

Succeeding this, government 'protection' of the 'part' Aboriginal population of New South Wales (NSW) was formalised with the passage of

¹ For example Type 2 diabetes (see chapter eight).

the Aborigines Protection Act in 1909, from which time Aborigines were subjected to a period of intense state supervision and control. It will be seen that they were dispersed and forcibly relocated, confined to shrinking reserve lands or to the periphery of white settlements in impoverished town camps, and excluded from economic, social and political participation in the dominant society. On the Macleay, the Burnt Bridge Aboriginal station was established in 1939 under the control of the Aborigines Protection Board (APB, later AWB), and remained in operation until 1969. These three decades of institutional control were marked by profound social disturbance, the active suppression of Aboriginal culture, and the endurance of great personal hardship. During this time the state attempted to incorporate many Aboriginal children into the dominant society by removing them from their parents and placing them in institutions. It also attempted to control the lives of their parents by the manipulation of rations. These two actions had a profound effect on the levels of psychosocial stress in Aboriginal communities and remain an ever-present and painful source of grievance in the minds of many Kempsey people today.

So in spite of the major social, economic and political changes which followed the abolition of the AWB in the late 1960s, most adults carry with them a legacy from having 'lived in a milieu where things continually 'fall apart'' (Rowley 1978:125). Injustices, real or imagined, which seem relatively unimportant to an observer, take on much greater significance in the context of a lifetime of felt injustice and discrimination. Understanding something of these experiences is therefore critical to an understanding of the contemporary social conditions of Aborigines, and of the pressures to which they have been subjected throughout their lives.

Early resistance - first contact to 1881

Kempsey is situated on the banks of the Macleay River, 35 kilometres upstream from the Pacific Ocean (see Map 1). It lies at the heart of an ecologically diverse area which includes the rugged and densely forested mountainous terrain of the Great Dividing Range, rivers, fertile alluvial plains and a coastal zone with ocean beaches, estuaries, dunes and swamps. The original occupants of the valley were members of the Dhan-gadi tribe. They subsisted on a rich and varied diet comprised of birds, marsupials, snakes, fish, shellfish, crustacea, flying fox, eggs, reptiles, cobra², eels, insect larvae, honey, yams, nuts and a variety of roots and berries (Ryan 1964; Campbell 1978).

The colonial occupation of the valley took place in the 1830's as the colonial frontier extended northwards from Sydney and settlers were attracted to the northern rivers by the cedar which grew in abundance in the rainforests. Forestry grants in the Macleay Valley were given to Europeans in 1835 (Morris 1986) and Kempsey was established in the following year by Enoch Rudder whose interest in the cedar trade brought him to the valley (Macleay Argus Centenary, October 17, 1985). The cedar cutters began exploiting the rainforest in 1839 but according to Morris (1986) their stay was brief, since they had moved on by the early 1840s when most of the readily accessible timber had been taken.

It is not clear what impact the first invaders had on the local inhabitants. Early accounts show that Aborigines seized opportunities to steal axes from the cedar cutters and were 'shot at' in so doing (Ryan 1964). While Morris argues at one point that the cedar cutters'

² A worm-like riverine invertebrate, Toredo nautilus, which can be found in rotten logs at the river's edge. Also called a 'wood oyster'.

brief incursions into the valley would have had only limited impact, he later notes that the 'aggression against the blacks' by these men was of major concern to the first Crown Commissioner (Morris 1986:30). Thus, while cedar cutters may not have 'disputed the occupation and utilisation of the land' (Ryan 1964:181) there are clear indications that the first contact period was associated with violence.

Pastoralism rapidly joined cedar cutting as the motive for white settlement and with the annexing of land hostilities broke out as Aborigines attempted to defend their livelihood. Aboriginal resistance took the form of attacks on stock and aggression towards the new settlers. The latter sought, through letters and petitions, to gain protection from the government in Sydney. However, until the establishment of a Native Police post at Nulla Creek in 1858, pastoralists were left to retaliate without recourse to any external legal authority (Morris 1986) and Aborigines were shot, sometimes in large numbers.

Blomfield (1981) gives a comprehensive account, based on the writings of early settlers and the accounts of oral historians, of the protracted and often bloody conflict which characterised relations between blacks and whites for the next two decades. According to Blomfield there were at least twenty massacres on the 'three rivers' (Macleay, Hastings and Manning Rivers), of which fourteen were in the region of the Macleay. Of the total, twelve were in retaliation for aggressive Aboriginal behaviour, four were for taking stock, two were apparently unprovoked attacks on Aboriginal groups and two had 'no obvious cause' (Blomfield 1981:4). Blomfield found allusions to other killings which were never documented, partly, he believes, because the hanging of the Whites

convicted for the Myall Creek massacre (1839) ensured that subsequent massacres on the Macleay were shrouded in secrecy. The silence surrounding them is maintained today by the descendants of old families in the Macleay Valley, many of whom were interviewed by Blomfield.

As a result of this secrecy it is not known when the 'time of the killings' (Quinlan 1983:37) ended on the Macleay. The last documented massacre is alleged to have taken place near Bellbrook, on the upper Macleay, in 1856. According to Blomfield, an infant survivor by the name of Scott, who was found and reared by a white pastoralist who gave him his name, died at Bellbrook in 1935 at the age of 78.

Interestingly, I was told in Kempsey that a Scott who died at Bellbrook in 1985 was the infant survivor of this massacre, which would put the date of the last killings around 1915. It seems more likely that the massacre referred to was the one in 1856 documented by Blomfield and that the deceased was in fact the son of the infant survivor. This collapsing of generations in oral history is indicative of the contemporary relevance of these stories to Aborigines. It was stated of Mr Scott (the younger) that he 'hated whites' because of the killings.

An elderly woman from Bellbrook claims that her grandparents were killed in two of the last massacres (Quinlan 1983), which supports Blomfield's (1981) argument that they in fact continued into the late 1850s or early 1860s. There can be little doubt that these massacres, combined with the introduction of exotic diseases, caused a drastic reduction in the Aboriginal population.

The suppression of violent Aboriginal resistance coincided with the intensification of rural production on the Macleay as the pastoral

industry slowly expanded³ and farmers came to grow maize and sugar along the river banks (Morris 1986). During this period there seems to have been little incorporation of Aborigines into the local economy as labourers (Morris 1986), in contrast to some other areas of the state (see below). However, five 'reserves'⁴ were notified for Aborigines who set about clearing the land and planting crops. Thus by the 1880s there were a number of Aboriginal farms being established on the Macleay at Bellbrook, Fattorini Islands, Shark Island, Pelican Island and Kinchela (see Map 1). Similar agricultural enterprises were established by Aborigines in other parts of the state (Goodall 1982). It can be seen that notwithstanding their unfamiliarity with horticulture as a mode of subsistence, Aborigines had begun to adjust to the changed economic circumstances contingent upon white settlement on the Macleay.

The beginnings of incorporation through 'protection'

Increasing public concern about the economic and social circumstances of the dispossessed Aborigines around Sydney and in the south west of the state led to the appointment of a Protector of Aborigines in 1881, and a census conducted in the following year recorded Aboriginal demands for land (Goodall 1982). That Aborigines were at this time adapting to a changing economy is demonstrated by the fact that 81.2% of those enumerated in the census of 1882 were self-sufficient:-

the majority from permanent employment in the capitalist economy and the remainder in seasonal employment and subsistence activities (Goodall 1982:29).

³ According to Morris (1986) the unsuitability of the land for wool production, on which the colonial economy was based at this time, resulted in relatively slow pastoral expansion on the Macleay.

⁴ Out of a total of twenty nine notified throughout the state during this period (Goodall 1982).

The role of the Protector was expanded in 1883 by the establishment of the Aborigines Protection Board (APB). A census conducted in this year once again showed that many Aborigines (both 'full-blood' and 'half-caste') were employed in skilled agricultural labour, such as fencing and shearing and were earning the same wages as whites (Rowley 1972). At this time the majority of Aborigines on the Macleay remained independent of the Board. Of the 479 Aborigines enumerated in 1892-93 only 100 of them were living on reserves (Morris 1985). More reserves were created - a total of eighty five were notified in New South Wales between 1885 and 1894, of which 55% were validations of Aboriginal occupation or were in response to Aboriginal requests (Goodall 1982). Aborigines were told that the land set aside for them belonged to the Crown and that it would remain in their possession forever on the condition that it was continually farmed and occupied (Goodall 1982). This undertaking was to be repeatedly broken over the ensuing decades, leaving a legacy of bitterness in the minds of the descendants of those early farmers, many of whom can today identify the 'land that belonged to my grandfather'. The Board also engaged in charitable support, distributing blankets and rations to the unemployed and the destitute and encouraging 'the already existing Aboriginal interest in European education' by providing rations for school children (Goodall 1982:29).

On the Macleay beef production expanded into the high country to the west and Aborigines were gradually incorporated into the economy by exchanging their labour for rations. On the Lower Macleay, the predominance of small farmers, who needed extra work off their own land in order to survive, served to exclude Aborigines from the labour market (Morris 1986). However, there was work available in the forestry industry and some seasonal labour available on farms, so that many

people managed to be employed for most of the year.

APB and missionary records at this time include accounts of the success of the Aboriginal farming enterprises on the Macleay (Goodall 1982; Morris 1986).

They are all cleared and cultivated, maize being chiefly grown. On the whole, the Aborigines are in a fairly flourishing condition, having horses and sulkies of their own. They have also provided themselves with boats, those supplied by the Government having worn out (Aborigines Protection Board Report, 1899, quoted in Goodall 1982:63).

A reserve was created at Euroka Creek (later to be known as Burnt Bridge) in 1894 in response to an application from the Davis family and by the end of the first year they had 'cleared 30 acres ... and planted maize and pumpkins' (Goodall 1982:38). This reserve was expanded in 1894 in response to an application from John Moseley, whose farm on Fattorini Island was washed away in the floods of 1897. By 1900 most of the land was under cultivation with maize and vegetables. Dwellings, barns and stockyards had been built and poultry and fruit trees supplemented production. Goodall (1982:65-66) states:-

The Guris [Aborigines] of the Macleay ... appeared to be living the perfect example of the 'civilized' lifestyle to which the Board hoped all Aborigines would aspire. They were permanently occupying and successfully cultivating clearly defined areas of land; they were engaging in European employment which was relatively often of a permanent nature and they had displayed an early and sustained interest in European education.

As the close of the century approached, however, drought and economic depression interrupted rural consolidation (Morris 1986) and there was widespread unemployment. White demands for rural land increased and Aborigines without a subsistence base gravitated towards the towns in increasing numbers. Here they set up fringe camps, largely dependent on the Board for subsistence. Between 1890 and 1905 the proportion of the

enumerated (NSW) Aboriginal population receiving rations increased from 17.5% to 40.1% (Goodall 1982). It seems likely that the fringe camp at Greenhill, three kilometres northwest of the Kempsey Post Office was established around this time although there is no record of this.⁵

These changes were accompanied by a significant downturn in race relations throughout the state with whites outspokenly critical of the Board's 'charity' and of the fringe camps, and increasingly eager to dispossess Aboriginal farmers of their lands. The Board sought to remove and 'apprentice' adolescents; the boys into rural labour and the girls into domestic service. Strong parental resistance to this was overcome with 'inducement' and 'persuasion' and by threatening to withhold rations (Goodall 1982). School enrollments by the relatively large and increasing Aboriginal population resulted in escalating demands to the Department of Education for the segregation of Aborigines into special schools. The strongest protests came from the north coast. Of the twenty seven segregated schools established in New South Wales between 1880 and 1909, fifteen were on the north coast and three were on the Macleay (Goodall 1982). All were on Aboriginal reserves, which tended to increase the concentration and containment of Aborigines, as they were forced to 'come in' to educate their children. Goodall notes that this resulted in the forced relocation of many families who had hitherto refused to have anything to do with the APB, and the increased populations on the 'school' reserves at Kinchela and Burnt Bridge threatened the viability of the farms. Others left their children with relatives. According to residents, some families chose to move on to other areas where their children could be enrolled at the public school.

⁵ Greenhill residents say that Blacks had always camped there, long before white occupation.

I wasn't goin' there [the local school] very long, me an' my cousin, when they wouldn't have us in the school, prejudice, an' we moved from there to [another town].

It is clear that the exclusion of Aborigines from more active participation in the labour market was partly a result of a more general economic downturn in the rural sector of the colonial economy. The resulting social plight of the dispossessed native population was however, both perceived as a social threat and used as a rationale for increasing government control.

After the Act - incorporation through control

In the first decade of the twentieth century the tide of prejudice gathered momentum. Alarmed both by the increasing size of the 'mixed-blood' population and its increasing dependency on the Board for support, and by its own budgetary difficulties, the APB became increasingly frustrated with its lack of legal might. Up until this time the only legislation which related specifically to Aborigines were those Acts which denied them franchise, prevented the sale of liquor to them (Liquor Act) and made it illegal for whites to 'live with, wander with or in any way associate with Aborigines except in an official capacity' (Vagrancy Act) (Bell 1959:349). Now, however, the Board wanted sweeping powers to solve what was viewed as the Aboriginal problem. Drawing on the records of the APB throughout this period, in which the aims and concerns of the Board are clearly stated, Goodall concludes that the solution was to be the disappearance of Aboriginal communities⁶ for:-

⁶ Goodall (1982) claims that the overall aim of the Board was the disappearance, both culturally and genetically, of the Aboriginal 'race' though she notes that the Board did not publicly admit the latter (see also Read 1983).

It is a danger to us to have a people like that [half-castes] among us, looking upon our institutions with eyes different from ours (A member of the APB, 1915, quoted in Goodall 1982:70).

This was to be achieved by dispersal of the 'able-bodied' off the reserves, a reduction in the birth rate and the forced dis-association of those of lighter 'caste' with other Aborigines (Goodall 1982; Read 1983).

The Board's efforts were rewarded by the passage of the infamous Aborigines Protection Act in 1909 under which an Aborigine was defined as 'any person apparently having an admixture of Aboriginal blood',⁷ (Bell 1959:349) and the Board was empowered to 'exercise general supervision and care over all matters affecting [them]' (Morris 1986:164). Officers of the police throughout the state were appointed 'guardians of the Aborigines' and the provisions of the Vagrancy Act and the Liquor Act were incorporated in the new Act (Goodall 1982:77).

The Board was also granted power over all reserve land and all the property on it and could expel any Aborigine from it. In this way the 'able-bodied' and those of lighter 'caste' could be removed from the reserves. Both Rowley (1978) and Goodall (1982) have argued however, that the Board also sought these powers of expulsion for disciplinary reasons, in order to remove troublemakers and undesirables from the reserves. This view is supported by the expulsions which did occur throughout the state (e.g. Gilbert 1977; Goodall 1982; Miller 1985). Mr Horry Saunders of Purfleet (on the mid-north coast just south of

⁷ The degree of 'admixture' was itself used as a basis for control since by defining a person as having more (e.g. 'half-caste') or less (e.g. 'octoroon') Aboriginal blood the Board could remove people to or expel them from reserves. One of the long-time resident farmers of Burnt Bridge was redefined in this way to facilitate his expulsion from his farm (Morris 1986).

Kempsey) told Gilbert (1977:39):-

When the showdown came there was only two or three [of the other residents] that stuck with me, even though I was tryin' to get some better livin' conditions for all of us. Anyhow, I was 'evicted' as they call it ... chucked off Purfleet as a troublemaker. The welfare board done it to break resistance and they succeeded too. Police surrounded Purfleet, blocked the highway while I was being evicted. It definitely cowed the rest and it was meant to. They dumped us in a condemned house at Tinonee.

Aborigines not living on reserves had no more security of tenure for they could be ordered to 'move on' to an unspecified place at any time. Thus Aborigines effectively had no security of tenure anywhere! Control of the birth rate and acculturation of those of lighter 'caste' was to be primarily accomplished by the removal of children which had indeed already begun before the Act became law.

As this draconian legislation moved into operation, changes were taking place in rural districts which increased the pressures on Aborigines and on the Board. Improvements in the rural economy increased white demands for land and requests to the APB for revocation of reserve land, from both the Lands Department and from individuals, increased steadily (Goodall 1982). The Board was not anxious to comply, but it gradually succumbed to mounting pressure, resulting in a significant reduction in reserve land acreage. On the Macleay, several families lost their farms when the land was leased to whites, in spite of their repeated protests and application to the Board for protection of their tenure.⁸

Throughout the state, managers were installed on some reserves, which were henceforth designated 'stations' and an era of much more immediate

⁸ Mr Mosely was dispossessed within a year of being reassured by the Board that his tenancy was secure and lost his maize crop, planted on the strength of that assurance (Goodall 1982).

and intensive supervision began. A manager took over the control of Kinchela and Fattorini and Pelican Islands signifying the end of economic independence for the farmers, some of whom had been in residence for several decades (Goodall 1982). The reserve land on the islands was ultimately sold by the Lands Department to whites and the Aborigines were evicted. Kinchela was destined to have a much more significant history, not only for Macleay Aborigines but for others throughout the state, for it was here that the Kinchela Boys Home was built by the APB in 1924 (see below).

After 1909 the tide of public opinion and legal repression continued on a downward course, reaching its nadir in the Great Depression of the 1930s. Successive amendments to the Act in 1915, 1918 and again in 1936 progressively increased the power of both the Board and the Police (Police Regulation [Amendment] Act 1935). Writes Bell (1959:350):-

Between 1855 and 1939 Aborigines ... could not exercise Federal franchise, were prohibited from obtaining liquor, could not receive old-age, invalid or widows pensions, or maternity allowances, ... [nor] ... family endowment and unemployment relief... were ineligible to serve in the armed forces [or] attend white schools ... [and were controlled by] the restrictions enumerated in the Aborigines Protection Act.

The great paradox of this period is that while the Board was attempting to disperse Aboriginal communities, there was in fact nowhere for them to be dispersed to, because the white community was unwilling to admit them (a situation which was to recur in the late 1960s when the Board closed its stations). They were not wanted in the schools or hospitals, nor as residents in the towns and their unsightly fringe camps were an affront to local politicians and townspeople. Their own attempts at assimilation and economic independence had been constantly thwarted. Reserves, once described in glowing terms as symbols of Aboriginal

enterprise and industry now became places of 'vice' and 'depravity', 'vicious surroundings' from which children had to be 'rescued' (Aboriginal Protection Board Reports, 1910, 1911, quoted in Goodall 1982). Reserve residents were coerced by the Board into working for low wages or for rations, sometimes on land that they had a few years before been farming themselves. They could be expelled from the reserves and 'moved on' from the camps; they could be barred from attending any public school at the same time that failure to attend school was used as evidence of neglect; they could have their children summarily removed; and they could not enter an hotel nor be sold liquor nor socialise or cohabit with whites. There were in fact few aspects of their lives which were not controlled by the state.

One of the more bitterly resented aspects of government control was the receipt of Child Endowment (Goodall 1982:260). Contrary to the assertion of Bell (1959, quoted above), Aborigines were not excluded under the provisions of the Family Endowment Act (1927) and were thus entitled to this benefit. However, just two years after they began receiving it the Board took control of Aboriginal child endowment, and cash payments to all but 'competent' parents ceased in 1930. The money was paid instead into a trust account and was used to defray the Board's expenses in the upkeep of Aboriginal children (Goodall 1982) although according to Read (1983:25) it was more widely used being 'distributed to almost everyone as rations, furniture or household or station improvements'. Aboriginal parents were given no information as to how the money was to be spent nor how much credit they had and expenditure of the entire amount was at the discretion of the Board.

As Morris (1986) and others (e.g. Rowley 1972; Horner 1974; Goodall

1982; Miller 1985) have shown, Aborigines were not passive recipients of APB policies and actions throughout this period. On the Macleay they protested in writing to the Board about the exclusion of Burnt Bridge children from Euroka school and the revocation of reserves and the eviction of Aboriginal farmers. They also responded to the forcible removal of children from their families with threats of violence against the Board's officers. Local protest culminated in the formation in 1925 of the Australian Aboriginal Progressive Association (AAPA) whose meetings, held 'conspicuously' at the fringe camp at Greenhill, were reported in the local press (Morris 1986:184). The formation of the AAPA was part of a 'wider political campaign' against the Board which was attempting to 'bind together the various diverse Aboriginal groups' who shared a 'uniform experience ... with Anglo-Australian institutions' and eleven branches were set up in its first six months of operation (Morris 1986:184).

The Association's major concerns were the loss of land, impoverished living conditions and the removal and treatment of children. In 1925 it held a public meeting at the Kempsey showground to protest the Board's policies, and also organised a conference in Kempsey which was attended by both local Aborigines and delegates from the surrounding region. At the conference the AAPA's political platform was formulated in terms of egalitarian principles which would give Aborigines equal rights under Australian law. Although the AAPA was unsuccessful in changing the Board's policies and collapsed in 1927 (to be succeeded by other political organisations), its formation was of sufficient concern to the Board that they held discussions with the Crown Solicitor to see if any action could be taken against it (Morris 1986).

In spite of the tightening net of dependency and control, 75% of the enumerated Aboriginal population remained self-sufficient in 1927, the majority working for at least part of the year in the capitalist economy (Goodall 1982:260). But the Great Depression was looming on the horizon and during the late 1920s and early 1930s Aboriginal social conditions deteriorated rapidly and white prejudice mounted (Rowley 1972).

Widespread unemployment across the country reduced the already narrow market for Aboriginal labour and by 1932, 85% of the male Aboriginal population was unemployed (Goodall 1982:254).⁹ Aborigines were excluded from the conditions of the award for pastoral workers by a ruling of the Commonwealth Arbitration Court in 1932 (Goodall 1982) and thus lost wage parity in one of their most important labour markets.

At the same time they were largely excluded from the Food Relief (1930) and Work Relief (1932) schemes introduced by the government to relieve the hardship of the unemployed. Instead they were directed back to the Board for rations, even though rations were not officially available to the able-bodied unemployed. According to Goodall (1982:261) there was considerable public outcry from both Aborigines and whites when the discrepancy between Food Relief (for whites) and Aboriginal rations was made public. The scale of rations was improved in 1931 and again in 1938 'to approximately the level of food relief provided to unemployed Whites' (Long 1970:30).

Lack of work and increasing dependency on the Board swelled the numbers in the towns camps. In response to public outcry over living conditions the Aborigines Protection Act (1909) was amended in 1936 to permit

⁹ Goodall (1982:254) notes that the police censuses of Aboriginal employment collected during this period are subject to error but they nevertheless indicate that there was high unemployment.

authorities to remove any Aborigine who was living in 'unsanitary or undesirable conditions' to a designated reserve, thus allowing authorities 'to clear the towns' (Rowley 1972:49). Because of the conditions under which the majority lived, this effectively permitted the forcible removal of almost any Aborigine onto a reserve (Bell 1959), superseding the 'move-on' clause of the original Act. Increasing economic dependency on the Board also swelled the numbers on the reserves (Read 1983) thus reversing the trend of the dispersal years when Aborigines were encouraged to leave the reserves. Living conditions on the reserves were, however, little better than in the camps and the economic climate prevented the Board from doing anything to improve them.

Rowley (1972:49) argues that the 'climax' in legal restrictions on personal liberties during the Great Depression was to have profound effects on Aboriginal 'attitudes'. It is probably no coincidence then that these years coincide with the end of ceremonial life on the Macleay,¹⁰ the last initiations of Dhan-gadi men taking place in 1932 and 1935¹¹ (Creamer 1977; Morris 1986). Creamer, who attributes the end of ceremonial life to a great decline in morale during the depression years, also argues that the retention of initiations so far into this century is strong support for the thesis that the Dhan-gadi had, up

¹⁰ Women's ceremonial life may have ended much earlier since Calley (1956:205) claims that 'none of the old women now living' passed through 'the segregation and instruction of young girls which took place around the time of the first menstruation'. However, Aboriginal women would certainly not have talked to Calley about these ceremonies, so unless this information was collected for him by a female it is not necessarily reliable.

¹¹ See Cohen (1987) for an eyewitness account of these events. One of the initiated men died at Kempsey in 1985. A very small number are still alive.

until this time, adapted well to the new social order (Creamer 1977).¹²

By the late 1930s only two reserves remained on the Macleay, at Burnt Bridge and at Bellbrook, the remainder having been revoked in 1919, 1920 and 1925 (Morris 1986) in response to white demands for rural land and as a result of rationalisation of the Board's operations. As part of this rationalisation the Board decided in 1936 to establish a station¹³ at (New) Burnt Bridge, adjacent to the old reserve, with the intention of resettling Aborigines from the revoked reserve at Yellow Rock,¹⁴ the 'town campers' from Greenhill, and the residents of the reserves at (Old) Burnt Bridge and Bellbrook (Goodall, 1982: 343).

In order to do this, the Board decided to lease some of the land at Old Burnt Bridge, thus freeing it for white use, and incorporate the remainder in the new station. Aboriginal families were still independently farming this land however, believing in undertakings given to them that the land would remain in their possession. They included Mr Moseley who was still living on land notified for him in 1898 and the Davis who had settled there in 1893 and had continuously farmed and cleared an area designated as reserve in 1894. A bitter and protracted struggle ensued resulting in the ultimate violent dispossession of the families, in spite of appeals to the Board and the Federal and State

¹² According to Ryan (1964) legends from the Dhan-gadi were recorded in the 1930s and from the 'remnants' of the Kumbaingeri and Bandjalang tribes, who also live in the Kempsey region, in the 1950s.

¹³ As noted earlier a station differed from a reserve in that supervision by resident managers was provided at stations, and control was consequently greater. Reserves were simply areas of land set aside for Aboriginal residence.

¹⁴ Already removed from the revoked reserve at Urunga in 1921.

Governments (Goodall 1982; Morris 1986).¹⁵ Farming came to an abrupt halt as managers were empowered to control Aboriginal income (Morris 1986) and the residents were expected to provide labour in return for rations, which was fiercely resented. These disputes added to the numbers of dispossessed families on the Macleay and have left a legacy of bitterness amongst residents at Burnt Bridge, many of whom are the descendants of the original families.

The relocation of Yellow Rock residents to the station at New Burnt Bridge took place in June 1937. According to one of my informants they were transported (in mid-winter) in an open truck. The station was ill-prepared for their arrival since the planned houses had yet to be constructed. Temporary shelter had been provided in half water tanks, laid on their side on the bare earth. Water had to be carried from Euroka Creek and no sanitation was provided, so people just 'went in the bush'. Thirty-two cottages¹⁶ were subsequently erected and by 1939 the population had reached 296 (Long 1970). It is at this time that the 'lived experience' of middle-aged Aborigines in Kempsey begins. However, before going on to discuss life on the station it is necessary to look at the changes that came with the end of the 1930s and World War II.

The APB was by this time facing mounting criticism. Aborigines everywhere were living under appalling conditions and were becoming increasingly outspoken against the Board. In 1937 a small group of them founded the Aborigines' Progressive Association (APA) (Horner 1974;

¹⁵ Similar violent dispossessions have been described elsewhere in the state (see for example Read 1983).

¹⁶ The derelict remains of two of these cottages can still be seen at Burnt Bridge. They are unoccupied.

Miller 1985) and in the same year one of its members was included on the Select Committee of the (NSW) Legislative Assembly to inquire into the administration of the APB (Morris 1986). A national conference of state Aboriginal authorities was held in Canberra but in spite of a shift in attitudes Aboriginal hopes for wide-ranging reforms were not realised. Rowley (1972:29) writes:-

Perhaps the most favourable light in which to interpret the recommendations of the 1937 conference was that the participants had such good reason to assume that popular prejudice against the person of Aboriginal appearance was an unalterable feature of the total situation.

However, both the conference and the Select Committee supported the transfer of educational responsibilities from the Board to the Department of Education. This was regarded by Aborigines as important since they had been receiving sub-standard education from untrained teachers in the segregated schools, deemed adequate for the needs of a 'child race' (Miller 1985:173).

In 1938, on the 150th anniversary of the invasion of Australia, an Aboriginal national day of mourning was held and a manifesto demanding citizens' rights for all Aborigines was prepared by the APA (Horner 1974; Miller 1985). In 1940 the Aborigines Protection Act was again amended, resulting in the reconstitution of the Board to form the Aborigines Welfare Board and a shift in policy through which citizens rights were to be earned through 'assimilation' (Bell 1959; Morris 1986). The new AWB argued that continued control on government stations was needed until:-

so-called Aborigines ... of half and lighter castes [could be made] responsible, active, intelligent citizens ... [even though] ... they inherit a different view of life, and ... the value of our culture must be proved to them (AWB, quoted in Bell 1959:351).

Accordingly, the Board held itself responsible for the training of

Aborigines with respect to 'health, education, housekeeping, working habits, and recreation' (AWB, quoted in Bell 1959:352).

There were further amendments to the Act in 1943 which provided for two Aborigines to sit on the AWB and for the introduction of the infamous exemption certificate. Commonly known as a 'dog license' or 'dog ticket',¹⁷ this certificate allowed Aborigines 'who in the opinion of the board, ought no longer be subject to the provisions of the Act' (Miller 1985:174) to be granted exemption. The certificate could however be withdrawn at any time, at the discretion of the Board. Exemption certificates were not issued to residents of reserves who, by virtue of that residence, were considered dependent on the Board and therefore not 'assimilated'. Those who obtained a certificate were exempt from all the special regulations which applied to Aborigines, and the Commonwealth Invalid and Old Age Pensioners Act was amended to provide for payment to Aborigines with exemption certificates (Rowley 1972). According to Rowley this once again encouraged people to move off the reserves to fringe camps but it can have had little effect in Kempsey since the population at Burnt Bridge continued to grow. I do not know how many Kempsey residents were holders of exemption certificates. While some people recall with pride that they or their parents were holders of these certificates others remain extremely hostile about the matter. Miller (1985:174) writes that:-

instead of being seen as a move towards full citizens' rights, the exemption certificates were regarded by most Kooris [Aborigines] as a disgusting form of paternalism.

¹⁷ As I understand it this was an allusion to the fact that the public was required to apply for a license to own a dog, which Aborigines saw as not dissimilar to the new 'license' which was to be applied to them.

From this time there were few legislative changes until the abolition of the Aborigines Protection Act in 1968 but Aborigines were increasingly entitled to welfare benefits over the next two decades (see below).

In the meantime the war had resulted in dramatic changes in the labour market and Aborigines were once more able to find jobs and were paid equal wages. Employment of able-bodied Aborigines throughout the state rose to 64% in 1940, 79% in June 1941, 82% in June 1942 and 90% in 1944 (Rowley 1972:81). Such figures clearly show that, contrary to white stereotypes, Aborigines were employable and that their participation in the labour market had most to do with the demands of the dominant society.

Aborigines also enlisted in the armed forces (albeit in the face of some opposition) and the public was made sharply aware of the prejudice which prevented Aboriginal soldiers home on leave from drinking with other soldiers in hotels (Miller 1985). Most Aborigines on the Macleay were by this time clustered on the stations at Bellbrook and Burnt Bridge although some were living at the fringe camp at Greenhills, where they had repeatedly resisted the Boards efforts to have them removed.

Institutionalised 'protection' - Burnt Bridge station 1939 to 1969

Burnt Bridge became one of the largest stations in the state, with fluctuations in population between 1944-63 from 262 (1960) to 319 (1954) (Long 1970). In spite of the large residential population however, the construction of the 32 cottages in 1939 was the last major improvement in living conditions undertaken by the Board, with little development over the next 30 years of operation (Long 1970). The cottages were of

standard AWB design and construction. Consisting of two rooms and a verandah, they were built with corrugated iron and had no interior wall linings, making them very cold in winter and hot in summer. The windows were unglazed. There were no internal facilities apart from a fireplace, although it seems from the accounts of ex-residents that solid fuel stoves were installed in some of the houses in later years. Only communal taps, laundries, ablution blocks, and pan toilets were provided. People recall the ablution blocks as having concrete floors, incomplete partitions and only cold water so that they were 'freezing cold' in the winter. Hot water was not installed at Burnt Bridge until the 1960s. There was no electricity and no refrigeration and the residents had little in the way of furniture. Lighting was probably similar to that described by Calley (1956:212) further north, consisting of 'slush lamps [made with] a naked wick protruding from a jam tin of kerosene'. When the station was visited by Long (1970) in 1965 the conditions described above still pertained except that the houses were by this time in very bad repair. Since that time there has been considerable further deterioration (see chapter three).

Managers of the station exercised enormous control over the lives of the residents. Permission to enter or leave a station could be refused to anyone at any time (Rowley 1978; Read 1983). One resident of Burnt Bridge recalled:-

What was the worst part y' know, anyone wanted to come and see ya they had to ask permission, and it all depended on who was the manager there and what sorta person he was.

Violence sometimes erupted when people were refused permission to visit their families (see for example Macleay Argus, September 10, 1960). Furthermore, police could enter the houses at any time and there are numerous accounts of abuse of this authority (see also Gilbert 1977).

Needless to say, alcohol was prohibited and any person under the influence of alcohol could be refused entry to the station, even if they lived there. The manager took residents' welfare payments and controlled their spending (Bell 1959).¹⁸ All farm production on the station was also controlled by the manager which Morris (1986) argues is one of the main reasons why the Board's aim of self-sufficiency was never realised. People simply refused to work in return for rations - sometimes on land they had previously farmed independently. It seems however that in the early days some families maintained small gardens for domestic use. Rations could be denied at any time to males who were unemployed and were considered lazy or had refused to work on the station.

'Matrons' (usually the manager's wife) inspected the insides of the houses and pronounced on matters of hygiene and cleanliness, an invasion of privacy which was bitterly resented by many women (Morris 1986).¹⁹ Clothing was issued twice each year, summer and winter, although according to Calley (1956) clothing was given only to those considered needy while the remainder had to purchase it. Education was provided at a segregated school established at Burnt Bridge in 1905 in response to the rejection of Aboriginal children from the public school. Segregated schools provided an inferior education compared to public schools (Rowley 1972; Miller 1985). Furthermore, for much of this period no high school education was provided at all, so most of the

¹⁸ In 1959 the law was amended to allow Aborigines to receive pensions and maternity allowance regardless of residence or (exemption) status.

¹⁹ As noted in chapter four there is a great deal of residual anxiety amongst women in Kempsey about the cleanliness of their houses, particularly if they are anticipating a visit from a white person (see also Edwards 1982).

older age-groups today are poorly educated. Aboriginal children did not return to public schools in Kempsey until 1962 when a few were 'brought in ... as an experiment' (Macleay Argus, February 8, 1962) to prepare them for high school.

It seems from the accounts of my informants that labour was sporadically available to Aborigines throughout the years that the station operated at Burnt Bridge (see also Cohen 1987). 'Coal bagging' (collecting, for sale, charcoal from burnt bushland) and vegetable picking (beans, peas, potatoes and pumpkins) were popular seasonal occupations for both men and women and Aborigines were sometimes employed on farms as 'stick pickers', collecting the sticks left on the ground following the clearing of forest for pasture. The brick works and timber mills employed Aborigines in the 1960s. Although there are no employment details available for Burnt Bridge during this time Calley (1956) shows that on the far north coast of New South Wales 'mixed-bloods' were employed in all primary industries (with the exception of dairying) and in mining, which suggests that there was a reasonable market for Aboriginal labour.

Virtually all the rural labour would have been seasonal so that finding year-round work would have meant moving from job to job and often from place to place. In 1966, 73% of all Aborigines registered with the Commonwealth Employment Service in New South Wales had previously worked mainly in seasonal or temporary jobs (Smee 1966). Rowley (1972) notes that the seasonal and temporary nature of Aboriginal labour caused considerable population mobility. This mobility was incorporated into the stereotype of Aborigines as going 'walkabout', a stereotype which is still invoked in Kempsey to explain why Aborigines are a bad employment

risk. Langton (1981) argues that the tendency towards matrifocused family formation in Aboriginal society was a response to particular social conditions, including itinerant labour patterns. Judging by the extreme reluctance of people in Kempsey to leave their homes to find work, itinerant labour had considerable social costs (see also Duncan 1966).

In many cases the wages paid to Aborigines during this period were lower than wages paid to whites doing the same work (Calley 1956). Calley (1956:201) also notes that in the north men's wages often had forced deductions for transport to and from work (at times amounting to one third of the days wages) and 'frequently, Aboriginal employees were persuaded to take cheap wine ... in lieu of part of the wage due to them' (see also Morris 1986). This was an attractive alternative since the sale of liquor to Aborigines was at this time still prohibited under the Act.

Calley also notes that an inquiry held on the far north coast by the Department of Labour and Industry in 1955 resulted in wage equality for Aborigines in the local pastoral industry. If the impact of this was the same as has been described elsewhere (Goodall 1982), wage equality would have had the effect of forcing some Aborigines out of the job market. However, according to Calley contract cane cutting, sleeper cutting for the railways and timber felling for the sawmills were already paying Aboriginal and white contractors the same rates.

Calley's (1956) study of the far north coast shows that a considerable degree of economic independence was possible during this period, with those households headed by a man who was able to work being largely

self-supporting. It can be inferred that by this time the Board was not controlling wages earned off the stations. Anecdotal evidence of some relative prosperity is found in his accounts of one man buying his 'best clothes' from the local tailor and others obtaining theirs by mail order from Adelaide, while 'at X, some had quite large bank accounts, in two cases with over 400 pounds' (Calley 1956:213). The important conclusion to be drawn however, is that while there was a market for Aboriginal labour it was not then and never had been a secure market. Thus wages could seldom have been regarded as an assured source of income. It seems possible that this has been a factor in the increasing acceptance over time of welfare dependency amongst Aborigines (see chapter three).

During the 1960s there was contraction in the rural economy combined with a downturn in the local forestry industry which eliminated much of the Aboriginal labour market (Morris 1983). New industries which came to the valley in the 1970s, in response to the state government's industrial decentralisation initiative (e.g. Clark Brick, Akubra Hats), have not provided any employment for Aborigines. Nor has the tourist industry which is now a significant part of the local economy. While Morris (1983) argues that the jobs lost with the contraction of the rural economy have never been replaced, the growth of service industries in Kempsey has provided some new employment opportunities for Aborigines, albeit of a different nature (see chapter three).

In 1965 Long (1970) found that ten men from the station were employed and seventeen men were listed as out of work. Of those employed, three were station handymen, three were employed by local or state Government authorities, two were at the timber mills and two were doing temporary

fencing. Two women were employed as domestics and six females under twenty years were listed as unemployed. Of the total adult population of 71²⁰, only twelve (17%) were employed and 56% of households were dependent on welfare payments. Not all of those unemployed were receiving welfare benefits. High local unemployment is confirmed by the fact that 37% of all Aborigines registered with the Commonwealth Employment Service in New South Wales in 1966 were from the north coast region (Smee 1966).

Social life under institutional conditions

In spite of the almost total control of their daily lives, many Kempsey residents look back with nostalgia on their growing up at Burnt Bridge. There was, they say, a great sense of community, a very active social life and a sense of seclusion and protection from the hostility of the town. Football, netball and hockey teams, and marching girls provided sport and entertainment and bus trips were organised to the movies (where they sat in segregated seating), and to the beach.

There wasn't much out there, but you could always find somethin', y' know [to do]. I don't think it would ever be the same [if we moved back]. It was nice 'cos every kid, we'd all play together, y' know. Look they 'ad their hockey eh, basketball, marchers, football, all sport-mad y' know ... see there used to be, you know ----- an' 'er husband, well they used to have a Monday night eh, they used to open it up [community hall], they'd have ten pin bowlin' this way and quoits, y' know.

An Aboriginal branch of the Country Womens Association (CWA) was

²⁰ There had been considerable outmigration of the population which accelerated after the 1963 amendments to the Act. In 1965 Long (1970) recorded total population of 161 of whom 55.4% were under fifteen years of age.

started²¹ and the Burnt Bridge Progress Association organised many community activities, including dances and Christmas parties. Social interaction, traditionally a public activity (Morris 1986), maintained and reinforced social cohesion, a feature of daily life that was lost with dispersal through the town.

So although by this time the stated function of the AWB stations was to train people for assimilation, the effect was often quite the opposite, reinforcing Aboriginal separateness from the social mainstream and fostering a sense of cohesion and community identity. Bell (1965) and others have made much of the mutual support and interdependence which characterised reserve communities during this period. However, this rather rosy image of station life needs to be balanced against the attitudes of its many critics. When the New South Wales Select Committee inquiring into Aboriginal welfare took evidence in Kempsey in 1966 most witnesses from the station expressed a strong desire to get off the station (Macleay Argus, June 25, 1966). One woman who had lived at Burnt Bridge for fifty one years told the Argus in 1968:-

I don't like living here. I don't think any of my people like living here. We feel shoved away. We don't have any privacy. I want to get off the station away from the conditions. I want to get away from all living together (Macleay Argus, February 27, 1968).

Limited employment opportunities had a destabilising effect, forcing out-migration of the young to Sydney and Wollongong seeking work. While this was attributable to local discrimination and the condition of the labour market rather than station life per se it had a significant effect on the population structure at Burnt Bridge (see Long 1970).

²¹ Aboriginal women had to form their own branch and use separate facilities for their meetings and activities because of white opposition to their joining the Kempsey branch (Morris 1986).

Furthermore, living conditions were unquestionably appalling:-

These huts are unlined. In wet weather water pours in through half inch cracks in the galvanised iron walls and ceiling and drives through ill-fitting weatherboard shutters across the windows. The floor is warped and the wind finds every flaw. [.] The stove is an open hearth off the living room [and] the rooms are smoke-blackened. In winter condensation mixed with soot drips like gum from the ceilings, permanently staining everything it strikes. Outside dripping taps provide a water supply and the overflow escapes down open drains. Flies cling like burrs to the green slime that defies disinfectants and digging (Macleay Argus, February 27, 1968).

Houses were overcrowded and what little is known of the health of the population indicates that birth and mortality rates were very high (see chapter one). A survey conducted by the Department of Health in 1958-59 found that 64% of Burnt Bridge residents were infected with roundworms and accounts of extremely heavy parasitic infestations have been recorded (Owusu-Ansah 1981).²² According to the Welfare Officer giving evidence to the Select Committee in 1966, worm infestations were endemic and the incidence of venereal diseases, including syphilis was high (Macleay Argus June 25, 1966).²³

Residents complained of the indignity and inconvenience of communal washing and sanitation facilities and the expensive journey into town to shop or see a doctor. They were subject to constant surveillance and interference by white authorities particularly the Board, the police and Child Welfare Officers. At the same time all 'unauthorised persons' were forbidden entry to the station - a fact which was proclaimed by a sign at the gate - which prevented the residents from freely choosing with whom they associated. In addition the enforced relocation of

²² Worms were apparently vomited up by adults and passed by children in their stools in massive numbers.

²³ Throughout these years the AWB maintained that the health of Aborigines in New South Wales was 'excellent' or 'very good' or 'satisfactory ... apart from an outbreak of gastro-enteritis' (AWB reports quoted in Parliament of New South Wales 1981:133).

people from different communities, particularly those from Yellow Rock to the north, almost certainly generated intergroup tension and animosity on the station. Bell (1965), arguing against the concept of a universal Aboriginal identity, notes the ethnocentricity of residential groups and the inter-group distrust and hostility that this generated.

While a sense of community identity may have been an important aspect of Aboriginal adjustment to institutional life at Burnt Bridge it is clear that very poor living conditions and all-encompassing white control were the dominant features of this experience.

Resistance to institutional control - Greenhill

Those who wished to escape from the institutional control of the Board in Kempsey lived at the camp at Greenhill, where they were subject to only sporadic supervision. They were, nevertheless, still subject to the general restrictions which applied to all Aborigines. Indeed, Rowley (1978:111) argues that the ever-increasing rigidity of government control meant that 'even those who lived outside the controlled reserves might as well have been there'.

The camp was built on the site of the old garbage tip, out of sight of the town and accessible by a small unsealed road. Water was carried from the Macleay River which flows to the north west of the camp.

Dwellings were makeshift structures made with waste materials (corrugated iron walls with cardboard linings) and could be legally demolished by the Council at any time since they were on Crown land. Unfortunately, there is very little recorded information about Greenhill

and none of the long-term resident's life histories have been collected, but it can be assumed that conditions there were similar to those of fringe camps elsewhere.

Greenhill seems to have provided a focus for local resistance to the APB/AWB. Both Morris (1986) and Goodall (1982) support the view that it was a 'central point of opposition to government control' (Morris 1986:279). Changes in Board policy in the 1950s led to Greenhill being declared a reserve in 1956 and 1957 (N.S.W. Ministry of Aboriginal Affairs n.d.). Informants state that at this time lessees were persuaded to sign over their leases to the Board in exchange for houses that the Board would build and rent to them for a nominal sum in perpetuity.

Five small cottages were constructed some time during the late 1950s under the supervision of the Kempsey Aborigines Welfare Committee (see below), although sanitation services for them were not provided for several years. The cottages were extremely small and as a result of successive changes in land ownership (the Aboriginal Lands Trust took over when the AWB was abolished and was in turn superseded by the Kempsey Local Aboriginal Land Council) the rental charged for them rose. When they were finally replaced in 1985 with modern brick houses (the cottages were by this time extremely dilapidated) a dispute arose over the (considerably higher) rental of the new houses. The frequently disregarded historical basis of this dispute is the fact that the tenants believe they have been fraudulently dispossessed of their land.

Throughout the late 1960s a total of twenty two new houses were built by the Board at Greenhill, albeit hampered once again by protracted delays

in the provision of sanitation by the Council. In line with Aboriginal housing policy at that time, the houses were not of standard Housing Commission construction. They lacked hot water systems and wash basins in the bathrooms and had only one wall point for the use of electrical appliances per house, even though the houses had to be heated using freestanding electric heaters. Hot water systems were not installed in these houses until the late 1970s! They did however have 'a bathroom and sewerage, electricity and water, linings on the walls and glass in [the] windows' (Macleay Argus, February 27, 1968).

During the construction period there was an influx of a dozen or more families seeking improved accommodation. The Board attempted to prevent the 'migrants' from taking up residence by having the Shire Council demolish the temporary dwellings as soon as they were vacated by the rehoused residents (Macleay Argus, February 27, 1968). One resident was given four days notice that her home would be burnt down, but she was granted a stay when it was realised that she was not a 'migrant' but a long-term resident at the camp. It seems however, that the number of houses constructed was actually increased from 14 to 22 to house some of the migrants.

At the same time as Greenhill was being established as a residential settlement, the AWB policy was openly against the retention of reserves, as were many Aborigines who expressed a preference for resettlement in town. At this time however integrated housing was very difficult to obtain either with or without the Board's help (see below).

The end of institutional control - closure of Burnt Bridge station and the move to town

At the beginning of the 1960s attempts were made to carry through the Board's policy of assimilating Aborigines into the towns. By this time, living conditions at both Burnt Bridge and Greenhill were appalling and increasingly the focus of public attention. The local council, the Department of Health and the Aborigines Welfare Board were in dispute over who was responsible (Macleay Argus, June 20, 1961). At Burnt Bridge the number of cottages had been reduced to twenty three with the destruction of substandard dwellings as they became vacant and those that remained were 'more or less decrepit'. Average occupancy was seven residents per (two-bedroomed) cottage with severe overcrowding in four houses (ten to fifteen residents) and overcrowding in a further six cottages with eight or nine residents. Overcrowding also occurred in another five cottages because they were occupied by several family units (Long 1970:47). Thus, true to the many paradoxes which had characterised its policies and practices, the Board was withdrawing its support from segregation (e.g. the demolition of dwellings on the reserve) while at the same time promising to build houses to replace the derelict cottages at Burnt Bridge and the makeshift dwellings at the Greenhill camp.

In 1958 and 1960 the first two Aboriginal families were resettled in the town on land acquired by the AWB, in spite of public protests. The families were chosen for assimilation by a committee, once more demonstrating that Aborigines had little control over their own affairs and were not permitted to act independently of white control. Because of the living conditions at Burnt Bridge there was fierce competition for resettlement. The first house was subsequently burnt to the ground

under mysterious circumstances, killing one of the inhabitants. There is considerable secrecy surrounding these events but the fire seems to have been the result of internal dissent in the Aboriginal community over the occupancy. In 1962 it was announced that a further family was to be resettled by the AWB, this time in a refurbished house which would be moved to a lot in South Kempsey. There was an immediate public outcry and attempts were made by town councillors to block the move, one alderman stating he:-

was not against assimilation but he thought the Board should spend money first on the shanties at Greenhill before it brought families into the white community (Macleay Argus, March 28, 1961) [emphasis added].

The 'white community' was later reassured that the relocated family would be 'chosen for assimilation' (Macleay Argus, May 13, 1961). There were long delays in completing the project as a result of further disputes between the Board and the Aborigines Welfare Committee over who should paint the house but it was finally occupied by the Cohen family from Bellbrook. Mr Cohen later recalled:-

There was a lot of antagonism when we came down. Yes, it was racism. Nobody wanted us, they were frightened of us. And we were not happy either (Macleay Argus, November 7, 1970).

Similar public protest has subsequently surrounded every housing scheme to resettle Aborigines in the town, the last being in 1986 when the residents of the village settlement just beyond Greenhill petitioned the Council in protest at an Aboriginal family coming to live amongst them (see Kamien 1978 for an account of similar protests at Bourke in the north west of the state). One such protest was fortuitous for the Aboriginal community since it led to an upgrading of the building standards for Aboriginal homes (see below).

In September, 1962 four Burnt Bridge families were relocated to Sydney and the AWB continued to obtain a few houses in town to resettle 'chosen' families. In 1964 a pre-school, financed by the (International) Save The Children Fund was opened at Greenhill and preparations were under way for the construction of eight new houses at Greenhill.

During the sixties, Aborigines throughout the state were becoming increasingly outspoken and were attracting growing support from sections of the white community. The Federal Council for the Advancement of Aborigines and Torres Strait Islanders (FCAATSI) was founded by Black activists in 1957, and the Aborigines Welfare Committee²⁴ was formed in Kempsey to promote the interests of Aborigines in the town. In 1961 the Anglican Synod of the Diocese of Grafton called for a full government inquiry into the conditions of employment, housing and hygiene of all Aborigines in the State. The more blatantly discriminatory provisions of the Aborigines Protection Act (and amendments) were repealed in 1963 (Rowley 1972), giving Aborigines full entitlement to welfare benefits. In 1965 the Student's Action for Aborigines Council from Sydney University, led by Charles Perkins,²⁵ toured the state in a 'Freedom Ride', campaigning for citizens' rights for Aborigines. During their visit to Kempsey they outraged the local population by picketing the public swimming pool from which Aborigines were debarred. The local press was unsympathetic and made much of the Communist Party connections

²⁴ This committee was comprised of both Aborigines and whites, and included one of the AWB officers.

²⁵ Franklin (1976) quotes an Aboriginal source as noting that the movement was at this time comprised mostly of white liberals and a very small handful of radical Aborigines such as Kevin Gilbert, Charles Perkins and Chicka Dixon.

of one of the white students, claiming the '[Freedom] Ride was Red-Inspired' (Macleay Argus, February 27, 1965). It seems that many local Aborigines were also against this intrusion. One woman told me that the visitors did not know about the local situation and had come and made a 'big fuss and left us to clean up the mess'. Nevertheless, the outcome was that the ban against Aborigines was lifted by the Council later in the year, amidst repeated disclaimers from the Council that the protest had any influence on its decision. The Aborigines Welfare Committee claimed responsibility for having the ban lifted (Macleay Argus, May 30, 1972).

In July of the same year a meeting of state ministers concerned with Aboriginal welfare and Commonwealth representatives met in Adelaide and the new policy of assimilation was born, based on general agreement at this meeting that Aborigines should not be forced to become white Australians (Franklin 1976). Thus:-

The policy of assimilation seeks that all persons of Aboriginal descent will choose to attain a similar manner and standard of living to that of other Australians and live as members of a single Australian community, enjoying the same rights and privileges, accepting the same responsibilities and influenced by the same hopes and loyalties as other Australians (Parliament of New South Wales 1981:5).

It was still assumed however, that Aborigines aspired to the same values and standards as whites. Special provisions for Aborigines were now not based on race but on a recognition of their need for 'special care and assistance' to make the transition to white society.

Subsequently, a number of changes in Board policy were announced, the most important being that managers were to be removed from the stations and reappointed as welfare officers based in the towns (Macleay Argus, October 14, 1965). This heralded the end of three decades of

segregation, containment and intensive intervention in the lives of Burnt Bridge families. In the meantime, a Joint Parliamentary Committee (NSW) had been established to investigate all matters pertaining to Aboriginal welfare, and it visited Kempsey in 1966, taking evidence from both Aborigines and Whites.

In 1967 a national referendum was held which gave the Commonwealth concurrent power with the states to legislate on Aboriginal affairs and to count them in the national census. The highest number of dissenting votes in New South Wales came from Kempsey where residents were once more petitioning the Council to protest the proposed construction in the town of houses for Aboriginal families (Macleay Argus, February 9, 1967). The complainants argued that two of the houses were of substandard design (which was true - two were to have been Greenhill-type cottages) and would therefore lower their property values. They also argued that the houses were too close to Burnt Bridge and would attract too many Aboriginal friends and relatives to the area. The Kempsey Municipal Council contributed to the protest by arguing that the construction of two houses side by side was not in the best interests of assimilation and that they should be scattered around the town. It is not hard to see the recurrent theme of dispersal underlying these statements.

The protest continued into the following year when a group of residents went to Sydney to lodge a petition with the Board. One of the petitioners is quoted as saying that while he accepted assimilation 'we just don't want an Aboriginal settlement in our area' (Macleay Argus, February 17, 1968) [emphasis added]. It is clear from this remark that the standard of the proposed housing was not the central issue. The

houses were eventually constructed but only after all the designs conformed to public housing standards. No substandard houses were subsequently built for Aborigines in Kempsey.

The report of the Joint Parliamentary Committee recommended some major changes in the legislation affecting Aborigines which were put into effect in 1969. The Aborigines Protection Act (and amendments) was repealed, to be replaced by the Aboriginal Affairs Act (1969), and the Aborigines Welfare Board was abolished. Responsibility for Aboriginal Welfare shifted to the Minister for Child Welfare and Social Welfare, and all reserves were to be closed, the land coming under the control of the Aboriginal Lands Board. Residents were to be resettled into towns. An all-Aboriginal conference was held in Kempsey in 1969 to discuss the changes and consider their impact on local Aboriginal communities. The conference was attended by representatives of other mid-north coast communities and speakers included Mr Charles Perkins (research officer with the Office of Aboriginal Affairs in Canberra), Mr Ken Brindle (state secretary of FCAATSI), Mr Alan Duncan (Department of Adult Education) and Mr W. Humphries (senior welfare officer for the Aborigines Welfare Board) (Macleay Argus, May 20, 1969). The provisional committee formed to organise the conference was formally elected as the Mid-North Coast Aboriginal Committee (Macleay Argus, May 20, 1969). Some of the representatives on this committee were to play an important role in local politics for many years to come.

The choice of Kempsey as a venue for the conference reflected the political activism of some the local people and drew attention to the prejudice which characterised race relations in the town. While the government was planning to close Burnt Bridge, thus putting an end to

promises of any housing redevelopment there, the white community remained outspoken against every effort at resettlement and families moved into town under the most hostile circumstances. They were also still being moved by white authorities, with little say in where they went. Many despaired of ever being resettled into decent housing. An announcement by the state government (Macleay Argus, November 9, 1968) that it would provide home loans to Aborigines who 'wanted to leave the district and settle in another town' again reflected the themes of dispersal and rejection by the local community which characterised this period.

Judging by the findings of the Commission of Enquiry into Poverty which surveyed three (unnamed) communities on the north coast, demolition of substandard dwellings was also quite common during this period. In spite of the fact that demolition orders required that a notice be affixed to the door of the dwelling 90 days prior to demolition, some families reportedly returned home after a few days absence to find their homes 'a pile of rubble' (Department of Sociology 1974:120).²⁶ Also reported were the setting fire of a 'humpy' on a reserve (with the loss of all its contents), in front of witnesses, and the death of a man whose 'humpy' was bulldozed while he slept inside. Aborigines also complained to the Poverty Commission about the numerous bureaucratic hindrances and misinformation for people awaiting housing and about difficulties with health services in the towns. These were certainly not isolated incidents. Residents in Kempsey mentioned several cases of summary demolition of homes in which families' possessions were totally destroyed. One woman recalled:-

²⁶ In one instance a dispute erupted after eighty people were made homeless by a 'zealous health inspector' (Department of Sociology, University of New England 1974:121).

[I went away to work] but I left [my things] there in the place [shack on the reserve]. I was comin' back an' that old bitch of a [name of the welfare officer] came an' destroyed it all, pulled the bloody house down an' all. I had nowhere to go. All my crockery was broken an' everythin'!

Many also had stories to tell of bureaucratic obstruction and problems with services in the towns. Thus the process of residential integration remained very much in the control of the state. While resettlement into town was being hampered by bureaucratic problems and community rejection, Aborigines were simultaneously being forcibly displaced from their substandard dwellings on the various reserves. It seems reasonable to conclude that Aborigines felt a great deal of anxiety and uncertainty about their residential rights and opportunities during this period.

Strategies for incorporation

Of the incorporative strategies adopted by the Aborigines Protection/Welfare Board two are of special significance to the ideas developed later in this thesis. They are the removal of children and the manipulation of rations.

(a) the removal of children.

In addition to containment and control, one of the most profoundly socially destructive activities of the APB/AWB was the removal of Aboriginal children to institutions and 'first class private homes' (APB Report, 1926, quoted in Read n.d.:2) without parental consent. The purpose of this policy, often frankly stated in the early days of the APB, was the acculturation of 'mixed-blood' children since it was hoped that:-

the continuation of this policy of dissociating the children

from camp life must eventually solve the Aboriginal problem (APB Report, 1921, quoted in Read n.d.:2).

Before the Aborigines Protection Act became law in 1909, the Board had for many years tried to persuade 'mixed-blood' parents to 'apprentice',²⁷ their adolescent children away from home as labourers and domestic servants, under the Board's direction²⁸ (Goodall 1982:73). For the most part this was strongly resisted, although some parents 'consented' after the Board's 'persuasion'. The Board however, was critical of parents who 'failed to assert their authority' and return their children to employment if they ran away as a result of emotional or physical mistreatment (APB Reports, 1908, quoted in Goodall 1982:73). By 1906 the Board was seeking control over all Aboriginal children in loco parentis to resolve its frustrations over lack of compliance in the scheme.

However, such sweeping powers were denied it under the Act (1909) and the Board was required to demonstrate in court that the child was neglected, under the provisions of the Neglected Childrens Act 1905, before he or she could be removed (Miller 1985). Clearly dissatisfied with these provisions the Board pressed for wider control, complaining that 'if the aboriginal (sic) child happens to be decently clad and apparently looked after it is very difficult indeed to show that the half-caste or aboriginal child is actually in neglected condition' (New South Wales Parliamentary Debates, quoted in Goodall 1982:81)!

²⁷ As Goodall (1982) notes it was not a true apprenticeship since no training in a trade was provided. 'Apprentices' did however, sometimes acquire work skills, as in farm labouring occupations.

²⁸ The children's wages were to be banked by the Board and returned to them at the end of their 'apprenticeship' (Goodall 1982:73).

In 1915 the Act was amended, giving the Board power of summary removal of any child if it was considered by the Board to be in the child's best interests (Miller 1985). This was used mainly to endorse the 'apprenticeship' of adolescents. Girls who were 'approaching the age of puberty' were much more vulnerable than boys and were removed in larger numbers (Goodall 1982). They were sent to private homes in Sydney and later in the towns and to country situations. The majority of boys were sent to country jobs as rural labourers. The Board controlled the apprentices' wages which it banked, remitting to the apprentice pocket money of six pence per week. Those who absconded from employment never received their wages from the Board. Reports of emotional and physical abuse are widespread (Gilbert 1977; Edwards 1982; Miller 1985; Read n.d.) and many of the teenage girls returned home pregnant (Goodall 1982). In the rural areas it was the police who suggested suitable homes for the wards and were responsible for seeing that they were not subject to abuse (Goodall 1982:134). Such a system offered little protection for the wards.

Younger children over ten years were sent to homes established by the Board, one for girls at Cootamundra in 1912 and one for boys at Singleton in 1918²⁹ (Long 1970). Because of its derelict condition the Singleton home was moved to the reserve school at Kinchela on the Macleay in 1924. The United Aborigines Mission (UAM) also ran a home at Bomaderry, under the supervision of the Board, for girls and boys under ten years of age. Many women spent their entire childhoods as wards of the Board in the Bomaderry-Cootamundra-apprenticeship progression of dispersal and control (Goodall 1982). In addition, dormitories were

²⁹ The Board's home at Singleton was in fact taken over from the Aborigines Inland Mission who had several years earlier established a home there for Aboriginal orphans (Miller 1985).

established on some of the stations (e.g. Walhollow and Brewarrina) and children who were 'unsatisfactory' for the apprenticeship scheme or who absconded from their employment were sent there for a period of internment. There were persistent complaints to the Board of sexual abuse of female inmates by dormitory managers and their sons (Goodall 1982; Read 1983).

Conditions in the homes were harsh. The inmates at Cootamundra were expected to perform arduous domestic chores under rigid discipline. The Board's minutes express concern that the girls were:-

flogged, ... slashed with a cane across the shoulders [and] treated with undue severity ... the use of the cane being a daily occurrence (APB Minutes, 1928, quoted in Goodall 1982).

One of the managers at Kinchela was dismissed for drunkenness in 1931.

He was replaced by a man who:-

regularly punished boys by refusing them food and tying them to a fence and beating them with length of hosepipe and with stock whips (APB Minutes 1934, 1935, quoted in Goodall 1982:140).

There were also reports of sexual abuse of the boys. Even the undertens at Bomaderry were not free of corporal punishment. Miller (1985:162) quotes one of his informants:-

I can remember June, my sister, when she was nine she wet the bed one day and the matron came and she got her and belted her until the blood came out of her back and when the blood came out of her back I said to the matron, 'My sister's back is bleeding.' And she said 'You be quiet or you'll get one too.'

The legislation remained in force until the Act was amended in 1939 when the welfare of Aboriginal children was returned to the Department of Child Welfare under the provisions of the new Child Welfare Act (Read n.d.). Although the number of children removed declined after this time (see below), it continued up until 1969 when the AWB was dissolved.

It is not possible to determine exactly how many children were removed. There are no records of the number taken prior to 1909 and an unknown number of lighter 'caste', classified as 'quadroons' and 'octoroons', were handed over to Child Welfare.³⁰ Board records show that 1,427 children were taken as wards at an escalating rate from 1909 to 1936 (Goodall 1982) with a possible additional 150 taken to 1938 (Morris 1986). There are no records of those placed in religious and non-Aboriginal secular institutions throughout this period (Read n.d.) nor are there any records of the numbers removed between 1939 and 1969 under the Child Welfare Act. However, Read (n.d.) estimates the former to be around 500 children and the latter to have included around 1600 children. Whatever the exact figures, the numbers were substantial. Morris (1986) calculates that about 66% of children in New South Wales were taken prior to 1936.

What effect did the removal of children have on Aborigines in the state? Fears for the safety of their children caused widespread movement as families fled from the reserves, relocating in temporary camps near towns and on pastoral properties (Goodall 1982). Ironically, living conditions in these camps increased the likelihood that a child would be designated neglected and removed, so in order to escape from the Board, families moved long distances³¹ or kept constantly on the move. Paradoxically, it was during this period that many public schools were

³⁰ Based on the removal rate of two children handed over to Child Welfare for every three taken by the Board recorded at Walgett Goodall (1982:135) estimates that the combined removals would have totalled 2,400 children. Peter Read of 'Link-up', the organisation working to reunite Aboriginal families, believes the number may be closer to 6,000 children (Link-up Diary).

³¹ It was during this period that some of the families now living in Kempsey (Campbells, Donovans and Mumblers) arrived from the south coast.

excluding Aboriginal children, and since failure to attend school was commonly used as a basis for 'neglect', many families were forced to come in to reserves to gain access to segregated schooling.

Furthermore, parents who fled the reserves could be prosecuted for abduction of their own children (Goodall 1982). Combined with other Board practices, the taking of children clearly had a significant effect on patterns of residence throughout the state.

On a more personal level the effect was often profound (see Gilbert 1977; Read n.d; Goodall 1982; Edwards 1982; and Miller 1985 for some personal accounts of the hardships endured and the effects on peoples lives). Some parents lived in constant fear of losing their children which were sometimes taken in dawn raids on their homes (Miller 1985; Morris 1986) or simply failed to return home from school (Read 1983). One-time residents of Burnt Bridge recount how they would run into the bush with their children when police appeared on the station and occasionally responded to the threatened removal of their children with threats of violence (Morris 1986). An ex-AWB officer described as a 'mother-figure' to 'hundreds of Aboriginal families' (Macleay Argus, February 27, 1968) is remembered with great bitterness for the part she played in what the local people describe as the kidnapping of their children. Threats of removal of children were used to gain compliance, and both Rowley (1978) and Goodall (1982) argue that removal of children was sometimes used as punishment for recalcitrant parents, a view supported by some of my informants. Researchers for the Commonwealth Government Commission of Inquiry into Poverty which was conducted in the early 1970s were told of a family who had their 'humpy' burned to the ground while they were away tobacco picking. They lost all their furniture and clothing but:-

The family told our research assistant they would not lodge a complaint over this as the official [who set fire to the house] was a Child Welfare officer who would take their children away if they annoyed him (Department of Sociology, University of New England 1974:121) [emphasis added].

The 'apprenticeship' scheme was frequently abused by employers who defaulted on their responsibility to provide food, clothing, shelter and medical expenses; who exploited the labour of the apprentices; and who physically and emotionally mistreated them (Goodall 1982, Read n.d.). An unknown number of people have never been reunited with their families. Many became delinquents, drug and alcohol abusers and patients in psychiatric hospitals (Edwards 1982; Read 1983). A man I spoke to at Kinchela, now an Aboriginal Alcohol Rehabilitation Centre, has spent most of his life there, first as a ward of the state, then as an alcoholic.

Not everyone suffered hardship however. Read (n.d.:14) notes that some apprentices 'were treated with some dignity and respect by their employers' and some of Goodall's informants, for whom Cootamundra was the only home they knew, look back on life at the home as 'pleasant and stable in comparison to their later apprenticeship' (Goodall 1982:140).

Considering the numbers involved, almost every Aboriginal family in New South Wales must have been affected to a greater or lesser extent by the removal of children by the state. Since its overt objective was the deculturation of 'part-Aborigines', it clearly had a profound impact on Aboriginal society at both the individual and the community level.

(b) The manipulation of rations and suppression of dietary practices.

Morris (1985) and others have shown that a central theme in the historical discourse about Aborigines was loss of culture. Aborigines were, he argues, depicted in negative terms as a people who, by intermarrying with whites, had lost their Aboriginality, rather than in more positive terms as a people undergoing cultural transformation. In this way Aboriginal adjustment to the new social order was effectively ignored and Aborigines were portrayed as a shattered remnant who had adopted only the worst that whites had to offer. A central argument in this thesis is that this theme of loss of culture underlies the perception of Aboriginal dietary transformation. It is responsible for two popular beliefs which have been elevated to the level of taken-for-grantedness, and which are in fact contradictory. The first is that Aborigines were incapable of adapting to either agriculture or introduced foods. The second is that they adopted introduced foods, but only the worst of the white society's diet.

For the same reason that social scientists have seen the need to reassess the issue of the supposed loss of culture and have examined more closely the nature of Aborigine's positive and active initiatives and strategies for the maintenance of culture and social identity; so too does the subject of Aboriginal diet need to be reevaluated in a way which takes account of the role of Aborigines in its transformation. While it cannot be denied that the post-contact era had a profound effect on diet it is necessary to consider more closely, rather than take as given, many of the common sense beliefs about it. This enterprise is, unfortunately, hampered by a paucity of data. To date only the most sketchy information is available.

As noted above, the pre-contact diet was rich and varied, drawn as it

was from an environment with a wide variety of habitats. The introduction of white flour and sugar was undoubtedly the earliest and most profound change. The flour provided a ready substitute for a traditional product that was labour-intensive, requiring laborious detoxification and preparation. It was used to make a dough (damper) which had previously been prepared from the root of the conjevoi and from a type of nut (Ryan 1964). According to early historical accounts the new damper was 'relished ... rather than the orthodox congou (sic)...[or the] yeast baked loaf turned out by the trade' (Ryan 1964:184). It therefore seems likely that white flour rapidly replaced the traditional flour since the former had an agreeable texture and flavour, and the latter was so time-consuming to prepare.

While it is impossible to determine just how much bush food continued to be eaten on the Macleay throughout the early post-contact period I think the importance of flour and sugar can be overstated. The relatively slow annexation of land on the Macleay assured the original inhabitants continued access to many of their hunting grounds, since the mountainous country to the west, to which the Dhan-gadi retreated, was largely undisturbed (Morris 1986). Furthermore, the diet was rich in fish and shellfish and the river and shoreline were habitats that were not yet commercially exploited by the new settlers. Even as Aborigines were incorporated into the pastoral economy, and were paid in rations, they remained dependent on bush foods since no meat was provided and the seasonal nature of their occupations necessitated a return to a fully subsistence existence when labour was not available (Morris 1985; see also Cohen 1987). At the same time they were however, incorporating new foods into the diet. Ryan (1964:184) quotes an early historian who wrote:-

They were not at all partial to corned beef, ate it only when fresh was not available. Our fruits and vegetables found ready acceptance at their meals, while fish of every kind ... came under their fancy (Ryan 1964:184) [emphasis added].

It was also noted that they readily harvested the honey of imported bees (Ryan 1964).

By the 1880s many Aborigines on the Macleay had become farmers and were raising European crops both for market and domestic consumption. On Fattorini Islands 'potatoes, beans, cabbages, peas, pumpkins and melons' (Missionary report, 1908, quoted in Morris 1985:105) were the favoured crops, while at Euroka Creek (Old Burnt Bridge) fruit trees had been planted to supplement the farm's produce of maize, vegetables and poultry. Clearly bush foods continued to be eaten because Morris (1986) found they were still an important part of the diet of the Dhan-gadi in the 1920s and 1930s, eighty years after whites had settled on the Macleay. At a permanent camp of rural labourers and their families on the upper Macleay:-

The families lived in bark huts and they grew lemon and orange trees (still growing today) as well as vegetables and corn for domestic use. Bush tucker was the main source of meat (Morris 1983:505).

Since farming stopped as a result of dispossession and control by the Board, or, in the case of the labourers' camps, changes in the rural economy, a subsequent decline in farming and the consumption of introduced vegetables could not possibly be attributed to inability to adapt to the new foods or practices.

The dietary history with which I am more concerned relates to the station years at Burnt Bridge and the camp at Greenhill. For this period evidence is indeed scarce. In spite of the fact that the state, through the APB/AWB, provided the dietary staples for a significant

proportion of the population for many years, there are no records which permit any quantitative analysis of dietary intake of rations by individuals.³² Nor are there any records of how the diet was supplemented and with what. The only systematic attempt to evaluate urban Aboriginal nutrition during this period was on the New South Wales South Coast in 1966, but this part of the 'Coasttown' project was abandoned because of 'doubts about the accuracy and usefulness of the information obtained' (Frith et al 1974:61). I made numerous attempts to find out about dietary practices at Burnt Bridge, with remarkably little success. In general people replied with vague generalities and refused to be drawn on specific questions. It is my impression that this is part of a more general secrecy about private (domestic) life and due to 'shame', but it may also reflect some concealment of Aboriginal practices (see below).

In the early days rations consisted of flour, sugar and tea with or without meat, although onions, potatoes, rice and milk powder were added in later years. Rations were issued on a per capita basis to those who needed them. Throughout the years that Burnt Bridge operated as a station, need would have waxed and waned according to the social and economic factors outlined above. Recalling the ration allocation of thirty years earlier one informant stated that in the 1950s she traded a two pound ration coupon for the following for herself and her dependent children³³:-

³² I pursued this matter in Kempsey. An ex-AWB officer informed me that they were ordered to destroy the ration books, showing amounts issued to different persons on a weekly basis, when the AWB was abolished. She stated that she had, however, kept the ration books. When I subsequently asked to see them she denied any knowledge that such records still existed.

³³ She was very vague about how many children she was supporting at the time.

1/2 dozen potatoes	'sometimes' rice
4 onions	flour
1/2 pound of dripping	jam, honey or syrup
sugar	meat
tea	milk powder

The flour was frequently contaminated with weevils and the meat was allegedly sometimes decayed. Claimed another, 'You had to get the weevils out of the flour ... and the rice'! Residents recall that borrowing and sharing were common so that staples such as flour and tea, though almost always in short supply, were seldom absent from the diet at any time. It is likely however, that a good deal of concealing of stores also took place, in order that families could protect themselves from the demands of their neighbours (see chapter three).

Since there was no refrigeration,³⁴ meat would have had to be consumed (or at least cooked) over two or three days. One woman claimed that meat had been issued twice weekly, though she did not make clear which period she was referring to. Others said the meat was issued weekly with the rest of the rations. Nevertheless, the ration diet was probably low in protein and deficient in the vitamins and minerals supplied by fresh fruit and vegetables. It is not possible to calculate the adequacy of its energy yield. Questioned about the apparent austerity of Board rations one informant countered 'yet we never starved, we always had plenty to eat'.³⁵ This was largely due to supplementation of the diet with bush foods and meat and vegetables from other sources.

³⁴ In the later years some residents had kerosene fridges but as one of them recalled, 'we used to run out of kerosene all the time'.

³⁵ Other accounts of life on Aboriginal stations show however that hunger was a severe problem (see for example Miller 1985).

One-time residents of Burnt Bridge station made frequent reference to the use of bush foods including wallaby, echidna, cobra, fish, shellfish, crustacea, eels, turtle and wild honey. Plant foods (wild fruits) were seldom mentioned³⁶ which suggests that gathering of native plant foods was insignificant. However, this needs to be interpreted with caution since all discussions of food, eaten the day before or thirty years before, emphasise animal foods. It seems unlikely that people out hunting and fishing did not avail themselves of the seasonal availability of nuts and berries but this would have been incidental to the main enterprise (i.e. getting meat or fish). According to a number of informants Aborigines also supplemented their meat rations by going to the 'killing yards' to get offal.³⁷

It seems likely that consumption, particularly of fresh fruits and to a lesser extent vegetables, declined when Burnt Bridge became a station and the population increased, although the evidence to support this is circumstantial. We know that farming came to a fairly abrupt halt when the managers took over control of the farms (Morris 1986) and that fruit and vegetables (other than potatoes and onions) were not provided in the rations. Those who did not have a cash income would therefore have been unable to supplement their diets with store produce. According to old residents, small domestic gardens were maintained by some families, but lack of reticulated water supply made this extremely difficult during the summer months. It seems that such enterprise diminished over the years as the conditions at Burnt Bridge deteriorated.

³⁶ One elderly woman recalled collecting yams as a child.

³⁷ Morris (1983) notes that rural employment shooting possums, dingos and rabbits provided both cash and meat to Aborigines.

Important sources of vegetables were the farms where residents worked. Sometimes their wages were paid partly in produce and at other times they used their cash to buy vegetables at greatly reduced prices. 'They [the men] used to come 'ome with vegetables, potatoes and pumpkin and squash and cabbage'. In later years a travelling produce salesman brought his truck to Burnt Bridge once per week. It is likely that this coincided with more people having cash incomes as a result of the lifting of restrictions on welfare payments.

While it is impossible to tell the extent to which people relied on rations during this period there is one important factor which may have influenced apparent consumption. Morris (1986) has described how traditional culinary practices, typified as 'dirty blackfella _____', were an important component of the negative portrayal of Aborigines. While this no doubt had had the effect of suppressing traditional practices, especially amongst those who were trying to be accepted into the white community, it must also have led to some concealment.

According to Fink (1957:106):-

They [Aborigines on the Reserve] feel they don't like a white person to see them cooking down in the ashes and near the dirt and eating their own [bush] food.

Thus, consumption of bush foods, particularly those that were unacceptable to the white community such as cobrah, acacia or 'wichety' grubs and echidna, may have gone 'underground'. I had some insight into this when a woman, with whom I had had regular contact over a period of many months, included a 'wichety' grub in her resume of the previous day's food intake. Her hesitancy and alertness to my response made me acutely aware of the significance she attached to this revelation.

The closure of the station at Burnt Bridge in 1968 and the relatively rapid relocation of residents into town probably led to a sudden diminution in the consumption of bush food. That these foods were still consumed, albeit sporadically, is evidence that they had, however, never been completely lost from the diet. Since everyone now had a cash income from some source and ate a 'supermarket' diet it seems reasonable to conclude that they were consumed in much greater quantities in the past when income was low and unreliable and rations were inadequate. Indeed, informants stated themselves that they did not eat nearly as much bush food as they had in the past. The importance of this lies in the fact that deficiencies in the past diet cannot be deduced from an evaluation of rations since an unknown quantity of dietary supplementation with bush and other foods was taking place.

There is some evidence that nutrition, particularly of children, was inadequate on many stations though there appears to have been considerable variation. Calley (1957:211) observed in the far north that:-

At X. [estimated population 140], perhaps only two families are undernourished. At U. [estimated population 130-140], however, the standard of nutrition is very low indeed. Many children are given 'bread and dip' (damper or bread dipped in thin gravy) three meals a day. Only two of the families on the station make a practice of cooking any other vegetables than potatoes. This is partly because vegetables tend to be very expensive, and partly because of cultural categories that class meat and bread as 'food', but vegetables as luxuries or 'trimmings'.³⁸

High infant mortality and growth failure in children, which were apparently widespread (see for example Calley 1956), are indications that nutrition may have been inadequate. But worm infestations,

³⁸ There appear to be grounds for doubting Calley's conclusion that vegetables were defined by Aborigines as 'trimmings'.

recurrent infections, poverty and alcoholism were also prevalent. As noted in chapter four such factors influence nutritional status so that it is not possible to deduce nutritional intake purely on this basis. By the 1960s poor diet was already beginning to be used in official explanations for Aboriginal health and social problems. In Kempsey, an AWB welfare officer cited poor diet as the basis of Aboriginal failure in schools (Macleay Argus, June 25, 1966) completely ignoring the profound difficulties experienced by children who attended public schools in Kempsey at this time.

One poorly explored area is the effect of the use of rations by the State, both as a marker of cultural inferiority and as a means of controlling behaviour. According to Goodall (1982) AWB rations were always less than those given to destitute or unemployed whites, although they were increased at the height of the depression in 1931 and again in 1938 to 'approximately' the level of white food relief (Long 1973). Underlying this difference in rations were two seemingly irreconcilable Board policies. While the Board was on the one hand determined to decculturate Aborigines in preparation for their absorption into white society, it was on the other hand exploiting traditional practices by relying on dietary supplementation with bush food to sustain it's dependents. Indeed, as Goodall (1982:31, quoting APB Report 1904) has pointed out the Board was forced to 'vigourously oppose' the 1903 legislation making the killing of native fauna an offence because Aborigines 'under the Board's care have depended largely upon native game for their animal food'. Such ambiguities must have greatly increased the frustrations of Aborigines who were dispossessed of their farms, inadequately sustained on Board rations and forced to supplement their diets by denigrated practices. After 1916 meat rations could

officially be withdrawn 'in areas where it could be shown that supplies could be made up by hunting and fishing' and according to Read (1983:24) this regulation meant that during the Great Depression 'practically no meat was distributed at all: reserve children were entitled to 4lbs of flour a week as basic nourishment'. If meat could be provided at the discretion of the Board, station residents would have had an additional incentive to conceal the amount of meat they were getting from the bush. During the Great Depression both the definition of 'Aboriginal' and the value of rations were manipulated by the state.

Since 1918 the police, as guardians under the Act, had been instructed to recognise only 'half-caste' and 'full-blood' Aborigines as eligible for rations and other aid. However, with the introduction of the Food Relief and Work Relief schemes, from which Aborigines were to be excluded, the definition was expanded to include all persons of 'Aboriginal appearance' (Goodall 1982:264). All Aborigines thus defined were denied Food Relief and directed back onto the APB for support. This was a government cost-cutting measure which was effective for two reasons. Firstly, the Board did not have to provide the Aboriginal destitute with any meat. Secondly, Food Relief recipients received ration allocations for their children and full Family Endowment while Aborigines receiving rations from the Board had the value of their childrens' rations deducted from their Family Endowment and had no guarantee of being paid the balance. Many Aborigines who had been economically independent and free from Board control were now forced to become dependent on the Board only to find the value of their support less than that paid to other unemployed persons (Goodall 1982).

Before the turn of the century rations were used by the Board to draw

children into the schools and threats to withdraw rations were later used to gain compliance with Board schemes (Goodall 1982). Dependency on the Board for rations during the worst years of economic hardship had a significant effect on residency patterns, bringing people into the reserves and town camps and thus under government control. Kelly (1944:143) records that in New South Wales in the late 1930s:-

[Through farm labour] the native becomes self-supporting and by far the great majority explained that they did not wish to live on the reserve, and they preferred not to take rations when out of work, for this might mean that the government could order them back to the reserve [emphasis added].

Thus food has been an important nexus through which the state has exerted control over Aborigines, right up until the time that welfare reforms assured them of a cash income. For this reason at least some of what is now so soundly criticised as inadequate diet based on ignorance, lack of initiative, failure to adapt to new foods and poor distribution of resources can be attributed to state policies in preceding decades.

Food consumption was also used in the wider community as a marker of racial inferiority. Aborigines employed on rural properties on the Macleay in the 1930s were 'fed outside', a racial slight that was keenly felt (Morris 1983; see also informant's account in Kamien 1978). Little had changed by the 1950s when Aboriginal farm hands who worked side by side with whites were fed under a tree or in an outhouse or laundry, often without utensils, while the white hands ate with the employers (Calley 1956). Forestry and sawmill workers ate in separate groups. Though some of these barriers have been broken down, there are still places in Kempsey where Aborigines wouldn't go to eat and many feel extremely self-conscious about eating where they can be observed by whites.

Cooking: Morris (1986) argues that at Bellbrook, the camp fire remained an important focal point in the public (external) domain and cooking a public space activity, in spite of the provision of internal fireplaces and the attempted suppression of 'eating dirty blackfella food' (food cooked in the ashes) by the station manager. Kelly (1944:144) also discusses the adjustment to reserve housing made by establishing a hearth outside the house - 'life around a camp fire had meaning. The fuel stove had none'. This remained true right up until the closure of the stations since Long (1947:47) found in 1965 that 'a good deal of cooking was done at outside fireplaces', in spite of the fact that the houses were provided with internal fireplaces or stoves.

Indeed fires have remained important in both the private and public domains wherever Aborigines are protected from white scrutiny. Interviews I conducted at Burnt Bridge in the 1985 were held inside near the fireplace, and the fires were kept burning during the day. Open fires were still frequently lit outside at Greenhill and at Burnt Bridge when people gathered together to drink, play cards or talk; but they were seldom lit in suburban backyards in the town.

Open fire cooking did however, embrace new technology so that cooking pots and camp ovens were used, and boiling replaced the traditional practice of dry baking in ashes. One pot cooking led to the adoption of the composite dishes variously named 'stew' or 'gravy' or 'soup', which are ubiquitous in Aboriginal cuisine (see chapter five).

Conclusion

Morris (1983, 1985) and others (Langton 1981; Cowlshaw 1987) have drawn

attention to the fact that post-contact Aboriginal societies have been almost universally depicted as disintegrated and disorganised, and this is particularly true of communities in settled Australia where cultural integrity has been evaluated in terms of dilution of Aboriginal 'blood' and the loss or retention of 'traditional' lifeways. This view of urban Aborigines as detribalised and acculturated still has wide currency (see for example Altman and Nieuwenhuysen 1979).

While there has clearly been a breakdown in many aspects of 'traditional' Aboriginal life (language use, ceremonies, marriage customs, subsistence patterns etc) a view of urban Aboriginal society as completely disintegrated does not do justice to the variety of strategies and initiatives Aborigines have pursued in adjusting to quite dramatic social change. Nor does it adequately account for the survival of a distinctive Aboriginal identity in settled Australia (see for example Carter 1988; Schwab 1988) and the retention of some 'traditional' customs and beliefs.³⁹

What should be clear from this chapter however, is that Aboriginal adjustment to social change has been greatly complicated by all-encompassing intervention from the state. This intervention was grounded in the belief that Aborigines were an inferior 'race' compared to whites, an ethnocentrism which was, in the eyes of the state, complicated by miscegenation (see for example Goodall 1982; Morris 1986).

In the early post-contact era, loss of land and marginal involvement in

³⁹ In chapter seven I describe, for example, the burning of the possessions of a deceased women at Greenhill in 1985.

the labour market confounded Aboriginal transformation from a hunting and gathering to a capitalist economy. Subsequently, increasingly intensive state intervention and supervision excluded Aborigines from active participation in the social, economic and political life of the dominant society at the same time as they were being incorporated into it. The reproduction of social relations across generations was interrupted by the widespread removal of children, whose assimilationist 'training' was directed towards the eradication of 'part' Aboriginal culture. In addition, access to food was manipulated by the state, as part of its incorporative strategies, bringing about dietary changes and the suppression of denigrated 'dirty blackfella' practices .

In fact, throughout this period all Aboriginal lifeways were both denigrated and suppressed. To whites, Aboriginal as 'dirty' was a critical signifier of racial difference, and this provided the rationale for the exclusion of Aborigines from using facilities such as hospitals, schools, swimming pools, hotels and cafes, barbers, and even meeting rooms which were used by whites. Significantly, the control of 'dirt' in the domestic domain was also emphasised in the training of Aboriginal women, and it was largely on this basis that families were eventually deemed 'fit' to be absorbed into white society.

A critical feature of the life experiences of Aborigines is their response and resistance to these events. Not surprisingly, the central themes of their stories are in many cases of powerlessness and dependency in a hostile world. As one man remarked to Gilbert (1977:32):-

You've got to go through it to understand what some of us've been through in life. They look at you today 'n' say, 'By gee, he gets it easy,' but when you look back 'n' see the hardships you went through.

Critical to an understanding of contemporary social conditions is the recognition that these 'hardships', and how and why they came about, are very much alive in the minds of today's adults. They comprise both an ongoing source of grievance and the context in which contemporary social pressures are embedded.

This account has dealt more with the lives of those Aborigines who attempted to maintain their autonomy, their economic independence, and their land base. Much less is known of course of the complete casualties who, in Gilbert's (1977:18) words, 'give up and say, 'oh what's the use,' and become no-hopers and drunks and goodness knows what'. Their stories are largely told, albeit more indirectly, in death records.

CHAPTER THREE

CONTROL AND AUTONOMY IN THE CONTEMPORARY PERIOD

In 1972 an Aboriginal tent 'embassy' was established in the grounds of the Federal Parliament House in Canberra, primarily to protest the court's decision in the case brought by Aborigines from Yirrkala against a mining company in the Territory, but also to draw attention to more general grievances (Miller 1985). The embassy attracted considerable media attention and a Labour government, pledging its support for Aboriginal land rights, was elected at the end of the year. By this time land rights had become the primary focus of Aboriginal political activism.

The (Commonwealth) Department of Aboriginal Affairs (DAA) was established in 1972 and in 1973 the newly appointed Aboriginal Lands Trust (ALT) in New South Wales took control from the state government of all remaining reserve lands, following amendments to the Aborigines Act (1968). The pressure on Aboriginal land is demonstrated by the fact that, of the 15 834 acres handed over to the AWB in 1940, only 3675 acres passed to the ALT (Yarwood and Knowling 1982).

With the change in government a new Aboriginal policy of self-determination was announced. It differed from assimilation most significantly in that it did not assume that Aborigines aspired to the same goals as the 'Australian community'. Instead:-

Self-determination means ... the scope for an Aboriginal group or community to make its own decisions about the directions it which it is to develop ... [because] ... the community ought to be large and diverse enough to accept differences within it in the way in which people move and develop (Parliament of New South Wales 1981:5).

This belief in community diversity as socially and politically viable became part of a more general policy of cultural pluralism which characterised the early 1980s.

Over the succeeding years self-determination was increasingly reflected in the funding of Aboriginal-controlled organisations which undertook various types of developments in their communities under the rubric of 'community control'. As will be seen however, the relinquishing of government control over the internal affairs of Aboriginal communities was only partial and the nature of the governments continued involvement tended to aggravate local tensions.

This chapter describes and discusses the contemporary social conditions of Aborigines in Kempsey. It begins with a review of the changes that led up to the political difficulties which beset the community in the mid-1980s. It will be shown that continuing bureaucratic intervention and control exacerbated the divisive nature of the emergent local political groups. This is followed by a discussion of population, housing, household size and structure, employment and services. I will then look more closely at a number of other socio-economic factors including reciprocity networks, gambling, alcohol consumption, and power and leadership in the community. In the final section I attempt to evaluate some of the effects of prejudice on the everyday experiences of Aborigines in Kempsey.

It will be seen that whilst Aborigines have gained some measure of autonomy in recent years, continuing government intervention, economic and social marginality, and race discrimination remain important determinants of Aboriginal social conditions.

From institutional to bureaucratic control - the seventies and eighties

During the early seventies social scientists were drawing attention to the social disadvantages suffered by Aborigines (see for example Rowley's trilogy first published in 1970) as did the Commission of Inquiry into Poverty. Associated with this was a change in attitudes in the Australian community towards a more sympathetic approach to Aboriginal social conditions. In Kempsey there was a marked increase in the press coverage of Aboriginal affairs, including sporting and social events, which for the first time portrayed Aborigines as something other than a 'problem'. A community group was organised to help the Aboriginal victims of a house fire (Macleay Argus, May 2, 1972) and a local man was elected as the North Coast representative of the new Aborigines Advisory Council. The sale of the Kinchela Boys Home by the state government was successfully opposed by local Aboriginal groups and the land was leased to the Thungutti Association (Macleay Argus, September 2, 1972) which had replaced the Mid-north Coast Aboriginal Committee in 1971.

On both the national and the local scene factionalism was beginning to act as a powerful counter-force to Aboriginal political progress. Some local activists were, for example, critical of the proposed National Aboriginal Consultative Council which was to advise the new Director of Aboriginal Affairs, seeing it as an organisation of city bureaucrats that would not represent the views of Aboriginal 'rank and file' (Macleay Argus, August 28, 1973).¹ The Kempsey Aboriginal Youth and

¹ The secretary of the Thungutti Association in Kempsey nominated as a candidate for the NACC.

Culture Centre (KAYCC) was formed and it received funds from DAA to purchase a bus and establish a community centre. KAYCC eventually gave rise to the Ngaku Co-operative which incorporated under the provisions of the NSW Cooperative Societies Act (1929) in 1978, for the purpose of applying to DAA for housing funds. But Ngaku and KAYCC subsequently became opposing factions with Ngaku emerging as one of the three major political organisations in Kempsey.

In 1979 the Dunghutti Aboriginal Elders Tribal Council (DAETC) was formed² in opposition to Ngaku which, at this time, had control of the Board of Directors of the Durri Aboriginal Medical Service (AMS) which had been established in 1977 (see chapter six). DAETC sought to gain control of the Board and recognition from the government, both as a local representative body and as a (housing) development organisation. In the meantime Greenhill residents sought autonomy from the ALT by establishing the Greenhill Progress Association (GHPA) and applying to the ALT for a lease to the land and control over the houses.

Not surprisingly, serious tensions were beginning to develop. DAETC ultimately took control of Durri (AMS),³ but not before there had been a violent incident at the Medical Service resulting from the factional dispute between DAETC and Ngaku. By this time Ngaku appeared to have a monopoly on government support and funding, and this caused widespread resentment. The problems were to escalate, ultimately leading to

² Dunghutti Aboriginal Elders Tribal Council (DAETC) was later incorporated under the provisions of the NSW Companies Act (1961) in 1981.

³ They were voted in by its members, the old Board refused to step down, a second election was called later in the same year and DAETC finally took control (Rainer pers comm).

further violence, the suspension of all building programs and the collapse of the Aboriginal Medical Service in Kempsey.

People in Kempsey claimed that the basis for the deterioration in Aboriginal politics there, widely recognised as one of the most internally divided and hostile Aboriginal communities in the state, had been the direct result of government interference. Indeed, an exhaustive study of the conflict by DAA supported the local view that government had had an important role to play in deepening the internal divisions (Reiner pers comm). As will be seen this was the result of a complex set of factors which had to do with the raising of Aboriginal expectations, control of land, and the injection of large sums of government money into the community.

The late seventies saw the formation of the NSW Aboriginal Land Council (1977) and the appointment of the Select Committee of the Legislative Assembly upon Aborigines (1978) and the Aboriginal Task Force (1979). While Aboriginal welfare was still cause for concern the central theme of Aboriginal activism remained the land rights issue and the Committee focused on this issue in its investigations. Aboriginal expectations of land tenure were raised and in Kempsey people returned to squat on land that had previously been theirs, either through private leases or as old reserves. It is during this period that the population at Old Burnt Bridge apparently increased (Reiner pers comm).

The title to the land at New Burnt Bridge and at Greenhill passed to the control of the Aboriginal Lands Trust in 1975 and 1976 respectively. In 1978 Ngaku petitioned the Lands Trust for a 99 year lease of New Burnt Bridge and announced plans for a multi-million dollar housing

development at New Burnt Bridge. In the following year the lease was granted and a Ngaku executive announced construction of the first new house. At this time he also allegedly stated that twenty one Aboriginal families had indicated during a housing survey that they wanted to settle at Burnt Bridge. Ngaku was hampered by insufficient funds and competing demands for housing elsewhere (South West Rocks and in town) and there was some delay in the promised Burnt Bridge development. By this time therefore relations between New Burnt Bridge residents and Ngaku had deteriorated significantly and there was open conflict between Ngaku and DAETC.

In this tense situation construction finally began at New Burnt Bridge and one house was completed in 1980. Three others were commenced in 1981 but they were vandalised and later set on fire and subsequent attempts to have them repaired and completed led to violent threats against the Ngaku workers. Work on the houses was suspended. The Lands Trust was dissolved in 1983 with the passage of the (NSW) Land Rights Act and the Kempsey Local Aboriginal Land Council (KLALC) was formed,⁴ adding another organisation to the already troubled community. New Burnt Bridge residents hoped that the Ngaku lease would now lapse but instead title passed to the KLALC with the lease in-tact. Ngaku refused to relinquish it and attempted to press ahead with its building program.

By this time the New Burnt Bridge community was extremely frustrated and hostilities broke out again. Over the next two years there were threats of personal violence, damage to property, and the barricading of the

⁴ Kempsey Local Aboriginal Land Council (KLALC) was registered under the provisions of the NSW Aboriginal Land Rights Act (1983) in 1984.

road into New Burnt Bridge to keep out the builders.⁵ Eventually the building program was abandoned, housing funding stopped and the residents continue to live under the most appalling conditions (see below).

It was commonly stated that the dispute occurred because New Burnt Bridge residents believed Ngaku was constructing the houses, not for the residents, but for 'their own people' from town who were planning to move back out when the houses were completed.⁶ Ngaku maintained that the settlers from town were to be in addition to the residents and that the rehousing of the residents was the first priority. The real issue was much more complex having to do both with the wider factional disputes in Kempsey and the desire of New Burnt Bridge residents to gain control over the land. The elders refused to let the building program continue until they had title to the land. Since they were not incorporated they were not eligible for funding and there had been a singular lack of government support for them to become incorporated, the official view being that there are already too many organisations in Kempsey competing for housing funds. Thus self-determination had to some extent been interpreted and controlled by the government, rather than by the communities it was intended to support, and this had led to enormous anger and frustration on the part of the New Burnt Bridge community.

⁵ My first visit to Kempsey coincided with this period so the barricades were in place when I was initially taken to New Burnt Bridge.

⁶ An unfortunate decision by the Ngaku executive to rehouse a relation of one of its members, who was new to the area, before others who had been waiting with increasing impatience for so many years for decent housing, lay at the foundation of this belief. This incident was however a small part of a much broader and complex problem with intense housing competition in the community.

In 1983 residents of Old Burnt Bridge were listed by DAA as squatters on private land (DAA Community Profile, 1983) as the old reserves had been revoked in 1954 and 1964 and the land sold during the early 1970s. A small portion remained Crown land and one parcel had been purchased by an Aboriginal man who had moved to Burnt Bridge from Yellow Rock in the 1930s. The Crown Land was occupied by the descendants of one of the original farming families, who had returned to Old Burnt Bridge in the late 1970s. The ADC bought Old Burnt Bridge in 1984 and handed the title over to DAETC with funds sufficient for the construction of two houses. The houses were built and are occupied. In 1985 DAETC had plans for extended residential development at Old Burnt Bridge.

At Greenhill the condition of the cottages deteriorated, little maintenance was done by the ALT and a community protest, supported by the staff of the Medical Service, was needed to get hot water systems installed in the late 1970s. The ALT refused to hand over the lease to the GHPA and when the ALT was dissolved in 1983 the title passed to the KLALC, along with the title to New Burnt Bridge. The Greenhill residents still wanted to control their own affairs. In 1984 they became incorporated under the Commonwealth Aboriginal Councils and Associations Act (1976) and changed their name to the Greenhill Aboriginal Corporation. Unfortunately, their acknowledged leader, a competent organiser and astute politician, later abandoned the struggle and moved to another town and the KLALC continued to run Greenhill. The building program there was suspended in 1986, along with all Kempsey development, but three new houses had been were completed. Most of the others were badly in need of replacement (see below).

Population, housing, employment and services

(a) population and services.

The Aboriginal population of Kempsey was difficult to determine with any precision. Official statistical information from the 1981 census was available only for the statistical local area (SLA) as a whole, which included many outlying communities and isolated dwellings. Furthermore, the census data were almost certainly an underestimate of the true Aboriginal population (see chapter one). Thus the 1981 estimated total population in the Kempsey SLA was 19,604 of whom 941 (4.8%) were Aborigines and Torres Strait Islanders (TSI). For 1986 the estimated total population was 22,900 of whom 1,279 (5.6%) were Aboriginal/TSI (ABS pers comm). This is a 11.7% increase in the total but a 35.9% increase in the Aboriginal/TSI population.

Under-reporting is at least partly due to the fact that providing misinformation and withholding information have become an integral part of Aboriginal resistance to bureaucratic control (see Hausfeld 1963). Morris (1986:235) argues for example that withholding information was a strategy used to frustrate the AWB. It is also however, a device used to exploit the welfare system. Even Aboriginal organisations in Kempsey could not get full census information. A door-to-door census attempted by the Durri AMS in 1985, as a critical first step toward an improved preventive health program, was abandoned because of antagonism from members of the local community. Kempsey is not unique in this respect. For example, Frith et al (1974) found that the population of the 'Coasttown' Aboriginal community was 36% above the official estimates.

In the field I relied on the most recent (and possibly most accurate) population estimates for the town only (Kempsey, Greenhill, and Burnt

Bridge) provided by DAA Community Profiles for 1985. These data were collected by Aboriginal field officers drawn from the local community. The estimated total Aboriginal population was 892 (Table 3.1).⁷

At least another 200 Aborigines lived in other settlements in the Shire, at Bellbrook, South West Rocks, Hat Head, Stuarts Point and Dondingalong. In the statistical region as a whole, there were also Aboriginal populations to the north at Nambucca Heads, Bowraville, Macksville and to the south at Telegraph Point (see Map 1).

Table 3.1 Estimated Aboriginal population of Kempsey, 1985 (Source: DAA Community Profiles).

	pop	dwellings	pers\dw#	15yrs+~
South Kempsey	353	58	6.1	53.8
West Kempsey	276	55	5.4	64.1
Old Burnt Bridge	52	12	4.3	76.9
New Burnt Bridge	29	5	5.8	51.7
Greenhill	182	34	5.3	61.5
Totals	892	141	5.6	59.8

mean number of persons per dwelling.

~ proportion of the population fifteen years and over.

Aborigines in Kempsey theoretically had access to the full range of health, educational and government services. Public pre-schools and primary and secondary schools were no longer segregated and some had Aboriginal teachers and special Aboriginal curricula. A private residential Seventh Day Adventist Aboriginal School (Mirriwinni Gardens)

⁷ DAA Community Profiles do not provide age-class information adequate to construct a demographic pyramid. Instead I did this with birth date information from 1322 client files at the Durri AMS (see Figure 7.1).

was situated between Kempsey and Bellbrook and a preschool financed by the Save the Children Fund was located at Greenhill. Tertiary education was available at the Kempsey TAFE (Technical and Further Education) which offered a wide range of vocational courses and also employed an Aborigine responsible for encouraging Aboriginal enrolment and providing ongoing support for Aboriginal students. (The TAFE provided tuition for the Aboriginal Builders Labourers Apprenticeship Scheme which was building houses at Greenhill in 1985 - see Figure 3.5). Aboriginal students were eligible for Commonwealth Government grants under the Aboriginal Secondary Grants Scheme (ABSEG) and Aboriginal Study Grants Scheme (ABSTUDY - for adults). These schemes provided financial assistance for books, clothing, school fees, travel and living-away-from-home expenses for secondary and tertiary education.

The Kempsey offices of the Commonwealth Department of Social Security and the Commonwealth Employment Service both employed Aborigines as officers involved in the handling Aboriginal matters. An office of the NSW Department of Youth and Community Services (YACS) provided emergency support (both cash and services) for families in need.

The Aboriginal-controlled Durri AMS opened in 1976 to provide health services to Aborigines in the region, from Nambucca Heads in the north to Port Macquarie in the south. Before its closure in 1986 both it and the local hospital catered to the health needs (both medical and dental) of the Kempsey community and additional specialist services were available in Port Macquarie, to which transport was provided free of charge. Community health services and drug and alcohol counselling were provided by the Community Health Service which employed an Aboriginal nurse. There was also a residential Aboriginal Alcohol Rehabilitation

Centre (Bennelongs Haven) at Kinchela, lower down on the Macleay a few kilometres from Kempsey (see Map 1).

In addition there were a number of Aboriginal organisations providing services (Aboriginal Legal Aid, the Ngaku Multi-Purpose Centre for child care), cultural expression (The Dunghutti Tribal Dancers which performed at the Fourth Festival of the Pacific Arts in Tahiti in 1985) and a political focus (DAETC, KLALC and Ngaku). The local office of the ADC in Kempsey, through which funding for local housing and development was coordinated, was closed in 1985 but regional officers for both ADC and DAA were at Port Macquarie, forty minutes away by car.

A significant amount of government funding had been provided for Aborigines in Kempsey - for housing, land purchase, the medical service, the Tribal Dancers trip to Tahiti, two community buses, and the child care centre. More general government support was provided as assistance to Legal Aid and through the Land Tax to the KLALC. Ngaku was supported to maintain a permanent office and executive.

By 1985 there were no longer any public facilities in Kempsey which were barred to Aborigines. They could use the public swimming pool, eat at the cafes, drink at any of the hotels and gain membership of the conservative Returned Services League (RSL) Club (which a number of them had done). Thus formal discriminatory practices and regulations had been dissolved and state anti-discrimination legislation provided an avenue through which Aborigines could seek redress for prejudicial treatment. Through a variety of government initiatives a range of opportunities had been offered, aimed at expanding their economic and social autonomy. There had in fact been quite dramatic changes over the

last twenty years - from institutionalisation and negative discrimination to self-management, the dissolution of structural discriminatory practices and moves to implement some positive discrimination (through government programs).

If these changes had been effective in improving the structural position of Aborigines one might have expected to find it reflected in improved indices of social equality such as housing, employment and health. However, while a number of important gains had obviously been made, it was apparent that Aborigines remained significantly disadvantaged, and that the everyday expressions of race prejudice remained critical features of Aboriginal life in Kempsey.

(b) housing.

Aborigines in Kempsey lived in three distinct locations, the most obvious difference between them being that two of them, Burnt Bridge and Greenhill, were all-Aboriginal communities, spatially segregated from the town, while town dwellers lived dispersed throughout suburban Kempsey.

Kempsey Town: Town dwellers lived predominantly in South or West Kempsey, where newer housing development had taken place. There were few living in Central Kempsey or East Kempsey because these were the older residential areas where houses tended to be privately owned. Town houses and flats occupied by Aborigines were regular suburban dwellings⁸

⁸ Although standard house design for Aboriginal housing has removed the stigma of inferior 'transitional housing' it has created other problems because it does not cater for different Aboriginal household structure and domestic activity - e.g larger families, three generational households, greater use of the kitchen than the lounge as communal space, 'sleeping out' on verandahs etc (Department of Sociology, University of New England 1974:113).

with all utilities (see Figure 3.1), though some of them were in very poor repair. With few exceptions the houses were rented, the Housing Commission of New South Wales, KLALC and the Ngaku Cooperative being the major landowners. Five Aboriginal families were purchasing their homes with loans provided by the ADC (ADC pers comm) and there was one known private rental. The low level of private rental reflected not only the generally prohibitive cost of renting on the private market, but also the difficulties experienced by Aborigines seeking tenancy of private dwellings.

Housing Commission was the largest landlord, with houses allocated both through Housing for Aborigines (HFA) and general Housing Commission (HC) programs. Satisfaction with the Housing Commission as a landlord was generally high, since repairs were usually attended to quite promptly and everyone knew that they had to pay the rent or risk eviction. On the other hand there had been widespread complaints about both Ngaku and KLALC as landlord bodies.

Ngaku was in grave financial circumstances in 1985 as a result of financial mismanagement, uncollected rental and a \$20,000 plus debt to the Shire Council for unpaid rates. Ngaku tenants who regularly paid their rent resented the rent defaulters and there was a tendency for payers to stop paying, especially when requests for repairs and maintenance were not satisfied. In 1986 the Shire Council was considering the forced sale of some of Ngaku's assets to cover its debts.

KLALC was beset by similar problems of rental default, lack of repairs

and a \$35,000 plus rate debt to the Kempsey Shire Council. In order to help rationalise their financial management, after their funds were frozen because they did not satisfy the requirements of the NSW government auditor (see below), KLALC took the unusual step of sub-contracting their property management to L.J.Hooker (Real Estate Agents). While such a step clearly ran counter to the principals of Aboriginal self-management, it was welcomed by many of the tenants. Their support was motivated by the fact that not only were they now assured that everyone would have to pay their rent (previously the source of anxiety for the regular payers, who also considered defaulting) but also requests for repairs and maintenance would be promptly attended. L.J. Hooker also appointed a co-ordinator who was outwardly polite to the tenants, though it was widely held that he was in fact 'prejudice towards the Blacks'.

It will be recalled from chapter two that the relocation of Burnt Bridge Aborigines was fiercely resisted by a vocal and politically active sector of the white community, so the move to town brought with it many new pressures as well as many of the old ones. People typically had little control over when and where they would be housed, or who their neighbours would be. Dispersal, built into the policy of assimilation, was reflected in the location of Aboriginal households in the town. That this may have had some social cost is reflected in Kamien's (1978) observation that depression amongst Aboriginal women (in Bourke) was significantly increased if they had two white neighbours.

The state, through the Commissioner for Housing, also maintained coercive power over Aborigines by determining who was 'suitable' for relocation to a new house (Morris 1986). Suitability was determined

according to the values of the dominant society. Not only behavioural characteristics such as hygiene standards and budgeting ability were taken into account but the very structure of the Aboriginal family was at issue since the commission's policy was to house individual family units.

Family size does not matter, but the commission discourages permanent overcrowding because it is unhealthy and causes undue damage to the house. A tenant can apply for a larger house on the case of a permanent increase in the size of a family. Families can still accommodate extra residents for limited periods such as school holidays, family crises, or other temporary circumstances (cited in Morris 1986:293).

It was clear to me that these restrictions on occupancy were however, frequently ignored. This generated considerable anxiety and subterfuge for some tenants as they struggled to fulfil their obligations to kin while at the same time preserving their own tenancy.

Morris (1986) has cogently described the importance of public space in Aboriginal social relations which, he argues, was a feature of Aboriginal social life which pre-dated, but was reinforced by, segregation and institutionalisation on stations and reserves. The move to (dispersed) town housing had had, he argues, a profound effect on the nature of public and private space. Whereas the public domain was the social domain on the reserve, the public domain in the town had become 'the domain of the stranger' (Morris 1986:292). Sociality was no longer centred around the external hearth but confined to internal domestic space, in keeping with the mores of the dominant society. This was highlighted by the continued use of public space (roads, yards, vacant lots etc) at Greenhill and Burnt Bridge, where congregations of Aborigines in the public domain were still a feature of daily life, in stark contrast to the town environs.

Aboriginal householders seemed to have adjusted in different ways to the animosity of their white neighbours. Some had retreated into the internal space of their domestic environment, avoiding at all costs exposure to white neighbours, to the point where they made little use of the external space surrounding their houses. 'Shame' seemed to be one of the primary determinants of this. They avoided being observed by whites and visitors tended to retreat rapidly inside their host's house, taking leave with equal expediency. Others put themselves aggressively on display, noisily interacting inside and outside, in defiant rejection of the prejudice they felt existed in the minds of white observers. A third and small but significant group appeared to have adjusted to town life and lived socially distant from but cordially beside their white neighbours. 'I got wonderful neighbours. I can't complain.'

The invasions of privacy that characterised reserve life - management surveillance, inspections of the houses and total police freedom to enter reserve and station homes - had largely but not totally been removed. Landlords in the town, especially the Commissioner for Housing, still made inspections of their properties, though this was not frequent enough to be seen by Aborigines as harassment, and welfare officers called to evaluate domestic conditions.

White visits to Aboriginal homes in Kempsey were almost always in an official capacity since social interaction between whites and blacks in each others homes was virtually nonexistent. Many town householders were extremely anxious about the impression of cleanliness their homes created to white visitors, an anxiety which had a direct bearing on the conduct of my research (see chapter four). As noted earlier, this may have been a legacy of the days when 'dirty' and 'blackfella' were

conjoined terms in white discourse about and to Aborigines (Morris 1986). It may also have been a result of the fact that poor living conditions were taken as evidence of neglect, on which grounds Aboriginal children could be removed from their families and institutionalised by the state. Furthermore, assimilation training, both in institutions and on APB stations, was intensely focused on hygiene and domestic cleanliness (see for example Edwards 1982). My gradual acceptance into households where repeated home visits were made was often quite clearly marked by a general relaxation in standards of tidiness and cleanliness. I was asked inside even though the breakfast table had not been cleared away or the laundry completed.

Greenhill: This settlement lies on the northwest perimeter of Kempsey beyond the visual catchment of the town (see Map 2). It is the site of the old Aboriginal camp. The land and houses were owned by the KLALC and there were two additional households in shacks and caravans on vacant land adjacent to the main settlement.

When KLALC took over control of the Greenhill reserve from the Lands Trust there were already substantial rental arrears which the KLALC decided to waive in 1984 to allow everyone to 'make a fresh start'. Since that time few tenants had paid any rent and rental reports for the period February 1984 to March 1985 showed rental arrears of \$34,000. The issue of rental for these houses was problematic. The residents maintained that they had lived in the houses for so long that, now they had title to the land and houses (albeit through the KLALC), they should not have to pay any rental. The amounts levied were however only minimal charges to cover rates and maintenance, and not rental per se.

As a consequence of rental default the KLALC owed the Kempsey Shire Council over \$35,000 in unpaid rates by mid 1985. Because of the provisions of the Land Rights Act the land at Greenhill is inalienable Aboriginal land, so the Shire could not sell any of it to recover the debt, which was the usual procedure in such cases. One of the proposals for a resolution of this problem was for individual households to be given leases and thus be directly responsible, both to the Shire for payment of rates and for their own maintenance and repairs. However, this ran counter to the ideology of black collectivity and meant the relinquishing of control by the KLALC executive and was not adopted. An ADC field officer believed that part of the problem was in the use of the word 'rental' with respect to the rates charges, since people resented the idea of paying rent for dilapidated dwellings they felt rightly belonged to them.

Most of the houses at Greenhill were the original ones that were built in the 1960s by the AWB; timber cottages which were badly in need of replacement (Figure 3.3). They were small, cold in the winter and hot in the summer and had only had hot water systems installed in the previous five or six years. Water was from town supply piped to the houses and sewerage had been connected at construction. Little or no maintenance or repairs had been done since the KLALC took over, partly because the houses so clearly needed to be replaced. Three of them were replaced with modern brick houses in 1985 (Figures 3.4 and 3.5), using the Aboriginal Builders Labourers Apprentice Scheme building team, at the start of what was to be a major rehousing development at Greenhill. However, funding through the ADC was suspended because the KLALC failed to satisfy the requirements of the government auditors and the building program was suspended.



Figure 3.1. Aboriginal housing in West Kempsey



Figure 3.2. Aboriginal dwelling at Burnt Bridge (Photo: J. Beard).



Figure 3.3. Aboriginal settlement at Greenhill - the AWB homes.



Figure 3.4. One of the four new houses at Greenhill



Figure 3.5. New house at Greenhill showing the Aboriginal Builders' Labourers Apprenticeship Scheme notice.



Figure 3.6. Durri Aboriginal Medical Service at Greenhill.



Figure 3.7. Aboriginal dwellings at Old Burnt Bridge.

The Durri Aboriginal Medical Service (Figure 3.6) was situated at Greenhill. This had had some effect on who controlled the Service, through its Board of Directors, and was not considered ideal by some members of the community. During the major review of Durri AMS by DAA, following its closure in 1986, the possibility of relocating a new service in the town gained quite widespread approval.⁹ Also located at Greenhill was the preschool funded by the Save the Children Fund.

Burnt Bridge: Burnt Bridge lies to the south-west about 2 km from the southern border of the town. It is divided by Euroka creek (see Map 2).

(i) **Old Burnt Bridge.** It lies to the west of Euroka Creek, and was accessible by an unsealed road which usually remained passable all year round. The farms established by Aboriginal families in the late 19th century (Morris 1986) were located at Old Burnt Bridge. In 1985 it was inhabited by four extended household groups, two of whom were descendants of the original farming families. DAETC had freehold title to the land and two new houses were built there in 1985. They had electricity, rainwater tanks (said to be an interim measure until the area is serviced) and septic tank sanitation systems. The remainder of the residents lived in one older house, several rudimentary dwellings made of timber and corrugated iron (some with earthen floors) (Figures 3.2 and 3.7) and old caravans. Electricity was connected to some of the dwellings but with the exception of the old house they shared one cold water tap connected to town supply. Sanitary pans were used for sanitation.

⁹ A re-organised medical service did in fact re-open in the town in 1987.

The DAETC had a planned residential development for a further 6 houses at Old Burnt Bridge, which in 1985 was awaiting rezoning approval. In 1985, DAETC were paid up to the Shire Council for rates which they collected from their members and consequently they were eligible for further funding through the ADC. The community was overwhelmingly dependent on welfare payments with only one person in part-time employment. Although DAETC was one of the major political factions involved in the conflict over New Burnt Bridge and Durri Aboriginal Medical Service and had had repeated disputes with both the ADC and DAA over funding they seemed to enjoy a fair degree of internal harmony. The collection of rates for Old Burnt Bridge, which they organised themselves was clearly effective and there appeared to be an active consultative network amongst members. The subsequent death of two of the senior and most influential members of the community however, may have had an impact both on their internal cohesion and their political activism.

The politicisation of the residents of Old Burnt Bridge derives much of its energy from the bitter resentment felt by the older residents regarding the revocation of reserve land and the forced expulsion of the original farming families. In the minds of some, these wrongs have yet to be redressed.

(ii) **New Burnt Bridge:** It lies to the east of Euroka Creek and is the site of the old Aboriginal Welfare Board station (Map 2). In local parlance it is commonly called 'the mission' which refers to the presence there of the Australian Inland Mission before the APB installed a manager in 1937. Aborigines have lived at New Burnt Bridge for over eighty years, originally as 'campers' across the creek from the

Aboriginal farms (Goodall 1982).

As a result of the conflicts described above housing development at New Burnt Bridge had ceased and the residents continued to live under appalling conditions. The road was rough and impassable in the wet. The one new house was in good condition and had electricity, town water supply and septic tank sanitation. Two vandalised partially completed houses stood empty nearby. The ex-managers house at the entrance to New Burnt Bridge was occupied but in need of demolition. The remainder of the residents lived in makeshift huts of wood and iron and had pan toilets which the residents had to empty themselves. A few have electricity connected, although for one household connection consisted of an enormous extension lead trailing yards across the often muddy ground to a washing machine which stood uncovered in the open. There were abandoned motor vehicles and shacks amongst the bush, and mounds of garbage beside some of the dwellings. Some had kerosene refrigeration and lighting and cooking was done over an open (internal) fireplace. In the summer, when the rainwater tanks were dry, water had to be transported from town in drums on the back of a truck. Severe health and social problems and heavy drinking contributed to a deteriorating situation at New Burnt Bridge.

Householders living in substandard dwellings and without permits of various kinds were still subject to harassment by Health Inspectors and Council officials. In 1986 a family left their home in town when their household broke up after protracted conflict. They purchased a caravan and moved it onto a block of land at Old burnt Bridge which was owned by a relative. They did not however, have a residential permit and one day the Council arrived, unannounced, to tow the caravan away. Somebody was

home at the time and resisted the removal. Following this incident they never left the caravan unattended and lived in constant anxiety that they would lose their home.

Housing, social conditions and social relations: While place of residence and housing standards are quite clearly linked, the relationship between place of residence and social problems was somewhat blurred. Living conditions at Burnt Bridge are generally appalling and drinking, violence and anti-white sentiments characterised the community at New Burnt Bridge. However, there were also a significant number of non-drinkers at both Old and New Burnt Bridge and some of the most respected community leaders lived there. Living conditions at Greenhill are also quite poor and there were severe drinking problems in some households, but the level of social distress varied enormously, as it did in the town where living conditions are generally much better. It is apparent therefore that improvements in living conditions per se have not necessarily relieved the social distress which have characterised the community in the past.

Social interaction and kin ties between residents of the three different areas also contribute to a blurring of distinctions between them. Greenhill was the site not only of Durri AMS, which attracted a considerable daily traffic, but also of the womens' card games, played daily under the trees on vacant land adjoining Durri, and the fortnightly two-up games. Some card games were also played at New Burnt Bridge but these tended to attract different participants since there were people who never went 'out to the mission' and did not associate with it any way, partly because of its reputation for drinking and violence.

It can be seen that the residential patterns, land tenure and housing conditions of Aborigines in Kempsey are the result of historical processes over which Aborigines had had little real control. To a considerable extent the problems experienced with housing development and rental collection have to do with the fact that Aborigines believe they have been fraudulently dispossessed of their land. This was exacerbated by bureaucratic perceptions of which Aboriginal organisations were most fit to receive government housing funds. In some instances fitness seemed to bear little relationship to the actual performance of those organisations. DAETC had an active consultative process amongst its members and had proved itself a competent rate collector. Ngaku on the other hand, had a monopoly on government funds in spite of the fact that it had had auditing problems for several years, had been unable to collect rentals on its properties, and had leaders who were consistently accused of nepotism by its own members. Control over land, the injection of government funds into the community, and continuous bureaucratic intervention have been highly divisive forces in Kempsey.

Furthermore, the move to town for Burnt Bridge Aborigines has not freed them from the constraints of housing welfare. The majority are tenants of the government, paying lower than market rental, and as such are subject to considerable bureaucratic control. In particular waiting for a house to become available (which took several years) and being constrained with respect to household size and the extension of hospitality to kin, were commonplace pressures. Those whose landlord was an Aboriginal organisation fared better with respect to control over who lived with whom, but were worse off in terms of having their houses

adequately maintained and a fair rental system enforced.

(c) household size and structure.

DAA Community Profiles for 1985 (Figure 3.1 above) show mean household size in the five Kempsey communities ranged from 4.3 to 6.1, giving an overall mean of 5.6 persons. This compares with a mean of 5.4 calculated by Gray (1987b) on the far north coast. Studies carried out a decade earlier in Kempsey (Kitaogi 1976) and in four other communities in New South Wales (Department of Sociology, University of New England 1974) derived mean household sizes of 7.8 (Greenhill only) and 6.0, respectively, which suggests there has been a small improvement in the availability of housing.

A survey conducted by the ADC in Kempsey in 1984 showed a housing shortfall of 124 dwellings, including replacement of the AWB cottages at Greenhill and the shacks, tents and caravans at Greenhill, Old and New Burnt Bridge (unpublished ADC Housing Needs Survey, 1984).¹⁰ Due to exclusion of Aborigines from the private housing market; high Aboriginal unemployment and lack of financial security; insufficient government funds for public housing; factional disputes in Kempsey; and the suspension of the building program, most of the families identified in the ADC housing survey in Kempsey will wait many years for a house.

There was a considerable range in individual household size in Kempsey - the smallest, one person and the largest I recorded, twenty one persons. Households of between seven and ten persons were not uncommon and it was

¹⁰ Elsewhere Gray (1987b) has found that crowding and a desire to have a home of their own were major reasons why Aborigines moved house and that crowding was a factor which consistently correlated with other social factors such of lack of retention in education in the children of crowded households.

almost certainly true that extended-family households were more common than in the general population (see Altman and Niewenhuysen 1979; Barwick 1980). Aborigines frequently invoked the caring and sharing ethic (the 'Aboriginal way') to explain their extended households, but another crucial reason for this was the severe housing shortage (see also Kitaogi 1976). When asked their housing preference the overwhelming consensus was that families preferred to live in separate dwellings; and that the old people would like to be free of their obligations to house their children and their children's children. It was nevertheless true, that some women perceived many positive features in sharing, including costs and domestic work, with other women in their households. Said one woman in support of her very large household:-

Before, when we move in, there was only me an' 'im [husband] and the kids [six children], it was nice and quiet. But now an then we get lonely for a bit of noise ... I like a bit of noise.
[They had been joined by eleven other members of her family].

The effects of the housing shortage were felt particularly by young couples. Welfare dependency, and the difficulties associated with obtaining private rentals, meant that young couples with children commonly had to remain in the homes of one or other of their parents. Under these conditions the parents were sometimes used as regular child-minders, a situation which some of them saw as exploitative.

Gray (1987b) notes quite correctly that even though crowding in households might be evaluated in terms of some physical criteria such as persons per bedroom, overcrowding is a sociocultural variable which has to do with household members' perceptions of their domestic space. There was no doubt that many Aborigines in Kempsey perceived their households to be overcrowded and this appeared to be associated with considerable domestic tension and disputation. Gray (1987c) has

attempted to look at some of the social consequences of crowding in Aboriginal households (see chapter eight).

It has been argued that there is a high proportion of male-absent households in Aboriginal communities in settled Australia (e.g. Rowley 1982; Gale and Wundersitz 1982; Young 1982), and this has almost become accepted as the Aboriginal norm (e.g. Altman and Nieuwenhuysen 1979). A few studies have however disputed this conclusion. Frith et al (1974) found only 7.5% of households were headed by lone females, compared to Rowley's 20.8% in 1965. In another survey of 350 households in four regions in New South Wales there was a 'relatively low incidence of stereotypical broken homes with absent adult males' (Department of Sociology, University of New England 1974:118).

There did not appear to me to be an unusually large number of households in Kempsey actually headed by women without partners. From my observations I would argue that Aboriginal households are sometimes incorrectly counted as male-absent, the residence of a male partner being concealed in order that the female household head can draw supporting parents benefit (see below). This 'hidden' male population may also help to explain the puzzlingly low masculinity ratio calculated by Young (1982), in her follow-up of Rowley's earlier study in New South Wales, for which 'no obvious explanation [could] be given' (Young 1982:5; see also Gale and Wundersitz 1982). One obvious corollary of the concealment of male household heads is that estimates of household income provided in surveys have under-estimated real income to a considerable extent (see below).

It seems that households in Kempsey were at once smaller than they might

have been had householders had more control over the extension of hospitality to kin, and larger than they might have been had there not been a housing shortage. Crowding was undoubtedly a problem and contributed to intra-household tensions. 'I've put me name down [for a Commissioner for housing house]' was as far as many young families had got towards establishing their own households. Under the current economic circumstances of Aborigines it seems likely that they will remain largely dependent on welfare housing for many years to come.

(d) employment and income.

The local economy is based on primary production (dairying, beef, potatoes, maize, timber), a few decentralised secondary industries (Clark Brick, Akubra Hats, King Gee clothing manufacturers), service industries such as the local hospital, and tourism. As will be shown below Aborigines have little involvement as producers in any aspects of the local economy with the exception of some public sector service industries.

There was (and still is) a high level of Aboriginal unemployment in Kempsey (and throughout New South Wales). Determining exactly how high was difficult for the same reasons that population estimates were difficult. For the Kempsey region there were 238 Aborigines registered with the Commonwealth Employment Service (CES) as unemployed at the end of September 1985, comprising 8.8% of the total unemployed (CES pers comm). This underestimated true unemployment to some extent because there were people who had lapsed from the CES register who were still receiving unemployment benefits and some of those receiving supporting parent benefit were in fact unemployed.

I analysed the data compiled by DAA for the 1985 Community Profiles for the town, Greenhill and Burnt Bridge. This shows that of an estimated 484 people aged 15 to 59, 17.4% were in employment, either full-time or part-time and 61.2% were in receipt of welfare payments (29.1% unemployment, 20.3% supporting parent benefit and 11.8% other benefits). Thus 59.8% of the potential workforce (i.e excluding pensioners) was without work. In addition, an unknown number of those in receipt of supporting parent's benefit were in fact unemployed (CES pers comm). These figures compare with those of Rowley for non-metropolitan New South Wales in 1980 which show that 53% of males and 21% of females were unemployed members of the workforce (Rowley 1982).

Furthermore, the number employed in Kempsey was not a true reflection of the level of permanent employment in the community since almost one third (32.1%) of those with jobs were employed as a result of CES-funded training schemes and very few of them could expect to find permanent employment once their subsidised training was completed. Employers of Aborigines in Kempsey were overwhelmingly from the public sector, accounting for over 90% of the total employment. This compares with an all-Australia public sector employment rate of 25%. Only eight jobs out of a total of eighty four (9.5%) were in the private sector. The remainder were with the Commonwealth, State or Local Governments. As Morris (1986:33) notes:-

The creation of employment for Aborigines within the public sector reveals the continuing determinacy of race as a significant factor in employment within the local economy of the Macleay Valley.

Aborigines were not employed in the retail, food or tourist industries in Kempsey, nor by small businesses, although there had been two recent exceptions. The newly opened supermarket had employed one Aboriginal

female and the Durri AMS doctor, who resigned his position and set up a private practice in the town, employed an Aboriginal receptionist. He received a wage subsidy from CES for the first twelve months of her employment.

The Aboriginal Liaison Officer of the Kempsey CES said that penetration of private enterprise for Aboriginal job placement was both essential for any real improvement in Aboriginal employment and the most difficult to accomplish. Even though employers could receive up to 100% wage subsidy from the Commonwealth Government for up to 1 year (in 1985, depending on the scheme) for the employment of an Aborigine, there had been almost no response to this initiative in Kempsey. Racial prejudice remained the greatest barrier to Aboriginal employment in Kempsey and as a result of their heavy dependence on welfare payments, Aborigines remained bound both by welfare dependency and economic marginality.¹¹

Widespread unemployment has some quite obvious negative effects (see also chapter eight). Amongst Aboriginal youth the promise of a better employment future flowing from a better education was seldom realised since prejudice and high youth unemployment in the general population combined to make their employment prospects very poor. Consequently, there appeared to be a diminishing incentive to remain at school¹² and boredom, alcohol and drug abuse, and violence seemed to be linked to

¹¹ A study of Aboriginal employment prospects recently conducted in three rural areas of New South Wales (including Kempsey) for the Department of Employment, Education and Training, suggests that employment for Aborigines will deteriorate in the coming years (see Aboriginal Employment and Education News, 1988).

¹² This may be part of a more general trend in the population since the proportion of people in the total Australian population aged fifteen years and over who left school at age sixteen or more declined between 1976 and 1981 (Department of Aboriginal Affairs 1984).

lack of meaningful activity and limited financial resources. Work experience schemes, funded for six-monthly periods by the CES, gave some young adults in Kempsey temporary employment, but there was little hope of this leading to a permanent job. Those who had these kind of jobs were simply absorbed back into the pool of unemployed youth, to be replaced temporarily by someone else.

On the other hand, for many women welfare dependency had brought unprecedented economic independence in the form of supporting parents benefits. Regarded by many women as the most secure and desirable welfare benefit, supporting parents benefit may have had a significant effect on the nature of the economic relationship between men and women, since mothers no longer needed to be financially dependent on the support of their partners. It may also have contributed to a shift in power relations between the sexes to a more 'matri-focused authority' (Rowley 1967), influenced earlier by the payment of child endowment and by other factors. However, Reay (1945) and Beckett (1965) both note the strong matrifocus of Aboriginal kinship, some time before the payment of supporting parents benefits to Aborigines. Langton (1981:18) argues that the matrifocused family as:-

an accepted or perhaps even desired family form for Aboriginal women and children [may have arisen] out of particular social conditions [] in which Aboriginal men were unable to reside permanently with their wives and children because of itinerant labour patterns, unemployment, imprisonment, regulations pertaining to social security benefits for supporting mothers and so on.

Beckett also notes the itinerant nature of male labour, though he does not explicitly link matrifocality to male absence.

It may be the case that de facto unions, reportedly more common in Aboriginal communities than in the general population (see for example

Gale 1972; Lippman 1972) have become a more attractive alternative to legal marriage as a result of supporting parent benefit. However, Gray (1985:140), supporting the findings of Kitaogi (1976), argues that Aboriginal marital patterns consist of:-

a logically-ordered sequence of types of sexual unions, with gradual transition to the state of marriage [and that] high Aboriginal adult mortality seriously reduced the security of Aboriginal marriages and was at the root of many of the social pressures on Aboriginal communities.

Thus supporting parents benefit may in fact be of less consequence than other social factors as a determinant of marriage patterns.¹³

Nevertheless, one of my informants argued that the displacement of men as supporters of the family in Aboriginal society was the most serious problem facing the community today.

While de facto relationships render the receipt of supporting parents benefit illegal, such deceptions were quite widely practiced and certainly contributed to personal and family tensions. What is more, reporting welfare fraud to the authorities could be used as retaliation in family disputes, a potential threat which generated some anxiety. Always in fear of bureaucratic surveillance and on occasions having to temporarily expel their partners from their homes, women struggled with the uncertainties of a paradoxically insecure economic security.

As discussed more fully in chapter four I was unable to collect any data on household income so had to rely on data from other sources to evaluate income. The most recent and comprehensive statistics available were those derived from the 1981¹⁴ census which show that median family

¹³ In a population with such high adult mortality legal marriage might also be considered advantageous since it secures for the woman a widows pension in the event of her husband's death.

¹⁴ This information is not yet available for the 1986 census.

income of Aborigines and Torres Strait Islanders in NSW was just over half the median income of all families (Department of Aboriginal Affairs 1984). Mean per capita income calculated by Rowley for Aboriginal households in non-metropolitan New South Wales was more illuminating however, because it takes family size into consideration. Because of the difficulties he encountered in collecting income data, even with Aboriginal interviewers, he provides only a 'highest likely estimate' of \$39 per week. This compares with a mean per capita income for all Australia of between \$109.80 (June 1980) and \$116.10 (December 1980) (Rowley 1982:15) and indicates that in country New South Wales, Aboriginal incomes were significantly less than the national average.

The collection of accurate household income figures is, in my view, virtually impossible, even when the figures are collected by Aboriginal interviewers. The popular perception that Aborigines will provide accurate information to interviewers simply because they are Aboriginal is quite false. Indeed, if they are from the local community, there may be just as many reasons for withholding information from Aboriginal interviewers as from whites. If they are not from the local community they are in any case often regarded with as much suspicion as any other outsider. While income statistics therefore need to be interpreted with caution, the 'order-of-magnitude' of average Aboriginal income is a reasonable reflection of reality.

Aborigines as actors in the context of social, economic and political marginality

(a) reciprocity networks.

Within the context of relatively scarce financial resources, which

constituted the reality of almost all Kempsey Aboriginal families, income and spending are constrained and modified by a complex network of borrowings and repayments between both kin and friends. Social relations were commonly articulated in terms of borrowing/lending relations - 'that [name], I won't lend her nothin'' or 'I always give her money when she asks, if I can.' Cash was far and away the dominant medium of exchange, although vehicles use, food and alcohol, and provision of temporary shelter were also incorporated into the exchange networks.

On the Durri AMS field trips to outlying communities, one of the health workers walked straight into several of the houses we visited and come back out to the vehicle with some food, generally damper or a sandwich. He explained his access to whatever was available to eat in the selected houses by saying, 'if you're related you can get anythin' you want'.

Reciprocity was reflected in the day to day exchange of food, cups of tea, and small amounts of cash. However, the network was also used as a cushion against the hardship caused by large irregular financial outlays - e.g. car repairs, car purchase, funeral expenses, bail, or court fines. It was also incorporated into household budgeting which was done on a fortnight by fortnight basis which need not include any carry-over for such expenses as the popularly dreaded 'electric light' bill. When this arrived, or the rent was due, householders generally had access to credit sufficient to meet their commitments. Thus what originally appeared to be a reflection of haphazard disregard for forthcoming expenditure, emerged, over time, as a more broad-based budgeting system. Funds moved backwards and forwards through the networks and participants seemed to be able to reckon both their obligations and their access to credit at any time with a fair degree of accuracy. Saving, in terms of setting aside cash surplus for individual use at some future time, was not a relevant strategy in such a system.

Generally speaking, people could refuse claims for cash on the grounds that it was for their own necessities. Thus money allocated for food, petrol, and other household essentials was not available as credit. Rent and the 'electric light' bill also fell into this category, but only if they were due to be paid at that time. Payment of such accounts due in subsequent fortnights was not a sufficient excuse for refusing a loan request, since both parties knew that a future commitment could be met with funds from the network, and therefore was a secondary consideration compared to any immediate need for cash. Interestingly, cash set aside for certain types of gambling was also not available for credit (see below). The use of 'lay-by',¹⁵ was effectively integrated into the system to acquire non-essential or more expensive goods. Access to cash needed to make periodic payments could be denied because the item on 'lay-by' would have been forfeited without regular payments.

Networks of reciprocity constituted a vital component of the affirmation of social relations and served to protect the financial interests of group members. They were also, however, a source of tension for individual actors. This tension derived from the perpetual strategising which was necessary to operate the system to the individual's advantage. Claims for resources had to be evaluated in the context of conflicting demands, needs, desires and obligations.

A woman was sitting in the car outside the home of her father's sister when a friend came up and asked her for \$50 to register his car. She told him that she couldn't do this until the following fortnight, because she had forgotten that there was a long weekend coming up. The claimant demurred for a time, trying to pressure her into lending him the money, but she put him off, saying she would see how she went [over the next few days]. When he had gone she revealed that her father's sister

¹⁵ A service offered by some retailers whereby an item is 'put aside' until purchased with periodic payments.

had also asked her for a loan, which she would give her. It was clear that with a limited amount of money to distribute, she felt her obligation to her father's sister to be greater than her obligation to her friend, in spite of the fact that they were quite close.

While sharing was the ideological 'glue' which held the system together, individuals within the system were highly competitive and were constantly and often anxiously attentive to the transactions taking place around them, regardless of whether they were immediately involved or not. Potential lines of credit not discovered until too late, defaulting debtors, cash shortages or the apparent advantage of others were all sources of tension and conflict. Cash was most readily available the first one or two days of pay week¹⁶ when individuals endeavoured to collect their debts, explore and get access to lines of credit and evaluate the claims against themselves of other network participants. With a complex combination of honesty and guile people operated the system to ensure their financial survival until the next fortnight.

The complexities of supply and demand determined that many transactions were carried on in secrecy (see also Calley 1956), and information about cash flow was jealously guarded. Cash was neither borrowed nor lent in the presence of others who may have had a vested interest in such transactions, necessitating complex arrangements to ensure that the right people were seen at the right time, under the right social circumstances. Subterfuge was sometimes used to forestall claims that an individual felt morally obliged, but did not wish, to meet. Offense could be taken over excessive demands, claims made at socially

¹⁶ To a lesser extent clusters of transactions take place after 'big' card games (i.e. those at which large amounts of money change hands).

inappropriate times and apparent or suspected evasion. On the other hand, the rejection of claims which were seen by both parties as invalid (but nevertheless worth trying), were accepted quite philosophically.

A couple had netted a large quantity of mullet and were selling them to all-comers for \$1 or \$1.50 each, depending on the size. A neighbour (not related) asked if she could 'book-up' (pay later) for two fish. The seller replied, 'no Aunt¹⁷, we ain't bookin' any up' and mumbled something about the cost of the net. The neighbour promptly went off, without rancour, to her house to get some money for the fish. An observer said, 'fair enough, she wouldn't let 'em book-up either.'

Failure by debtors to make repayment when it is known that they had surplus with which to meet their obligations sometimes caused considerable animosity. On the other hand great leniency could be shown to defaulters if they were seen to be down on their luck, or in trouble with the law, and quite simply unable to pay. Large debts could be repaid over many years and disputes could arise as to the amounts outstanding and the time-frame for repayment. At times moral pressures could be brought to bear on creditors in an attempt to force them to accept limited or no repayment. Thus a major family dispute resulted when a lender tried to recover a substantial old debt from someone who had 'reared her up'. The lender suffered considerable personal and family criticism over many months as she tried to rationalise her efforts to recover the debt when she knew she 'owed' her creditor.

Failure to discharge one's obligation to contribute to family expenses was also a cause of disharmony.

A woman explained to me that she and her father 'did not get along' with her father's brother. This was because the father's brother had not contributed to his mother's funeral expenses. On the day the mother (the narrator's FM) died, her father's brother was drunk and went around borrowing money for more grog. Subsequently, he wouldn't help out with the funeral expenses.

¹⁷ 'Aunt' was used here in the generic sense as a term of respect for older women in the community.

Some months later this dispute waned, and the woman decided to approach the father's brother for some money to make the next repayment to the funeral directors.

Sometimes more general complaints were made about sharing:-

That's Blacks for you. Spendin' their pension gettin' drunk and playin' cards, then goin' around askin' for a loan.

You won't get fish off anyone, not 'ere [Burnt Bridge]. They're too tight!

While limited financial resources created problems for those dependent on welfare payments, being employed brought with it other kinds of pressures (see also chapter eight). Having permanent employment, particularly in (relatively) high-income, public service positions, set workers apart from the social mainstream to some degree, though I am not sure to what extent they were, as Rowley (1982:107) claims, seen to be 'trying to desert the Aboriginal cause'. They were certainly a small minority both at work and in their own social environment and increased financial resources probably made them subject to extra claims from kin. Work routines prevented them from participating in the less regulated and sometimes spontaneous activities of their families and peers and pressure may have been exerted on younger employees to absent themselves from work.

It seemed that there was an association between heavy gambling and high alcohol intake amongst those who occupied permanent jobs in Kempsey, though I have no quantitative data to support this. If this was the case it may have been a reflection of some of the pressures associated with having paid employment in a predominantly unemployed community. Calley (1956) noted the lack of conspicuous displays of wealth to gain social prestige in Aboriginal communities and it was apparent that some tension existed between the accumulation of material goods and the

'Aboriginal way' of sharing these with others. This tension was almost certainly heightened for those on good incomes who could afford to purchase a house or buy a new car.

(b) gambling.

Gambling, in a variety of forms, was extremely popular. Horse and dog racing, poker machines, 'housie' (Lotto) and lotteries were gambling pursuits that Aborigines shared with whites in Kempsey. Card games and '2-up' (a game of chance with coins) were on the other hand largely Aboriginal pastimes.

With respect to the demands of reciprocity networks, cash for certain forms of gambling was considered a necessity. This was particularly true of money that was said to be 'needed' for 'housie' or for 'the cards'. As others have observed (e.g Bell 1965) gambling was not the primary function of these activities. They were above all vital social activities which required cash, so a person's right to reserve some money in order to attend was seldom questioned.¹⁸

Card games, predominantly played by women, took place either at Greenhill or Burnt Bridge virtually every day of the year. Beginning in the early afternoon, they frequently continued until the small hours of the following morning, moving between outdoor and indoor venues to cope with changes in the weather and failing light. A small core of women played regularly, while a much larger number of women and a few men attended more sporadically. The circle of players, sitting on the

¹⁸ The acceptance of card money as valid expenditure was not however open-ended. Someone who refused a loan request then went to the cards with what turned out to be a large amount of cash would have been viewed as having failed in his or her obligations to share.

ground, was always attended by onlookers and children of various ages, some infants in their mother's laps.

Card games were the forum for vital exchanges of information and gossip, for the airing of disputes, for public censure and for the affirmation of alliances. Indeed they occupied a quite central place in the social life of the community, 'I heard at the cards', prefacing many disclosures. Everyone's cash outlay, losses and winnings were closely watched by both players and observers, accurate reckoning being hampered by the various strategies for handling cash and concealing winnings which were an integral part of the game's conventions. Complex calculations, based on the individual's perception of the progress of the game, determined the extent of their participation and players could be criticised (though seldom directly) for leaving with too much of other players' cash in winnings. In spite of the subterfuge, everyone learned of big losses and wins (sometimes several hundred dollars), so that successful players often became subject to claims from their network participants.

While the social aspect of card games should be emphasised, its impact on individual finances was often not insignificant. Even though the majority of players seemed to spend only the limited amount they had set aside for the day's game, daily outlay for regular attenders would have added up to quite significant sums of money, when compared to their total incomes. A few women were known to be unable to control their gambling at the cards, and were sometimes censured as a result.

Several hundred dollars changed hands at most card games and individuals winnings were occasionally reportedly in excess of five hundred dollars.

One woman said that she had gone over to the cards once and won \$300 in twenty minutes. Then she bet \$100 on one card and lost it. Now she didn't go to the cards any more because she got 'too tempted' and couldn't help gambling her money.

Even larger sums of money changed hands at the '2-up' games which were only played when large sums of money were available. The significant difference between the economic impact of cards (and '2-up') and other forms of gambling, was that it functioned as a form of income redistribution between members of the Aboriginal community rather than as a net drain to external gambling bodies.

'Housie' was run by churches and clubs, was played by mixed groups of blacks and whites and was much less important as a forum for social exchange. It was valued however, as a social activity, players often choosing to get together and drive to Port Macquarie to play where the game was said to be better. Only small sums of money were used to buy the numbered cards for the games, and prizes were modest; small amounts of cash, a tin of biscuits, some bed linen etc.

Poker machines and horse racing, on the other hand, drained off large but incalculable amounts of cash. As with all monetary transactions great secrecy surrounded expenditure and winnings, though once again, everyone learned of the 'big wins'. Poker machine gambling, and to a lesser extent horse racing, were much more likely to be regarded as less legitimate forms of expenditure and resentment could arise amongst network participants if people who had denied they had any cash were subsequently seen playing the poker machines.

Although card gambling clearly functions as a redistributive mechanism (Altman 1987), Martin (pers comm) rightly criticises this as a rather

simplistic summation of the complex motivations of its participants. In a remote community in the Northern Territory he found that, as in Kempsey, women frequently went to the cards saying that they wanted to get some money to pay for domestic expenses; expenses which could just as easily have been met if the money used in gambling had instead been set aside for this purpose.

There was no doubt that Aboriginal gambling attracted negative attention from the white community. The presence of congregations of Aborigines at the TAB (betting agency) on pay day was interpreted as evidence that Aborigines were squandering their welfare payments, and, by implication, were therefore receiving too much in 'hand-outs'.

(c) alcohol consumption.

The high proportion of deaths recorded at Durri in which alcohol was a contributing cause (see Table 7.1) attests to widespread alcohol abuse in the community. It was however, virtually impossible to get any quantitative data on alcohol consumption (see chapter four). It was clear however, that heavy drinking is one of the critical factors in Aboriginal social problems in Kempsey. It is associated with domestic disputation and violence, arrests and prosecutions, motor vehicle and other accidents including burns, neglect of children, acute and chronic illness, and loss of income. Men have served time in jail for physical assault of their partners under the influence of alcohol. Female alcoholics left their children in the care of their unwilling families and neighbours while they were intoxicated for several days of every fortnight. There is also a clear association between severe poverty, personal neglect and alcohol abuse in households in the community.

I was told that some children began drinking before the age of ten years (commonly flagon wine). This was discussed with regret, but in a tone which implied that such behaviour was the individual choice of the child and little could be done to prevent it. Beer was the popular drink of older age groups but youths, particularly those with incomes but no family responsibilities, consumed spirits also, sometimes mixed with liqueurs. Many older people expressed concern over the drinking (and drug taking) habits of the young, and alcoholic women who had responsibility for children were frequently censured.

Drinking took place at a number of the hotels in the town or at home. One hotelier would allow Aborigines to buy alcohol from his bottle shop on credit, even when they were intoxicated and unable to accurately assess the magnitude of their debt. At Greenhill and Burnt Bridge drinking commonly took place in public space, in the winter time around a fire. Children were always on the periphery of these gatherings, but it seemed to be customary practice for other adults to remain aloof from the group unless they were actually participating in the drinking. Fear of violence erupting as a result of increasing intoxication was probably a factor in this.

It was rare for people to drink alone and alcohol was an important medium of exchange in reciprocity networks through which social relations were reinforced. Furthermore, people did not appear to be ashamed of being drunk. Intoxication was such a commonplace event that even though it caused some comment, (e.g. 'there goes [name] charged up again') and perhaps censure, it was not something people bothered to conceal. On the other hand those who were sober could be very impatient with people who were drunk, especially if they were making social

nuisances of themselves.

In spite of all this, alcohol abuse in Aboriginal communities should not be overstated. There were many moderate social drinkers and teetotalers (many of the latter reformed drinkers) in Kempsey. Households labelled as 'they drink' were not necessarily solely comprised of heavy drinkers, but similarly, households that appeared to be teetotal sometimes included individuals who were in fact heavy drinkers.

(d) community and leadership.

There were two important sources of political tension for Aborigines in Kempsey. The first had to do with a notion of community, as a corporate entity, which whites falsely ascribed to Aborigines and which Aboriginal ideologues had fostered in the interests of strengthening their political power. As should now be obvious there is no 'Aboriginal community', in the sense of a politically cohesive group, in Kempsey. There are instead highly competitive, mutually suspicious and sometimes hostile groups whose affiliation seemed to be reckoned by a complex interaction of kinship, place of origin and place of residence.

Except in the context of interactions with white society tribal/language affiliations are secondary to kinship. Furthermore, group boundaries are not distinct, because affiliation changed according to the issues which gave saliency to particular allegiances at particular times. The tension is derived from the fact that outsiders, largely government officers, act on policy which implicitly or explicitly reflected a white view that Aborigines are a homogeneous and unified group. The outcome of such policies is quite clearly reflected in the account of the land/housing dispute in Kempsey for which DAA policy was at least partly

responsible. Many similar disputes, largely to do with internal struggles for control of organisations and funds (such as for control over Greenhill) were going on all the time. They were not always obvious to outsiders, because they did not always erupt into physical violence.

The second source of political tension is derived from the disruption of old structures of authority and the working out of new ones. Older men and women, who in the past had exercised political control, tended to have been replaced by younger people with better western educations. Although some old people had adapted by working quietly and forcefully behind the scenes, thereby maintaining considerable political power, others had become angered or disgusted and withdrawn from the political arena. This no doubt contributes to a sense of political disorder.

Furthermore, the requirements for leadership seem to have changed dramatically. Thus, outspoken political rhetoricism and hierarchical authority were appropriate to dealings with white bureaucracies and to running Aboriginal organisations controlled by government funds, such as the Durri AMS. They are however, quite inappropriate in the context of internal politics where self-effacement, assumed egalitarianism and consensus prevailed (see chapter seven for discussion of management difficulties at Durri AMS). Rowley (1978) discusses the difficulties experienced by Aboriginal leaders who are accused of nepotism and self-aggrandissment. Part of the problem of 'burn-out' in Aboriginal leaders has to do with reconciling these major and potentially destabilising ambiguities in political style and effectiveness.

The effects of race prejudice

It is essential to write about the effect of race prejudice on Aborigines in Kempsey because some understanding of its pervasiveness is critical to an understanding of the social pressures to which people were subjected. This is difficult however, because to be a victim of prejudice is an intensely personal experience that even the most sensitive and empathetic observer can share only superficially.

(a) prejudice in the past.

Kempsey has a long history of poor race relations. As Morris (1986:174) states:-

For the Aborigines in the area, towns were mapped out [in the early 1900's] in terms of the level of harassment. Kempsey and Bowraville were 'bad' towns, while Armidale and Port Macquarie were 'good' towns.'

When Calley (1957:190) visited the far-north coast of New South Wales in the 1950s he found that:-

the Aborigine is assigned a place in the social hierarchy well below that of the lowest white man and is excluded from participation in many aspects of community life.

Stereotypes included that they were dirty and foul-smelling, diseased, pox-ridden (having venereal disease), sexually promiscuous, lazy, unpunctual and thriftless, addicted to gambling, could not hold their grog and had inferior mental capacity compared to whites. Calley catalogues the persecution of children in schools, the exclusion of Aborigines from community social life (partly by virtue of the law making it illegal to sell them alcohol), and the prejudicial treatment received by Aborigines under the law. Said one Aboriginal woman to me:-

Aborigines didn't vote, in fact they were ... they weren't counted as people [long pause] they were just like animals!

Arrests for minor offenses were common and according to Calley (1957)

disproportionate sentences were given for crimes against whites compared to sentences for crimes against other Aborigines. This view is supported by numerous accounts of Aboriginal crime and sentencing in the local press. For example, in 1962 an Aborigine was goaled for 21 days with hard labour for attempting to steal petrol (Macleay Argus, November 8, 1962) and in 1965 two Aboriginal men were sentenced to six months goal with hard labour for stealing chickens, to eat, valued at three pounds fifteen shillings (Macleay Argus, May 22, 1965).

In the past religious segregation resulted from the fact that ministers did not want to admit Aborigines into their congregations so left them to the ministrations of the United Aborigines Mission (UAM). Calley (1957:202) believed that the presence of the UAM was one of the 'most important factors perpetuating the social exclusion of Aborigines from the religious life of the community'. He recorded very negative stereotypes held by ministers of churches on the north coast. Kelly (1944:144) notes that:-

he [the native] rarely goes to church; the church apparently prefers to come to him, and services are often held on the reserves [emphasis added].

White prejudice generated 'shame' in being Aboriginal. Calley (1957) notes the use of Aboriginal languages by older people generated friction between them and younger people who regarded the use of 'lingo' as a sign of inferiority (see also Reay 1949). One woman in Kempsey recalled:-

We only got spoken to in the lingo [by our mother and father] even in the street. We used to walk away from 'er [mother] 'cos she make us shame. 'Mum don't talk to us like that'!

Another said that they were 'too shame' to enter the movie theatre when the lights were on so they always waited until the show began before taking their (segregated) seats at the front. Fink (1957) describes

Aboriginal shame at being seen eating bush foods or cooking in the ashes. Legislation passed decades before preventing whites from co-habiting with Aborigines was still being enforced as demonstrated by the fining of a man for 'lodging with an Aborigine' in 1960 (Macleay Argus, December 22, 1960).

It was not clear to me why Kempsey had always been a 'bad town', but some of the tension is probably due to the fact that Aborigines constitute a relatively large and visible minority in Kempsey, compared to other towns in the region. The Kempsey SLA has the highest relative Aboriginal population of all mid-north coast SLAs. By contrast Port Macquarie, Kempsey's nearest neighbour to the south which in 1985 was frequently visited by Kempsey residents for shopping and entertainment remains a much more comfortable place in which to be Aboriginal. Race tension in Kempsey may also relate to the fact that the Burnt Bridge Station and the Kinchela Boys Home (now an Aboriginal alcohol rehabilitation centre) have attracted continuing negative attention from whites in the region over many years.

(b) prejudice in the present.

While many of the formal structures of prejudice have been removed, there is much about the everyday life of the town which maintains barriers against the black population. Their exclusion from mainstream society is perhaps exemplified by the centenary edition of the Macleay Argus issued in 1985. In 116 pages containing hundreds of excerpts from previous editions of the paper spanning one hundred years of community life, Aborigines are the subject of four entries:- when Dave Sands a 'Kempsey boxer' won a fight in London (1951), and was killed the following year in a motor vehicle accident (1952); the 'disgrace' of

Aboriginal living conditions at Greenhill (1955), and the 'blockade' of the Kempsey public pool by the 'Freedom Riders' (1965).

Aborigines are now able to drink in any hotel, cafe or restaurant but go only to those 'where Blacks can go'. 'Can' has to do, not with legal restrictions, but with being made to feel welcome. Aborigines who ate in cafes in town often appeared tense and self-conscious; some would come to the counters to buy food but would not eat at the tables. Judging by various accounts of their out-of-town visits some people who were reluctant to dine or drink out in Kempsey felt more comfortable about doing so in other places.

Other subtle forms of discrimination abound. Houses have 'been rented' when Aborigines appear in person seeking tenancy,¹⁹ or get offered substandard dwellings not fit to rent.

An Aboriginal family, desperate for accommodation because of a domestic dispute, nervously approached a real estate agent in the town and was told that there was in fact one suitable flat available. They agreed to take it, but later found out that its many shortcomings (no hot water, cracked walls, poor paint) included being infested with fleas. The agent who had offered them this accommodation had clearly done nothing to ensure that the flat was ready for occupancy. Eventually, the family got their bond back, after complaining to the agent that the flat was unfit for human habitation.

Employment discrimination is accomplished by Aborigines not being offered interviews or being told that the 'job is taken' (see also Altman and Niewenhuysen 1979). They are made to feel dirty²⁰ at the

¹⁹ The charging of exorbitant bonds in cash in order to exclude Aboriginal tenants has also been reported (Department of Sociology, University of New England 1974).

²⁰ Moodie (1972) also discusses prejudicial hospital and clinic treatment of Aborigines, which was related to the potential contamination of whites if Aborigines used the same facilities.

local hospital, and in a few shops are not served until all white customers had been attended to, regardless of the order in which they had arrived. One woman recounted:-

I wen' in there [take-away shop] one day ... an' I was standin' there for a long time an' she kept servin' everyone else an' I said real loud, y' know she come up an' said 'Ya right?' and I said 'No! I bin' standin' here and you bin' serving everybody else! Y' seen me standin' here!' It made me wild!

One shop assistant 'always drops ya change into ya hand so she doesn't have t' touch ya'. Bank tellers refuse to cash cheques or subject Aborigines to subtle forms of harassment.

On one occasion three Aborigines and I, all employed by DAA to undertake the review of Durri AMS in 1986, went to the local bank to cash our pay cheques. They had been drawn against the Durri AMS account which had been held by the bank for many years and which involved the transfer of hundreds of thousands of dollars annually. DAA had already made arrangements with the manager to ensure that the cheques were cashed. On our arrival one of the Aboriginal members of the team approached the teller with his cheque. She informed him quite rudely that the cheque could not be cashed, though she did not give him any reason. He replied that the cheque could indeed be cashed because it had been arranged with the manager. She said the manager had gone to lunch and she would not cash the cheque. He stood his ground however, saying he wanted the cheque cashed. She walked away, without further comment, and consulted for some time with someone behind a glass partition. We were left waiting and watching for several minutes. By this time it was clear to the Aborigines on the team that they were being harassed and they discussed amongst themselves possible courses of action including making a scene in the bank, in order to get their money. Eventually the teller returned with a grim expression on her face and without another word stamped the back of the cheque and rudely pushed the money under the grill. The rest of us were dealt with in the same manner. At no time did the teller indicate that she had been in error or apologise for the inconvenience she had caused.

Police harassment of Aborigines remains widespread and Aborigines are disproportionately represented in Australian prisons (Department of Aboriginal Affairs 1984). Kamien (1978) reports the retribution meted out by police to Aborigines in Bourke after a number of them became involved in political activism. I do not have figures on Aboriginal

arrests and prosecutions in Kempsey but judging by the frequency of court appearances and the need to find money to pay court fines, Aborigines in Kempsey were subjected to a high rate of prosecution and arrest. Even the appointment of a Legal Aid lawyer had not greatly alleviated their legal problems. One of them allegedly always advised his Aboriginal clients to plead guilty (whether they felt they were guilty or not) and he would ask for a six-month jail sentence. He became known as 'six-month -----' and many people went elsewhere for their legal assistance in order to avoid him.

It is no exaggeration that Aborigines had to cope 'often daily' with discrimination from the dominant society (Commonwealth of the Parliament of Australia 1979:55). Indeed, it was a potential, though not always real outcome of almost every interaction with whites; what Morris (1986:326) calls a 'random pattern of intolerant behaviour'. This potential was the corrosive undercurrent which generated nervousness, anger, withdrawal, apathy, shame, hatred, reticence, fear and embarrassment amongst blacks in their day-to-day encounters with whites. Lippman (1972:31) writes that:-

the expectancy of Aborigines, based on long experience, is to be despised or rejected or, what is even worse, ignored, which results in a distrust of whites and an acute sensitivity to slight, real or imagined [emphasis added].

She cites an Aboriginal informant, 'I hated all whites. This hatred is something Aborigines everywhere feel constantly' (Lippman 1972:27). Gilbert (1977) also talks about the lingering hatred of Aborigines for whites.

Not surprisingly, social contact between Aborigines and whites in Kempsey was minimal and, as noted above, the two seldom entered each others homes. The main exceptions to this were visits to Aboriginal

homes made by white officers in some official capacity (see also Kamien 1978). The social distance between whites and blacks in Australian country towns is reflected in a survey which showed that of the whites questioned:-

none stated that they had had 'a great deal' of contact with Aborigines and only 12 per cent had had 'a fair amount' [while] fifty-one per cent had had no contact whatever (Lippman 1972: 31).

The unifying concept in white prejudice is race rather than skin colour because in Kempsey, as in other towns, skin colour was highly variable.²¹ Thus race or 'blood' is the definitive signifier of 'otherness' against which stereotypic conceptions of Aboriginality are invoked. In spite of quite considerable social change over the last two decades these stereotypes remain the same as those which Calley reported in the 1950s, i.e that Aborigines are dirty and diseased (polluting); thriftless, lazy, unreliable and so forth; and drunken (see also Lippman 1972; Taft 1975; Kamien 1978; Morris 1986).

Conclusion

During the seventies the majority of the Kempsey Aboriginal population moved to town, bringing an end to segregated social life, at least in the physical sense. Those who remained at Greenhill and Burnt Bridge did so largely as a matter of choice. By 1985 most people occupied standard housing, all Aboriginal children attended public schools (with the exception of the few attending private schools), and everyone had legal access to the town's public facilities. The last discriminatory regulations of the welfare system had been removed (in 1969), and all

²¹ Having brown rather than fair skin, I was asked by Aborigines on several occasions if I was a 'Koori' [Aborigine].

were assured of a basic income. Furthermore, many programs had been instituted to encourage Aborigines to stay at school, obtain tertiary qualifications and get work experience; and policies adopted by government departments meant that Aborigines had better chances than ever before of obtaining public service employment. Aboriginal difficulties in interacting with government bodies had also been recognised, leading to the appointment of Aboriginal liaison officers in the welfare, employment and education systems.

Through DAA and ADC, Aboriginal organisations had also gained control over land at Greenhill and Old and New Burnt Bridge, and were owners of a substantial amount of residential property in the town. They had a land council with a permanent executive, a child-care cooperative, a cultural organisation, a legal service, and a medical service.

Yet in spite of these changes, Aborigines remain marginal to the mainstream of economic, social and political life. Widespread chronic unemployment seems to have locked the community into economic participation as consumers only, dependent on the state for support. This has generated tension between a desire for material goods (and travel and entertainment) and limited means, and has fostered an ethic of resource sharing which prevents the accumulation of cash. Educational opportunities which should open the way for greater employment seldom realise their promise, a problem particularly acute amongst the youth.

The move to town had been associated with rejection by the white community, and residential locations were chosen not by Aborigines themselves, but for them by the various organisations involved in the

integrative process. An overt policy of dispersal had ensured that Aborigines were scattered about the town, physically displaced from their kin and divorced from communal public life. Home ownership is rare, so householders remain bound by the terms and conditions of tenancy, which in the case of the Commissioner for Housing determines household structure to a considerable extent. A severe housing shortage creates tension between the demands of kin and Aboriginal notions of sharing, and their ability to provide hospitality.

In addition, the large sums of money for housing administered by Aboriginal organisations have opened up deep internal divisions in the community. In fact, the state has not relinquished these funds to full Aboriginal control since it retains the power to determine which organisations should get funded and which should not. Furthermore, as recipients of public money they are accountable to the state for the disposal of those funds. Many of the tensions which were evident in 1985 were the outcome of the interaction of these oppositional forces; increasing power and autonomy on the one hand and continuing state control on the other.

Finally, though the formal expressions of race prejudice have been abolished and considerable progress has been made toward breaking down the barriers between white and black, race prejudice remains a significant feature of the everyday life experiences of Aborigines. The outcome of stigmatization, both past and present, is to be found in low self-esteem, evasion of interactions with whites which are potentially threatening, and a corrosive anxiety which dominates people's attitudes toward the dominant society.

Some features of Aboriginal adjustment to these changes stand out. Internal rivalries and dissension have dogged the efforts of Aboriginal organisations to take some control of their own affairs. New leaders have emerged whose style is often appropriate to interaction with government bodies but inappropriate in terms of the Aboriginal political system. Older people have become disillusioned and withdrawn from political life, increasing the sense of political instability in the community. Gambling, alcohol abuse and domestic violence are widespread and it is apparent that in spite of quite considerable social reform over the previous decade or more, there is evidence of continuing social stress in the Kempsey community.

CHAPTER FOUR

TOWARDS A REAPPRAISAL OF ABORIGINAL DIETARY PRACTICES

The continuing debate about Aboriginal diet in the urban environment is problematic with respect to three main issues. The first of these has been considered in chapter two. It is that notions of loss of culture and the assumed adoption of the 'worst of white people's diets' have influenced the way in which the diet of 'part' Aborigines in settled Australia has been viewed. On the basis of the historical analysis of diet provided in chapter two, there appear to be good reasons for challenging this stereotype.

Secondly, as noted in chapter one, Aborigines have frequently been assumed to be a homogeneous group, defined primarily in terms of race rather than in terms of their social heterogeneity within the category 'Aboriginal'. One of the consequences has been that health and nutrition in remote communities have been used as a basis for assertions about the health and nutrition of Aborigines everywhere. This is significant because anecdotal accounts of the diets of Aborigines in remote communities have frequently emphasised dietary practices which confirm the 'worst of white people's diet' hypothesis. This seems to have been somewhat uncritically accepted as also relevant to Aborigines in urban communities.

Finally, there is a quite remarkable shortage of quantitative information about Aboriginal diet in settled Australia. As Gracey (1977:11,14) remarks:-

[There are] important gaps in our knowledge about what they eat and drink..[although there are]... many statements from the popular press, radio, television, books, novels, Government reports and transcripts of evidence to Committees of Enquiry mentioning the unsatisfactory dietary practices of Aboriginal people today. In most cases these statements cannot be refuted although some reports in the media seem exaggerated.

Yet in spite of this, specific quantitative statements have been made about the diet of Aborigines, both with respect to urban communities, and with respect to implied 'universal' Aborigines. Thus:-

Inadequate diets were a common finding amongst Aboriginal patients [in a general practice in New South Wales]; 61.5 per cent of Aborigines, compared with only 10.9 per cent of whites, regularly ate below average diets" (Coolican 1974:128) [emphasis mine].

and:-

Kamien has described the modern Aboriginal diet as one of the most unhealthy known to man. Excluding alcohol, he says, flour and bread provide up to 60 per cent of the calories consumed by Aborigines and 60 per cent of their protein. The average sugar consumption of Aboriginal adults is between a half and one,¹ kilogram a week (McIlraith et al 1979:16) [emphasis mine].

According to Coyne and Darnton-Hill (1979:33):-

the staples of today remain remarkably similar to ... rations ... with the nutritionally poor additions of alcohol, sweets, jam and aerated drinks ... [and] the majority of the energy ... tends to come from highly refined carbohydrates.

It has also been argued that Aborigines eat whenever food is available, supposedly following 'traditional' behaviour (Coyne and Darnton-Hill 1979).²

¹ This widely cited pamphlet prepared for the Australian Medical Association does not include any source references.

² Similar stereotypes about the diet of an ethnic minority have been reported elsewhere (Fitzgerald 1986). Thus health professionals and others in New Zealand believe that Cook Island immigrants eat only starchy vegetables and no leafy greens, do not follow 'proper' meal patterns and have a drinking problem.

In view of these problems, it is worth reviewing previous studies of Aboriginal nutrition, before going on to discuss the methodology used in this study. Firstly, both (a) dietary and (b) nutrition-related studies in Aboriginal communities will be examined in more detail, focusing primarily on those undertaken in urban³ environments. As will be seen there are a number of methodological and interpretive shortcomings in some of these studies and the evidence on which assertions about Aboriginal nutrition have been made is fragmentary.

Nutrition studies in urban Aboriginal communities

(a) dietary studies.

The earliest quantitative study of Aboriginal nutrition was made in remote Australia by Wilson (1953) who compared the food intakes of Aborigines living on government settlements, missions and cattle stations in the Northern Territory in the 1940s. In this study only rations were measured:-

as there was not sufficient time [to assess indigenous foods] and it is generally agreed that the contribution that these foods make to the diet is not significant ...[being eaten] ...usually during the week-end days off or on the annual 'walkabout'.

Nevertheless, a long list of 'indigenous foods', both plant and animal, which are the 'main types eaten by the natives' is given (Wilson 1953: 603).

Wilson evaluated dietary adequacy by dividing the volume of rations, as either prepared meals or uncooked foods, by the number of persons supplied in each group and comparing the consumption of food groups with

³ Urban is used here in the sense of non-remote, i.e. it includes town environments as well as larger urban centres.

the average consumption in Australia. Tables of food composition were then used to assess nutrient intakes which were compared to recommended daily allowances and the numbers of individuals receiving 'recommended amounts' of calcium, vitamin C etc. calculated.

In gross terms the diet was found to be low in milk and milk products, fruits, vegetables, fats and eggs - in fact in perishables which it would not be possible to store in remote areas at that time. However, the exclusion of indigenous foods from the calculations could surely have resulted in significant underestimates of fats, eggs, fruits and vegetables. Furthermore, comparisons were made with the 'average weekly consumption' of all Australians, when a more realistic comparative picture would have been derived from non-Aboriginal populations also living in remote areas, who had similar limited access to perishable foods. There are also major problems with calculating daily intakes of nutrients from group data which measure foods available for consumption.

While Wilson's data indicate there were severe inadequacies in the Aboriginal diet this was largely confined to cattle stations, was always the result of the diet given to Aborigines by whites, and concerned those vitamins most affected by low intake of fruit and vegetables, the indigenous consumption of which was not recorded. While the diet was clearly not optimal in some respects there are grounds for questioning whether or not it was as poor as is indicated.

No further quantitative work was done until the 1970s when attention moved to Aborigines living in urban environments. As part of a study of diabetes prevalence Wise et al (1970) evaluated the diet of Aborigines in an urbanised community in South Australia. They collected diet

histories from ninety eight subjects chosen at random from a population of 210 and used these histories to estimate mean calorie, carbohydrate and protein intakes for different age cohorts. No information on alcohol consumption was available. As discussed below, diet history is not a valid method for the calculation of nutrient intakes since the data provided by this method do not have the necessary quantitative precision.

In Bourke, northern New South Wales, Kamien et al (1975) weighed the foods consumed by each member of two families on six consecutive days and analysed aliquots for a range of vitamins. Stating (p93) that:-

These families were considered to represent the best dietary habits and living conditions of the Aborigines from the town and the reserve,

they show that the diets were low in vitamin C, calcium, iron and other nutrients.

They also undertook a broader community dietary evaluation but it is not at all clear what sort of dietary data were collected. We are simply told that:-

Dietary data were collected independently by three people familiar with the population studied, by observation and questioning at three different periods. These data allowed qualitative assessment of the food available to and consumed by the Aboriginal population (Kamien et al 1974:126).

On this basis they argue that the 'staple diet' [of Bourke Aborigines] consisted of 'overcooked stews, fried flour, syrup and aerated waters' which is 'almost devoid of any vitamin value' (Kamien et al 1974:129) and also that:

Popular foods were damper made from white flour, water but no yeast and usually baked in the ashes...and johnny cakes made from the same dough and fried in dripping. These were usually eaten with golden syrup, jam or honey (Kamien et al 1975:94).

Yet in the two families who took part in the weighed survey, only Family B consumed damper, aerated drinks were 'not consumed in large quantities', ice blocks and sweets were apparently consumed only by the children and both families regularly ate eggs. The majority had intakes of protein, calcium, iron, vitamin A, and riboflavin that were probably adequate; an unlikely outcome from a diet 'almost devoid of any vitamin value'.

It seems possible that Kamien et al concluded from the community survey that popular foods were also staple foods, and evidence to the contrary from the weighed survey did not cause them to reassess this view, perhaps because the families studied were 'the best'.⁴ I would argue however, that foods which are most often talked about are desired or relished foods but are not necessarily most frequently consumed foods.

Weighed surveys in urban households are quite invasive and almost certainly cause some change in the dietary habits of the persons under study (Marr 1971). It is interesting to note that the reported caloric intakes in the two households studied by Kamien et al were well below Australian Recommended Daily Allowances (RDAs) (range 55% to 89% of recommended), in all members of both families. Clearly, the observed low vitamin and mineral intakes could have been due to low food consumption, rather than poor dietary quality, but the authors do not raise this question. It is also possible that the low caloric intakes were a response to being studied, and that this had reduced the intakes of the other nutrients.

⁴ Although the two families are earlier described as 'two typical Aboriginal families' (Kamien et al 1974:127).

Just as interesting is Kamien et al's (1974:129) study of a group of alcoholics (nine men and one woman) from the community who had mean blood levels of vitamins A, E, B6 (pyridoxine) and B12 (cyanocobalamin) that were all within acceptable limits; only slightly low thiamin levels and Vitamin C, riboflavin; and folic acid levels which reflected 'a diet low in fresh fruit and leafy vegetables'. Other interesting claims are that 'Aboriginal people in this population make no association between diet and health', yet (later), 'three out of 23 children under three years were taking vitamin supplements' (Kamien et al 1974:129).⁵

While the results of the Bourke study once again demonstrate the presence of deficiencies in the diet, some of the statements made about it appear to be generalisations, and there is a tendency to emphasise its negative aspects at the expense of the more positive findings. Furthermore, the possibility that the composition of the diet in the two households intensively studied was adequate, but people were simply not eating enough, is not raised at all, and this fosters the popular perception that Aborigines do not eat the 'right' food. In addition, Clements (1974) cautions Kamien and his co-authors against imputing dietary inadequacy on the basis of blood vitamin levels, since other factors such as infections and worm infestations are intervening variables (see below).

Some interpretive shortcomings are also evident in the study by Hitchcock and Gracey in a rural town community in Western Australia. They looked at the dietary patterns of Aboriginal households in a town 'with an unenviable record of interracial discord' (Hitchcock and Gracey

⁵ Kamien (1978) also later reports acting as arbitrator in a dispute between a husband and wife as to the health value of oranges.

1975a:12). Sixteen dwellings were on a reserve, four were 'transitional' houses on the perimeter of the town and twelve households lived in Housing Commission houses in the town. A satisfactory 24 hour food intake record for nineteen out of twenty six children was obtained from mothers by the recall method, but only eight households (three reserve, one transitional and four town) provided household purchase data from which household food intake was assessed.

Using food tables to convert total purchases to total nutrients available for consumption, nutrients 'apparently' consumed by the eight households were calculated and compared to the household RDA calculated according to household composition. The results are shown in Table 4.1.

Table 4.1. Proportions of recommended daily allowances apparently consumed by Aborigines in 'C'town.*

	% RDA		
	reserve~	transitional+	town#
protein	98	140	123
energy	76	93	85
calcium	43	84	106
iron	76	97	92
retinol eq.	68	140	215
thiamin	83	116	86
riboflavin	47	111	128
niacin eq.	99	152	133
vitamin C	39	98	95

* Source: Hitchcock and Gracey (1975a:14).

~ 3 families

+ 1 family

4 families

It can be seen that where caloric intake is lowest, on the reserve, intakes of other nutrients are low. In the town and transitional

households however, intakes of most nutrients are either greater than recommended or marginally lower, in spite of lower than recommended caloric intakes. These results support the proposition that the foods available for consumption were adequate to provide a nutritious diet, but people in some households were simply consuming them in rather small quantities.

Indeed, compared to the results of the recent national dietary survey (see chapter six), except on the reserve the nutrient intakes shown here are quite high. Nevertheless, the authors begin their discussion by stating that:-

this study has documented poor dietary practices in a rural Aboriginal community living in south-west Australia (Hitchcock and Gracey 1975a:15) [emphasis added].

A number of other statements are also expressed in such a way as to highlight the negative aspects of the diet. For example, cereal is taken for breakfast 'in addition to damper', rather than the other way around; reserve households have only 'two prepared meals day' with 'snacking' on the previous evenings leftovers or 'what was in the cupboards' between meals, while town households had 'three meals per day', even though the middle 'meal' is described as a sandwich or leftovers from the previous evening's meal! (Hitchcock and Gracey 1975:14). In a subsequent article they state further that 'most people' on the reserve 'ate damper made from white flour' (Hitchcock and Gracey 1975b:21), yet only three out of sixteen reserve households took part in the study.

On the basis of these studies there are quite clearly grounds for arguing that the diets of some Aborigines in urban environments may be inadequate in certain respects. My point is however, that there have

in the past been both methodological and interpretive problems which need to be evaluated more critically. Also not addressed are the considerable difficulties associated with collecting data of this type in Aboriginal communities, and the biases and inaccuracies which can arise as a result. This is especially pertinent to studies in towns with very poor race relations, such as that studied by Hitchcock and Gracey.

On the other hand these studies have identified some important features of Aboriginal dietary practices such as the emphasis on meat as a desired food, the popularity of stews, an association between the consumption of damper and shortage of cash, the relatively low and intermittent consumption of fresh fruit, and the relatively low consumption of dairy products. The significance of these dietary practices will be discussed in chapter five.

In another study the diet and anthropometry of a random sample from 580 school children in Walgett, New South Wales, were assessed by Heywood and Zed (1977) during 1976. One 24 hour record of food intake was obtained by recall (with assistance from mothers in some cases) from twenty nine Aboriginal and forty three white children. Nutrient intakes (energy, protein, iron, thiamin, riboflavin and ascorbic acid) were calculated using a computerised data base derived from the Tables of Composition of Australian Foods and the mean intakes of the two groups compared. There were no significant differences in the average intakes of energy, iron, or thiamin by the Aboriginal and the white children. Mean protein intake of the Aborigines was significantly lower than that of whites. However, for three of the five Aborigines with intakes lower than recommended the 'probability that their intake [was] below

requirement is very low' (Heywood and Zed 1977:23). Similarly, mean intake of thiamin was significantly lower in the Aborigines but only two of the six Aboriginal children with lower than recommended intakes could be predicted to have intakes below requirement. The most significant nutritional difference was for Vitamin C for which 24% of Aborigines and 7% of whites had intakes below the standard (FAO/WHO) used. It was also demonstrated that children in this community with multiple vitamin deficiencies were more likely to be Aboriginal.

Other studies of Aboriginal nutrition

To some extent, conclusions about Aboriginal diet have been made on the basis of the indirect evidence of nutrition-related disorders, especially in children. This is an area which has been more comprehensively studied than diet. In particular, a number of studies have shown that many Aboriginal children are growth retarded (Maxwell and Elliot 1969; Jose and Welch 1970; Moodie 1973; Gracey 1977; Rassaby 1978; Coyne and Darnton-Hill 1979; Gracey et al 1984), and anaemia and vitamin and mineral deficiencies have also been reported (e.g Cheek et al 1981; Gracey 1977; Rassaby 1978; Coyne and Darnton-Hill 1979).

While such findings indicate that, to some extent, nutritional state is sub-optimal, attributing this to sub-optimal diet alone is problematic. Diet and nutrition do not stand in a one to one relationship because a range of genetic, psychosocial and other factors (such as infection) influence the nutritional outcome of food intake. Of the children Rassaby (1978) reports were under the third percentile for weight 64% were anaemic, but 60% had parasitic infection of the bowel proven by stool culture and 32% had at least one perforated eardrum. Hookworm infestation is an important cause of anaemia (Gracey 1977) and both

chronic and acute febrile illnesses can depress iron absorption (Clements 1976). Vitamin C requirement is known to be higher in children with chronic infection (Clements 1976). *Giardia lamblia* infestations have been found to be associated with growth faltering and infections, particularly discharging ears (Gill and Jones 1985). Many of the studies finding growth retardation which Moodie (1973) describes also found multiple childhood morbidity from ear infections, parasitic and infective intestinal conditions and chest infections. Moodie also discusses the medical practices of Dr. Kalokerinos who believes that many of the clinical features of desperately ill Aboriginal children are due to acute ascorbic acid deficiency precipitated by infection, and Moodie notes that cases of chronic ascorbic acid deficiency appear to be quite rare. Interestingly, Jose and Welch's (1970) study of 600 growth retarded children in Queensland found little biochemical evidence of calcium deficiency. Indeed, according to Moodie (1973:179) no frank deficiency diseases have been reported for Aboriginal communities 'in the recent past'. Coles-Rutishauser (1979) draws attention to the fact that poor nutritional status amongst Aboriginal children may be a consequence of repeated dietary restrictions associated with frequent illness, rather an inadequate diet.

Furthermore, it has not always been possible to demonstrate clear relationships between social factors and health and nutrition. In a study of the health and nutritional status of fifty four rural and urban Aboriginal children in Victoria, Dobbin (1977) found no statistically significant associations between nutritional status and health, nor between the income of the breadwinner and child's health or nutritional status. There was a relationship between height percentile distribution and income of breadwinner in the rural children but not in the urban

children. Mother's education showed a statistical correlation with birthweight and growth, but not with episodes of ear discharge, nor with the number of hospital admissions (Dobbin 1977). Amongst inner-city Aboriginal children in Sydney, anaemia was found to be uncommon, which suggests that diet was adequate in several respects, yet there was evidence of growth retardation which 'correlated with certain social factors such as problem drinking in the household and marital disruption' (Lickiss 1971:vi). It also seems possible that social factors were at least partly responsible for growth failure in institutionalised Aboriginal children, reported on by Moodie (1973::193) since:-

In a group of Aboriginal boys resident at a North Coast Aboriginal Boys Home only one of thirty was anaemic [yet] they showed the same pattern of growth retardation as their contemporaries on North Coast settlements and reserves.

Harrison (1986) found no clear differences in the dietary quality of infants who thrived and those who failed to thrive in a study of under-threes at Milikapiti (Bathurst Island, Northern Territory). Growth faltering was associated instead with reduced food intake. She also found that various social factors, such as birth order, mother's alcohol consumption, and mother's education correlated with growth of the children.

Similar findings have been reported from studies of white children in the Adelaide Hills and in Sydney (Clements 1977). In particular, no statistical relationship was found between household dietary patterns and the nutritional status of individual children (Adelaide Hills) and there was a strong correlation between the emotional stability of the family and the total health of the child, including rate of growth (Sydney). Children with lower than accepted blood levels of a number of

vitamins showed no clinical evidence of disease.

Furthermore, it would seem that there has been a negative view of Aboriginal nutrition which may have influenced the way some studies are reported. Thus Clements (1976:5,6) concludes a review of growth and nutritional problems in children by stating of the whites, 'it would seem that the fundamental factors responsible for the great majority of these cases of malnutrition are either sociological or psychological'; yet of the Aborigines, 'poor rates of growth are due to inadequate intakes of the right kinds of food' [emphasis mine].⁶

The results of studies of nutrition amongst children should not be used uncritically as a basis for making generalisations about nutrition in the community as a whole. Adults and children eat diets that are different in some respects (Cashell pers comm). In particular, children consume a great deal more confectionery, ice-cream, aerated beverages and snack foods than do adults (see also example Anderson 1982).

The information available regarding adults is sparse. Gracey (1977:11) states that:-

less is known of the health problems of adult Aborigines but they do have a high incidence of obesity, diabetes, alcoholism and venereal disease....largely determined by social factors and [having] an important nutritional component which so far has been poorly documented ... [there are] ... large information gaps especially about what they eat and drink.

This lack of evidence does not deter him, however, from attributing obesity to 'overconsumption of highly refined carbohydrates and other non-nutritious foods' (Gracey 1977:12). In addition, studies which

⁶ He does go on to say that this 'may be due to poverty' but there are 'social and personality factors in a large number of households' (Clements 1976:6).

indicate that the nutritional state of Aboriginal adult populations might in fact be quite good tend to be overlooked. For example, Hart et al (1975) found no significant differences in haemoglobin levels between Aborigines on five reserves and a similar group of Caucasians in South Australia. From information concerning 555 Aboriginal births in South Australia between 1981 and 1982 they found that only 8.0% of the mothers were anaemic, and although this was somewhat higher than the comparable non-Aboriginal rate (2.8%), it argues against widespread nutritional deficiencies in the Aboriginal group. Furthermore, Truswell (1979) notes that in Australia 15% of pregnant women suffer from anaemia at some stage during pregnancy, 24% suffer from biochemical iron deficiency and 12% from folate deficiency.

A final point is that explicit or implicit comparisons of the Aboriginal diet with that of non-Aboriginal Australians have been confounded by a general paucity of data about diet and nutrition in Australia. Coyne and Darnton-Hill (1979:33) note in their review of nutrition in Aboriginal children that there is in fact 'little biochemical data on white Australian children for comparison'. Results of the first major dietary studies of Australian adults and children are only just becoming available and in particular:-

Very little useful data exist on variations in nutritional status and dietary habits between different socio-economic segments of the Australian population (Commonwealth Department of Health, 1987:48)

Thus studies purporting to compare Aboriginal diet with Australian diet need to be reviewed with caution, especially where no attempt is made to base comparisons on the diet of similarly low socio-economic groups.

The Kempsey dietary survey

(a) planning the research.

The present study had two aims; to collect quantitative dietary data; and to examine the relationships between economic, social, cultural and historical factors and dietary practices in an urban community. My early review of the literature led me to formulate the project around the hypothesis that urban nutrition was grossly inadequate, so I hoped to come to a better understanding of why Aborigines lived (allegedly) on damper, syrup and tea. I also intended to make some objective assessment of health, particularly as it related to dietary practices, in order to understand their possible health outcome. Underlying this formulation was a commitment to applied research, in that the study could contribute to a body of knowledge which might inform policy and spending on Aboriginal health.

Adult (rather than child) health and nutrition was chosen as the focus of this study for two main reasons, firstly that adult mortality had made an increasing contribution to overall Aboriginal mortality and secondly, that less quantitative data on adult nutrition was currently available. The adult studies done by Kamien et al (1975) and Hitchcock and Gracey (1975a) were small (two households and eight households respectively), and therefore limited in their explanatory potential.

Community approval is necessary to undertake a study of this nature in an Aboriginal community and it is generally sought from umbrella organisations such as local and/or regional Land Councils, organisations of tribal elders, or legal or medical services. Because this project was health-related, communities in New South Wales with Aboriginal

Medical Services were considered as possible locations and an introduction to the Durri Aboriginal Medical Service (Durri AMS) was arranged. Durri AMS provided⁷ medical services to a wide region from Port Macquarie in the south to Nambucca Heads in the north and Bellbrook in the west (Map 1). Dental services were also provided for this region and to Taree. One might expect that communities with Medical Services would have generally better health than communities without, and that the standard of nutrition would be higher. However, health data from Kempsey (see chapter seven) indicate that this is not necessarily the case, so it seems unlikely that an important bias had been introduced by choosing this community.

A preliminary field trip to Kempsey was made in August 1984 when I discussed my proposal with members of the (all-Aboriginal) Board of Directors, the Administrator and the staff of Durri AMS. I also joined the regular AMS field trips to local and outlying regions. The fact that I am a trained nurse and this proved important in my being accepted at the health service. It also seemed to give greater legitimacy to my interest in health issues, and thus to the research proposal. With written approval to undertake the study I returned to Kempsey for a further 14 months field work between September 1984 and December 1985. A subsequent trip to Kempsey was made in June 1986 to participate in the review of the Durri AMS for the Department of Aboriginal Affairs.

(b) social considerations.

One of the major reasons why so few nutrition studies have been done in Aboriginal communities is that they are made difficult by a number of

⁷ Durri Aboriginal Medical Service had its funding suspended by the Department of Aboriginal Affairs in 1986.

social problems which tend to result in very low cooperation rates. Indeed, the greatest obstacle to the conduct of this study was the profound suspicion of whites felt by Aborigines in Kempsey, and the reserve generated by this suspicion. It had its basis in the historical experiences described in the previous chapter and was exacerbated by the fact that Kempsey had a poor record in race relations.

As already described, blacks and whites occupied separate social 'niches' in Kempsey, and although they increasingly shared public social venues they seldom entered each other's homes. The few white people who had worked and associated with Aborigines in Kempsey for many years still seldom (if ever) visited Aboriginal homes in a social context. If they did so in the course of their work, there was often considerable discomfort on both sides. Since the formal data collection for my project depended to a large extent on house-to-house calling it was necessary to breach the norm of black-white relations in the town.

Furthermore, Aborigines in Kempsey exhibited a high degree of suspicion of whites who came to them seeking information. This was not unique, being widely reported amongst researchers in Aboriginal communities (see for example Frith et al 1974; Department of Sociology, University of New England 1974; Owusu-Ansah 1981). Indeed Frith and her co-workers, whose study was carried out in a region with comparatively good race relations, got such poor interviewer participation that they were unable to obtain adequate information on nutrition and child-rearing, and such a low rate of house entry that had to abandon the third phase of their project to 'assess housing conditions and environmental sanitation' (Frith et al 1974: 59).

Added to the reserve and resentment generated by prejudice is a shyness or 'shame' with which many Aborigines respond to whites, especially if they are being directly questioned. 'Shame' and 'shaming' are important aspects of Aboriginal social behaviour and control (see for example Reay 1949; Fink 1957; Bell 1965; Duncan 1986), and can be readily generated during interactions with whites, particularly in situations or during questioning which breach Aboriginal codes of proper conduct.⁸

Furthermore the use of non-standard English, the lingua franca of urban Aborigines, makes it difficult interviewers to ask appropriately framed questions and for them to understand what information is being sought. People are also extremely sensitive to being made to look ignorant. Vesper (1987) provides a more detailed discussion of some of the problems inherent in research in Aboriginal communities.

My most significant efforts in attempting to deal with these problems included the employment of an Aboriginal research assistant (see below); initiating a prolonged period of contact with the community before collecting any formal data; modifying my interview and data collection methods; and showing myself willing to be sensitive to informants' discomfort and sometimes implicit rejection.

Early in 1985, after several months of participating in the affairs of the medical service, including accompanying the staff on field trips to local and outlying communities, I sought, through informal channels, the

⁸ People's considerable reluctance to talk about other people reinforces Fink's (1955, cited in Bell 1965) observations that talking about someone was as potent a form of shaming as laughing about them. Many times when I was asking about other people in an informant's household the informant would laugh uneasily or not answer, probably because it made them 'shame' to be talking about others.

services of a research assistant.⁹ In spite of the fact that the pay was very good and the working hours flexible there was initially no response to my enquiries. It was subsequently revealed that the one person who was interested in the job was making careful enquiries herself, about me, the nature of the study and in particular whether or not it was 'OK' to ask the kinds of questions I was interested in asking. She subsequently came forward and offered to join the project, becoming my most important source of contact with people in the community and my cultural guide. There were no other applicants for the job.

(c) research design.

In order to answer the question 'Why do Aborigines in Kempsey eat what they eat' it was necessary to pursue two lines of enquiry - that of their actual food intake, and the social, economic and cultural determinants of their dietary practices. It was my original intention to collect comprehensive food intake data and construct a simple health profile for a sample of individuals. This was to be supported by more general information about dietary practices and socio-economic factors in the households in which those individuals lived. By choosing a representative sample of households, the results were to be used to make more general statements about the community as a whole. However, I encountered two major problems which caused the design to be modified after the project commenced.

The socio-economic variables in participating households in which I was interested were size, composition, employment, living conditions, and

⁹ This position was funded, and the pay rate determined by the Australian Institute of Aboriginal Studies.

especially income and expenditure. In particular, I wanted to compare household size and income with diet. Questions on these issues were to be included in the household interview. Unfortunately, much of this data proved impossible to collect because the community was extremely sensitive to information gathering of this sort. Householders in my sample were not always willing, for a variety of reasons, to reveal who lived with them, and clearly deemed it impertinent of me to ask. Even more impertinent were my questions about household income and expenditure which constituted both intolerable intrusion by a white investigator and a breach of internal Aboriginal codes of conduct. Since continuing with this line of questioning was unacceptable to my informants and threatened to jeopardise the collection of other data, including the 24 hour recalls, the interview was restructured to consider only household expenditure on food. In this I received important guidance from my research assistant. Even then, adequate data on household expenditure on food were not collected from all the householders interviewed. While I subsequently came to know who lived in most of the participating households and their income sources, these data have not been used in any specific way. They were however, important in subjective evaluations I subsequently made, for example about income and the variety of vegetables consumed (see chapter five). Living conditions were, of course, observable, but they seemed to be an unreliable indicator of dietary habits.

The second problem had to do with the collection of food intake data. For the reasons discussed below the dietary method I chose was 24 hour recall and I was advised (Rutishauser pers comm) that in order to measure the nutrient intakes of individuals with reasonable validity by this method a minimum of ten records should would have to be collected

from each. Even though this was to be spread out over several months, I was unable to get informants to sustain their commitment to the project, and after two or three records had been done it became increasingly difficult to find people at home at the agreed time. Ultimately, four or less records were collected from each informant and the data were used to calculate mean intakes for the group (see below).

Since individual nutrient intakes were unavailable, and could not be related to individual health profiles, the collection of health data was revised to look more generally at the community as a whole. Similarly, socio-economic data related to the community as a whole, rather than to specific households. While this was a compromise solution, it has to be considered in the light of the extreme difficulties encountered when trying to conduct this type of research in Aboriginal communities; difficulties which are reflected in the paucity of quantitative data on urban Aboriginal nutrition.

(d) sampling.

A random sample of one third of the estimated total households in each region was drawn - eight of twenty four households at Burnt Bridge, thirty two of ninety five households in the town (twenty out of fifty nine in South Kempsey and twelve out of thirty six in West Kempsey) and ten of twenty eight households at Greenhill.¹⁰ The households selected were checked with Durri AMS personnel and exclusions were made if the householder responsible for shopping/cooking was known to be chronically ill, incapacitated (e.g. as a result of alcoholism) or away. Those excluded in this way were replaced by additional randomly selected

¹⁰ The number of households was determined using Durri AMS household listings for 1984 updated with the help of Durri AMS staff and the research assistant.

households which were combined with the original households to form the final sample.

As anticipated many households did not agree to take part in the project, a problem not unique to dietary studies in Aboriginal communities (see for example the non-participation rate amongst non-Aboriginal families in Sydney in Payne et al 1975). Some took part in the first stage (the household interview) but not in the second which involved the more intrusive, repeated home visits to collect food records. As the project progressed I became better acquainted with many individuals who were not in the sample, and as a result of my concern over the attrition rate I asked them to participate in the project. Thus my random sample of households lost its randomness and became a product of more traditional anthropological methods of gaining cooperation. The sample was improved however, by being larger than if I had rigidly adhered to the random sample. Ultimately forty two households participated in the study in some way, of whom 29 (67%) were from the original sample (Table 4.2).

Table 4.2 Profile of the sample participating in the dietary survey in Kempsey, 1985.

	Int#/rec~	Int only	Rec only
Original sample	18	11	0
Additional	5	0	8
Totals	23	11	8

interview
~ recall

Of the original sample, lowest cooperation was at Burnt Bridge where only 38% (3) households consented to interviews and only one of these gave recalls. Recalls were obtained from one additional household. In the town, 55% of the original sample households participated, of whom 100% in West Kempsey and 58% in South Kempsey gave both interviews and recalls. In Greenhill there was 80% participation by the original households and 50% of these gave both interviews and recalls.

Amongst the non-participating households (from the original sample) two groups stood out - those in the community most socially and economically deprived and those most successfully 'integrated'. Many of the latter did not readily identify with the Aboriginal community and 'keep to themselves'. It is my impression therefore, that the sample does not adequately represent the upper and lower ends of the social spectrum, and is drawn largely from 'middle-Kempsey'.

The role played by the research assistant in gaining cooperation in the project was paradoxical. While her presence was absolutely vital to our gaining cooperation from many people, there were disadvantages in that there were households that she never visited socially and in which she was extremely uncomfortable. Consequently, we did not get such complete data from these households. Others she simply refused (albeit in an oblique way) to approach with me at all and they were eventually excluded from the study because without her support I was unsuccessful in getting people to participate. It was later apparent that in some of these cases she had been guiding me away from households which were known to be extremely antagonistic towards whites and/or had severe

drinking problems. Conversely, it was sometimes through her that I gained an introduction to families who were willing to participate in the project but had not been in the sample. Needless to say, these households yielded some of the richest field experiences.

(e) selection of dietary methodology.

The collection of food intake data is extremely problematic (see for example Young and Trulson 1960, Marr 1971, Baghurst and Baghurst 1981, Block 1982, Rutishauser and Wahlqvist 1984) and 'there is no generally accepted method of measuring dietary intake in free-living individuals' (Marr 1971:107). Dietary data can be collected at the national level using food balance sheets, at the household level using household expenditure or at the individual level by recording current intake or recalling past intake (Wahlqvist 1981). At each level, there are different problems with validity and reliability and care must be taken not to draw conclusions, for example about levels of vitamin deficiencies, that the chosen method is not sensitive enough to test.

In choosing an appropriate method for the collection of the individual dietary data a number of factors had to be considered. Accuracy of information had to be balanced against minimal disruption to people's daily lives and especially to their eating habits. The method could not be so labour intensive that only a very small sample could be studied (e.g. as by Kamien et al 1975). This effectively eliminated direct weighing methods. Also such methods (e.g. weighing food before serving and waste) tend to sacrifice usual eating habits for reliability of measurement (Young and Trulson 1960). I doubt that such a method is generally appropriate for Aboriginal households because it is disruptive of domestic activity and will almost certainly affect usual eating

habits.

The method could not depend for its success on high levels of motivation on the part of informants since I was already aware of Aboriginal reticence about providing information. This eliminated diet records, either one day or for longer periods, since I could not expect many informants to keep them for me. Some of the problems I would surely have encountered are reflected in the study reported by Brown et al (1975) for whom only eighty seven out of 200 nursing students, factory workers and dietary aides at a hospital adequately completed a four day record! Finally, an appropriate method of data analysis, which I could undertake myself, had to be available.

Dietary recall appeared to be the most appropriate method. There are three recognised ways of collecting dietary data by recall - 24 hour recall (or recall for longer periods e.g. seven days); diet history; and frequency questionnaire. All are problematic in some way. The diet history method was developed by Burke (1947) and is in fact a combination of methods involving (i) 24 hour recall using household measures combined with usual foods consumed for each meal; (ii) a detailed checklist of foods about which questions are asked concerning likes, dislikes, use, purchasing etc; and (iii) a menu recorded for three days by the subject. According to Marr (1971) the method has often been misused and Block (1982) points out that as designed by Burke it was intended to provide only a scale of ranking of dietary intake, rather than exact figures. It requires skilled interviewing and is very demanding of subjects' time.

Frequency questionnaires were originally developed as a descriptive

tool, although they can be modified to quantify intake in some way. The method commonly uses self-completed questionnaires to 'assess the frequency of consumption of a specified range of foods/drinks' (Baghurst and Baghurst 1981). According to Baghurst and Baghurst it has been used in Australia in studies investigating the possible associations between diet and health, in nutrition programmes to search for individuals likely to require further investigation, and by themselves in a number of studies. It is not an appropriate method for the quantification of nutrient intake.

The most popular method is 24 hour recall which uses household measures to estimate amounts of foods consumed. The longer 7 day recall has also been used, to overcome the problem of lack of representativeness of a one day recall, but it suffers from problems with memory failure (Block 1982). The 24 hour recall places fewer demands on the subject than other methods (Rutishauser and Wahlqvist 1984), can be administered in a shorter time (Block 1982), and is less likely to influence usual dietary intake (Burk and Pao 1976).

The Nutrition Section of the Commonwealth Department of Health is currently analysing the dietary data which were collected by 24 hour recall for the National Heart Foundation's 'major cities' study of heart disease risk factors. They have developed a data base derived from the Tables of Consumption of Australian Foods and a computer program which analyses food intake for nutrients. With the support of their nutritionists I decided to use the 24 hour recall method to collect my data so that I could both use their data base and program for my analysis, and have a comparative study against which to evaluate my results. The latter was important because very little dietary data are

available in Australia, the current Heart Foundation study being the first major nutrition survey undertaken in almost forty years (Department of Community Services and Health 1987).

The 24 hour recall satisfied a number of my criteria for selection of an appropriate method. It could be carried out by me on a relatively large sample, was minimally disruptive and did not depend on a heavy commitment to the study on the part of informants. The use of household measures to determine the amounts consumed was also ideal because of its simplicity. I received instruction about the method from the nutritionists at the Commonwealth Department of Health, and modified their data form so that the meal at which a food item was consumed could be recorded. Plastic standard measuring cups and spoons were purchased and I designed a simple wooden instrument, to help informants estimate length and thickness (for damper, lamb chops etc). I also obtained a simple electronic balance but this was not used very often because the appearance of too much equipment tended to make informants retreat from open participation.

Not surprisingly, there are a number of important problems and considerations relating to the use of 24 hour recalls. Numerous studies have been done to evaluate both how reliable 24 hour recall is for measuring food actually consumed and the extent to which 24 hour recall is a 'true' indication of an individual's dietary intake. They are summarised by Young and Trulson (1960), Marr (1971), Madden et al (1976), Burk and Pao (1976) and Block (1982). The critical issues seem to be:-

(i) A single 24 hour recall can be used to calculate mean intakes of nutrients for a group, but is not a valid measure of the nutrient intake of an individual (e.g. Marr 1971; Block 1982). Repeated 24 hour recalls provide better individual information but the number of recalls required to appropriately classify the intakes of most individuals varies for different nutrients (James et al 1980, reproduced in Rutishauser and Wahlqvist 1984:101) (4.3).

Table 4.3 Number of days required to classify 80% of the population into their appropriate tertiles with 95% confidence.#

nutrient	men	women
energy	5	4
fat	9	6
protein	5	5
carbohydrate	3	2
vitamin A	46	64
thiamin	6	9
riboflavin	10	12
calcium	4	4
iron	12	19

Source: From James et al (1980) published in Rutishauser and Wahlqvist (1984:101).

(ii) Numerous attempts to test the reliability of 24 hour recalls have produced conflicting results, some showing little variation between nutrient intakes derived from 24 hour recalls and weighed, measured or observed intakes (see for example Marr 1971, Burk and Pao 1976, Madden 1976 and Block 1982) and others indicating that 24 hour recall results in significant under-reporting (e.g. Acheson et al 1980; Block 1982). However, differences found do not necessarily indicate which of the methods compared is unreliable. For example, Young and Trulson (1960) cite a study which found that apparent mean intakes of all nutrients were greater for three 24 hour recalls than for ten days weighed dietary

intake, but they fail to mention that this was mostly because of cutback on snacking when subjects were keeping the weighed record (Burk and Pao 1976).

There are a number of other considerations which have been raised. For example, how representative is one day's recall of an informant's usual intake and what are the effects of seasonal factors, memory, interviewer probing, and subject's age on accuracy of recall. In some communities deliberately providing misinformation, or telling the interviewer what the respondent thinks the former wants to hear may be additional problems. In spite of these difficulties there appears to be a consensus that the 24 hour recall is a useful dietary research method.

(f) data collection.

The initial home visit was used to introduce ourselves, explain the project and outline the kind of information we were seeking. Following some discussion my assistant and I had agreed that return visits should be by appointment, unless the informants were willing to see us at any time (which many were as the project progressed). While this was clearly not an optimal strategy for the collection of food records, because informants could feasibly have altered their food intake in anticipation of the interview, it was considered a necessary courtesy. There were no obvious signs that food intake on the previous day was altered because an informant was expecting a visit from us the following day.

At the second visit, informal (taped) interviews were conducted and third and subsequent visits were made to collect 24 hour recalls. It was originally hoped that a male and female from each household would

take part in this section of the study so that possible sex differences in food intake could be evaluated. However, males of all ages generally showed greater reluctance to talk to us than did females, and it proved impossible to interview one of each sex from every household.

Interviews were conducted in a total of thirty four households (see Table 4.2 above). The senior household member responsible for shopping and cooking (a woman in all but one household) was asked a series of questions relating to shopping, cooking, meal patterns, the use of restaurants and takeaway meals, food likes and dislikes, the consumption of 'bush foods', food taboos, and the use of special foods in sickness, pregnancy and lactation. This information provided both important insights into usual dietary practices in the community and a context in which the recall data could be interpreted.

They were also asked 'How many people live in your household?' ('How many adults, how many children?') and 'How much do you usually spend on food each fortnight?' ('at the supermarket, at the butcher, at the market')? These questions did not always produce data that were usable in terms of specific numbers/dollars so responses were used as part of the qualitative analysis.

Recall informants were told that I wanted to know about everything they had eaten or drunk on the previous day, beginning with when they got up in the morning.¹¹ Discussions were centred around the previous days activities to aid recall. Considerable care was taken to elicit the most accurate estimates of food intake possible, and sometimes similar

¹¹ One informant had got up and had a snack at 3 a.m. and this was included.

portions (such as lamb chops or slices of damper which were left over) were measured. Similarly, every effort was made to ensure that reporting of foods consumed was as complete as possible, by prompting informants to recall whether or not they had snacked between meals, where they had been when the food/beverage was consumed, or who had cooked the meal. Reported food items themselves led to many prompts such as 'did you put butter or margarine on that bread ... sugar in that cup of tea? Did you trim the fat from that meat? Did you eat it all? [and especially] Did you have anything else with the meal, such as bread or damper?'

While such measures help to ensure that the record is complete, underestimation of actual food intake due to either forgetfulness and/or concealment cannot be ruled out. In view of the low mean daily energy intakes calculated (see chapter six), under-reporting probably did occur. Under-reporting of food (and alcohol) intake, by up to fifty percent, is also believed to have occurred in the national dietary survey (Cashell pers comm) with which the Aboriginal data have been compared (see below).

Under-reporting could have been accomplished either by not fully stating all the food consumed on the previous day, or by not agreeing to do a recall on a day when a comparatively large amount of food had been eaten. On two occasions informants did refuse to do a recall because they had 'eaten up' the day before, so this clearly may have had some effect on nutrient intakes. On another occasion a woman who was listening to her husband's account of his previous day's food intake argued with him about his reported intake of cream sponge and had him reluctantly admit to a third slice consumed as an afternoon snack.

In order to test the hypothesis that fluctuations in food intake occurred between pay week and off pay week, the day in the pay fortnight (1 through 14) was recorded for each recall. Every effort was made to ensure an even spread of days between the two weeks and between weekend and week days. The meal and the cooking method were also recorded and many long informal discussions about likes and dislikes etc took place.

Over a period of several months, 126 recalls were collected from thirty eight informants, twenty six females and twelve males aged between fifteen and sixty seven years. They came from thirty one different households with five households providing more than one informant. Of the total number of informants twenty seven (71%) did four recalls each. The remaining eleven informants did one (five informants), two (five informants) and three (one informant) recalls each.

The recall sample was not representative of the Kempsey community in three main respects. Firstly, 43% of recall informants aged fifteen to fifty nine years were employed at the time they participated compared to only 17.4% of Kempsey adults (see chapter five). However, one third of the employed recall subjects had only temporary jobs under Commonwealth Employment Service (CES) subsidised employment schemes and all of them became unemployed during the course of the study. Since they had little prospect of finding further work, they could not be considered as employed in any long-term sense.¹² Nevertheless, insofar as dietary habits are affected by income, it could be argued that the recall sample contained a potential bias towards a better-than-average diet.

¹² As discussed in chapter three, few of these people can subsequently expect to find permanent employment, so this period does not constitute a long-term socio-economic improvement.

Secondly, ten of the thirty eight informants (26%) were diabetics (compared to approximately 10% of the population - see chapter seven). This high rate of diabetic response was probably partly due to the fact that the diabetics had to take an interest in their diets in order to control their disease, and were thus more willing to take part in a dietary survey. All had received dietary advice at some time and many had participated in a diabetes education program run at Durri AMS during 1984. Since they all had unstable blood sugars to a greater or lesser extent, none could be said to have been well controlled by diet. However, there were clear indications that some of them had made modifications to their diets over the years, so that the foods consumed by this group may be typical of a comparatively smaller proportion of the population as a whole.

Thirdly, 76.9% of women and 75% of men who were recall informants were overweight or obese, compared to 60.9% of females and 53% of males in the Kempsey Aboriginal population (see Appendix for definitions and Table 7.4). All of the diabetics were also obese, but all overweight or obese people were not diabetics. Diabetes and obesity are therefore compound rather than additive biases in the sample.

Since voluntary restriction of food intake in an attempt to loose weight and/or control blood sugar may have had a significant limiting effect on the intake of energy and other nutrients (see chapter six), the somewhat higher rates of diabetes and overweight/ obesity in the sample than in the population should be taken into consideration.

Finally, there were no recall informants who had a severe problem with

excessive alcohol consumption because most households with 'drinking problems',¹³ either refused to participate (although this was not necessarily the main reason why they did so), or were excluded from the study in the first instance if the female head was incapacitated as a result of heavy alcohol consumption (two households). Informants who did drink (a few quite heavily) generally refused to do a recall if they had been drinking the day before.¹⁴ Furthermore, general household questions about alcohol consumption were eventually deleted because they gave offense. As the research assistant reassured one woman:-

There was a question about grog, y' know, but we crossed it out. Y' know how some Blackfellas are, they get offended.

Consequently, alcohol consumption was not evaluated generally, and was recorded on only two 24 hour recalls. This problem was impossible to circumvent. A previous attempt by a medical practitioner, well-known and liked in the community, to study the relationship between alcohol and hypertension amongst Aborigines in Kempsey was never completed. The researcher believed that even if he had persevered with the study he would not have got the necessary data (Copeman pers comm). Other researchers elsewhere have failed to collect any usable data on alcohol intake (e.g. Wise et al 1970).

Finally, Burnt Bridge is under-represented in the recall sample, as are males. While it was not possible for me to control for these factors

¹³ Caution needs to be exercised when describing households as having 'drinking problems' although Kempsey Aborigines do this all the time. It is often the case that only some members of the household drink and 'drinkers' and teetotalers may belong to the same household.

¹⁴ Reported alcohol intake tends to become increasingly inaccurate as consumption increases (Darnton-Hill pers comm) so that quantities are at best estimates only.

they need to be borne in mind when interpreting the results of the study.

(g) 24 hour recall data analysis.

Approximately 3,500 food items, consumed by 38 informants on 126 days were coded by me at the Nutrition Section of the Commonwealth Health Department (now Department of Community Services and health), under the guidance of personnel responsible for coding the data for the national survey. Each item of food was then recorded in a data file on a mainframe computer at the university, and for each item the informants identity number, sex, place of residence, recall number, the day in the pay fortnight the food was consumed, description of the food, cooking method and volume was also recorded. The Department of Health's program to analyse foods for nutrients was then copied to one of the Australian National University's mainframe computers. A second file was then generated, containing the nutrient content for each food item consumed.¹⁵ Subsequent analysis of these two data files, for foods consumed and nutrients consumed, was done by me using SPSS-X.

(h) interpretation and evaluation.

The results of the dietary survey are discussed in the following chapters. For the reasons outlined above the data collected were not adequate to draw conclusions about the adequacy of individual dietary intakes. Evaluation has therefore been confined to a comparison of group results with those obtained in the national survey. It is important to note that the latter have been published without any discussion or analysis of their health implications, partly because this

¹⁵ I am very grateful to Dr David Feary for assistance with file transfer and reformatting and with the programming necessary to complete these operations.

is an area in which public health policy with respect to nutrition is still being developed and assessed in Australia.

For foods consumed, the mean intakes are derived from 126 days of food consumption, so that the maximum amount of available information about food varieties and patterns of consumption could be evaluated.

However, in order to minimise the effect on mean daily nutrient intake of unequal repeated measures, the mean daily nutrient intakes for men and women were calculated from the mean daily intakes of each individual. The latter values were also used in the comparisons with Recommended Dietary Intakes (RDI).

One of the major problems in the interpretation of the data was the lack of an appropriate population with which to compare the results. There have been no other dietary studies of adults in urban Aboriginal communities using 24 hour recall, and there is very little dietary data available for other lower socio-economic groups in Australia. Thus, the results of the National Dietary Survey of Adults (1983) have been used as a basis for comparison.

There are however, a number of important ways in which the national sample and the Kempsey sample differ. The national survey was conducted in capital cities only, and the sample is comprised of a variety of ethnic groups.¹⁶ Although a breakdown of both the education and employment status of the national sample is reported (Commonwealth Department of Health 1986), there has been no analysis of the relationship between diet and either education or employment. The

¹⁶ Ethnicity is somewhat obscured however by the fact that only region of birth is shown, which is predominantly Australia (71.9%).

national survey did not include persons under twenty five years of age and data on alcohol consumption were collected and included in the analysis.

The Kempsey survey was confined to an ethnically discreet, rural town population. Persons fifteen years and over were included and very little data on alcohol consumption were collected. Employment rates in the Aboriginal sample were less than half the national rate for males and three fifths of the national rate for females (see Table 4.4). Furthermore, of those in the national sample who were employed, 41% of males and 33% of females were in upper echelon 'professional/technical' and 'administrative/ executive' positions, compared to one in the Kempsey sample in these job classifications.

Table 4.4. Comparison of employment rates in the national and Kempsey Aboriginal dietary surveys.

	Employment rates %	
	Australia#	Kempsey Aboriginal
males	88	42
females	51	33

Source: Commonwealth Department of Health 1986.

It is thus apparent that the results of the Kempsey survey reflect the dietary habits of an economically less advantaged population than that of the national survey.

Statistical tests have not been used in the analysis of these results. This is because the sampling technique and the data collected were not

adequate to ensure their validity. For example, I was interested to see whether or not there was a significant difference in the mean intakes of the major nutrient categories (energy, protein, carbohydrate and fat) between diabetics and non-diabetics. However, as already noted I did not have enough recall repeats to evaluate the nutrient intakes of diabetics and non-diabetics on an individual basis. Nor could groups means be used because the total sample was not large enough to divide into groups for the purpose of comparison once sex, age and weight had been taken into account. For these reasons the effect of informants' weight, age, place of residence, and employment status on nutrient intakes were also not tested.

What follows then are dietary intake data which have been evaluated in the context of both the results of the national survey, and the more general information collected during household interviews and an extended period of observation and interaction in the Kempsey community.

Conclusion

In this chapter I have argued that there has not been a strong empirical basis for many of the assertions made about Aboriginal diet in urban environments. Only two quantitative studies of food intake have been published and both involved very small groups, which limits the extent to which their findings can be used to generalise about Aboriginal nutrition. In spite of this, very poor dietary habits have frequently been assumed to be ubiquitous in Aboriginal communities.

The paucity of data is almost certainly due in part to the considerable difficulties involved in conducting this kind of research amongst

Aborigines. In this study, methodological considerations had to be balanced against the realities of conducting research in a rather hostile social environment. Nevertheless, by making home visits and by using a combination of structured household interviews and 24 hour recalls of food intake I was able to gather a significant body of dietary data.

It was clear from these observations that there is a remarkable degree of uniformity of dietary practices in Kempsey Aboriginal households, regardless of apparent income or physical living conditions (see Chapter 5). This consistency in the patterns of consumption is a reflection of the broader social homogeneity which characterises the Kempsey Aboriginal community (see Chapter 3), and which has its origins in the shared historical experiences of life at Burnt Bridge and Greenhill (see Chapter 2). These experiences helped shape the post-contact diet and transcend the differences brought about by relocation of many people into the town. Consequently, I would argue that the patterns of consumption, or the kinds and variety of foods consumed, may reasonably be assumed to be representative of the community as a whole.

However, individual nutrient intakes, from which the nutrients consumed are derived (see Chapter 6) are more problematic, because of the lack of representativeness of the sample. As discussed earlier in this chapter, the age distribution of the sample does not reflect the age distribution of the population, and there are more employed and obese/diabetic people and fewer males in the sample than in the community as a whole. The other important omission is alcohol consumption. Notwithstanding these shortcomings, this is the largest quantitative study of urban Aboriginal nutrition ever undertaken and, as I will argue, the results strongly suggest that the extremely poor diet and heavy alcohol abuse thought to be characteristic of urban Aborigines, warrants re-evaluation.

CHAPTER FIVE

DIETARY PRACTICES AND FOODS CONSUMED

In the preceding chapter I have pointed out that accepted-as-fact notions about the diet of Aborigines are based on a relatively small amount of empirical evidence and a large amount of anecdotal evidence. Much of that anecdotal evidence comes from seeing Aborigines eating and drinking under a rather narrow set of conditions; for example, on Aboriginal reserves where eating habits are more public and poverty more extreme; in public places where people are likely to be eating take-aways or other foods not prepared at home; at schools where children are eating meals based on their own food choices, rather than those of the family.

This chapter deals with the actual patterns of consumption and foods consumed in Kempsey. Nutrients consumed, one aspect of the nutritional outcome of the observed patterns of food consumed are discussed in the following chapter. It will be seen from this chapter that generally speaking, the dietary patterns of the dominant society prevailed, although there were some features of the diet and attitudes to foods which are distinctive.

Because entry into Aboriginal homes is extremely difficult, little of the anecdotal information recorded in the literature has been collected in the domestic setting; yet this is where women can talk about what is done in the kitchen, where they will show you the brand of icecream that they buy or the meat cuts in the refrigerator and where you will see what people are eating and drinking during your visit. Importantly, it

is also in people's homes where you get some sense of the complex interaction of physical, economic, psychological and social factors with dietary practices. It is only by home visits that a comprehensive approach to dietary evaluation can be attempted.

Although many of the initial home interviews I conducted were very stressful, prolonged contact eventually eased the tensions between myself and the participants in most households. Naturally, the most difficult interviews yielded little information - questions were incompletely answered or evaded altogether, responses were brief and devoid of descriptive detail. Others, on the other hand, were rich and informative, revealing much more than just the shopping and cooking habits of the household. The data yielded were not of the type which could be analysed in terms of specific categories or yes/no percentages but they provided an important contextualisation for the results of the dietary recalls.

Shopping

Shopping patterns were largely dictated by the fortnightly receipt of welfare payments on 'pension day' when cash was withdrawn from the bank or credit union¹ and groceries and other household items for the fortnight were purchased. This resulted in a fortnightly influx of shoppers in the town, laconically described by Aborigines as a 'blackout'. A few women however, did their main shopping weekly or by the month.

¹ Most Australian welfare payments to urban dwellers are made directly into an account.

On 'pension day' many complex negotiations and cash transfers took place between network participants, often before shopping began, but generally speaking this did not appear to make inroads on the cash available for food shopping. I did not hear anyone say that they had insufficient money for food as a result of settling their debts or giving loans.

Almost all women said that while they did their 'big shop' on pension day, they did purchase other foodstuffs during the fortnight as required. This statement referred particularly to commodities such as bread and flour (and 'smokes'). Only a few people felt that they 'had difficulty making the money/food spin out for the fortnight'.

No, I don't have any trouble.

That [food] lasts ... if I get short of anything I go an' buy it.

No, I save a bit [of money for the next fortnight].

No, not really 'cos he [husband] gets the subsidy [family income supplement] y' know, in our off week, of sixty dollars, so that really keeps us just for smokes and bread. Y'see, sometimes we don't go through all our stuff [food] in the time [between pays]. I shop once a fortnight, an' if I get short I just go to the shop, y' know.

However, one woman said of her food shopping:-

But I'll tell ya what, it nearly takes all my money up and I'm scratchin' then for the rent.

Another replied:-

The last day, the last day, that's the main problem there. It [food shopping] sorta just works out right. Oh, it's only now and then I might just say, one day shorta just one meal, and I gotta rack around for that meal.

In this household however, there were twenty one residents and frequent influxes of guests who stayed to share their food, so occasional food budgeting problems in such a large and fluid household are hardly surprising. Indeed, sharing with co-residents or visitors sometimes put a strain on household food budgets:-

It's only like that one day [the day before pension day] eh, your scrapin' round, see I'm out 'ome there, I make sure I've got everthin', y' know. I told ----- [sister, staying with her] y' know, to buy their own things ... yeah, but she jus' buy a packet a' pies, an' them hamburger things. That's not a right meal, and ----- [sister's partner], y' know, he seen me cookin' our nice meals, an' he say 'that looks nice'.

It was almost certainly the case that, in most households, the cash remaining after the main shopping was completed was not sufficient for the purchase of all desired commodities. However, no-one indicated that they were hungry in off pay week, and could not get enough to eat. Two people who said that they had trouble making the money spin out were heavy and consistent gamblers. One of them told me once that she had 'nothin' left' until pension day. The fresh fish in her refrigerator was, she said, 'for the cats'.

Shopping was almost universally done at large supermarkets, with very little 'corner store' shopping. There was always a good deal of discussion about where to get the most inexpensive items, what foods were 'on special', and who sold the best bulk meat orders etc. Meat and vegetables were sometimes purchased from alternative sources (butchers, green grocers or the vegetable market in South Kempsey). One woman had her groceries delivered, for a small charge, because she preferred to take the bus to town to shop. Everyone else had access to a car, except for one old couple at Burnt Bridge who had to arrange a ride into town with someone. Women generally shopped for food, but some were regularly assisted by their partners.

Cooking

Although it was predominantly women's responsibility, both men and women cooked, and there was nothing remarkable about a male household member

preparing the main meal of the day.

Oh, he [husband] cooks a fair bit. I do it most.

----- [husband] cooks if I'm busy doin' somethin' else, he's learnin' to cook.

I cook most of the meals. If I'm sick or somethin' he'll [partner] cook.

----- [husband] does it at weekends, or if I'm tired he'll cook.

One woman replied however:-

He [husband] does most of it. I can't cook much. I don't like cookin'. When I'm in the mood I'll get in an' cook.

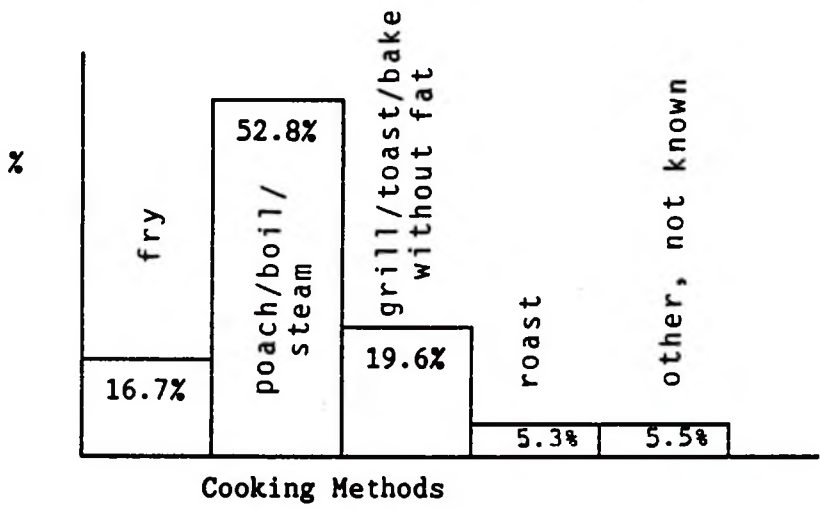
Another stated that she and her partner took 'turn about'. Only one woman said that her husband did the cooking; she did it only if he was away for some reason. One male living alone also cooked for himself. The people who were renowned for being able to 'cook a good damper' were women, but one woman specifically mentioned that her partner cooked damper and fried scones, as well as many of their meals.

Meals tended to be simply prepared, with very few complex recipes, and dessert seemed to be rarely eaten. Twenty five percent of meat dishes were meat/vegetable composites variously described 'stew', 'soup', 'gravy', or rarely 'casserole'. The word 'gravy' was in fact used both for the dressing for meat, made from meat juices and flour, and for more substantial liquid based dishes containing meat or shellfish, with or without vegetables.

One of the widely accepted notions about Aboriginal food habits is that frying, usually in 'dripping' (meat fat), is the preferred cooking method. In order to test the validity of this, I analysed the method used for each food item (not dish) which was cooked in the home in some

way.² Of the 723 food items cooked in the home, 16.7% were fried, using dripping (6.6%), margarine (5.7%), oil (3.2%), no added fat (1.0%), and butter (0.3%). While this indicates that dripping was (marginally) the most popular fat for frying, it does not support the notion that frying is the most popular method of cooking. Other methods used in the home included poaching, grilling, toasting, boiling, steaming, baking and roasting (Figure 5.1). Of the total food items cooked, 5.3% were roasted of which 4.6% were in dripping, and the remainder were in oil/water, 'own juice', and not known.

Figure 5.1. Cooking methods used.



Meal patterns

To some extent, the social aspects of meal consumption seemed to be dependent on household size. Thus women in small households generally said they all sat down to eat together, whereas in large households meal patterns tended to be much more flexible. In the largest household (twenty one members) everyone who was home ate the same meal, but there

² Twelve food items are counted twice because they were prepared in two different ways, e.g. fried before being put into a stew.

was not enough room in the kitchen for them to eat together at the table:-

We do it in sections see. The little ones first, then the teenagers, then the grown-ups.

People not at home at meal times commonly made up for this by having a 'snack' on their return. This was comprised of leftovers from the meal, or whatever else was available. These 'snacks' could be as big as a meal, so 'snacking' contributed a significant proportion of total daily intake of nutrients. This is reflected in Table 5.1 which shows the proportions of total intakes of energy, protein, carbohydrate and fat derived from different meals. Although the evening meal ('tea') and the midday meal (dinner') were more important than 'snacks' in terms of energy, protein and fat intake, almost one quarter of the total energy intake was from snacks. The relatively high carbohydrate intake from snacks reflects the fact these were more likely to be accompanied by bread than were regular meals.

Table 5.1 Proportions of intakes of energy, protein, carbohydrate and fat derived from different meals.

	Proportion of total intake %				
	b'fast	dinner	tea	snack	code ³
energy	18	26	27	21	8
protein	17	29	37	16	1
carbohy	20	25	26	27	3
fat	16	27	26	16	15

³ Code items were not cited by the informant but were included as part of the coding process e.g. as ingredients of a cake. Unfortunately they were not identified by meal in the coding process so cannot be related to specific meals. The high proportion of fat contributed by 'code' relates to fats used in cooking.

Meal composition followed an Australian pattern of bread and other cereals for breakfast and/or cooked food such as eggs or baked beans or 'leftovers' from the previous evening meal; meat or fish and vegetables for the main meal (either during the day or the evening); and bread and 'leftovers' or sandwiches for the remaining meal. Sandwich fillings for sandwiches made at home included luncheon meat ('devon'), corned beef, tomato and lettuce. 'Dinner' for those who worked at work Durri AMS consisted primarily of sandwiches or a filled roll bought from one of the stores, hot potato chips, and meat pies. Meat and salad seemed to be the most popular roll or sandwich filling.

A number of people said they didn't 'worry' about breakfast:-

I might 'ave a cup of coffee and might be a coupla piece of toast. ----- [partner] just has coffee.

Oh, I don't worry about breakfast. The kids 'ave cocopops or weetbix. ----- [partner], he'll 'ave a couple of eggs on toast.

The majority however, started the day with some food. Several women stressed the point that they regarded breakfast as an important meal.

Surprisingly few main meals were comprised of take-away food. Cost was the major limiting factor but other reasons for not buying take-aways were given:-

I don't like em.

Now and again [we'll have take-aways]. Sometimes we'll 'ave a pizza an' sometimes we'll have some of that Farmer Smiff's chicken. Very rare though. I prefer me own cookin'.

Take-away food was more commonly bought as a snack, or for the midday meal by people who were away from home for one reason or another. Of the take-away foods mentioned, rotisserie-cooked (Farmer Smiff's) chicken was the most popular. A few said they liked Chinese food and

hamburgers, but pizza was rarely cited, probably because cheese is not a popular food.

Having 'a feed' or 'eating up' was a recurrent theme in discourse about food, particularly meat (including bush foods), fish and shellfish.

Well, there a funny lot 'ere. You can have meat there, an' they won't eat it. Then all of a sudden, they'll just have one big go, of meat.

I'd sit down, I might have a feed of fish, say two or three meals, or four meals, then I could do without it for three or four months. I'm the same way with meat.

When they feel like a feed [of shellfish] they go out [to the beach], 'cos when they go out, see they might fish there for a week or more, an' they just 'ave a good feed until they're sick of it.

Periodic intakes of large quantities of some foods obviously pose problems in evaluating nutrient intakes.

Foods consumed

In this section the foods consumed by the recall subjects are reviewed and discussed, in the context of the more general comments made during the household interviews, and my own observations. In order to evaluate the impact of possible economic scarcity on the diet of Kempsey Aborigines, differences in intake of the food groups between pay and off pay weeks are shown. It was hypothesised that a fall in the intake of some foods, particularly meat might indicate a shortage of disposable income in off pay week.

(a) meat.

Meat tended to dominate responses to questions about both meal composition, 'favourite foods', and 'foods consumed on special occasions

such as at Christmas'. For the majority, it was certainly seen as the central food around which a 'meal' was based.

However, a number of women stated that they did not like to eat meat every day.

We don't eat much meat. I'm sicka meat.

Sometimes I don't eat it [meat] all the time.

Sometimes I don' have to buy meat 'cos he [partner] wins meat at the [RSL] club, y' know. He won 'alf a sheep last Friday. That'd last us a month! We'd only eat it [meat] about three times a week.

In some cases however, 'meat' seemed to be rather narrowly interpreted as red meat or as a hot meat dish of some description, because in reply to my follow-up question, 'what do you have instead of meat?' one woman replied 'I might make a salad, [pause] with cold meat'; while another said they had chicken or fish. On the other hand, others listed fish; nut meat, gluten, and lentil patties; and eggs as meat alternatives. Three other householders stated that they were vegetarian (Seventh Day Adventists), but in two of these meat (chicken only) was eaten occasionally. In both these cases white meat also seemed to be classified differently to red meat. One other woman stated that they didn't eat much meat because it was too expensive.

Mean daily meat consumption was 189 grams for males and 106 grams for females, which is 24% less than the national mean daily consumption for both men and women (Table 5.2). There was no apparent fall in mean daily meat consumption for males in off pay week, but there was a 20% fall for women from 120 grams per day in pay week to 96 gms per day in off-pay week.

Table 5.2. Mean daily consumption of meat and meat products.

	consumption (g)			
	Australia#	Kempsey Aborigines		
		total	pay	off pay
males	248	189	189	187
females	144	106	120	96

Source: Commonwealth Department of Health 1986

Differences in the consumption of various meat types are shown in Table 5.3. Most striking are the lower consumption of pork and poultry and the higher consumption of sausages by Kempsey Aborigines. This is most likely a reflection of economic constraints since poultry was highly desired and most often mentioned in response to the question, 'what would you eat more often if you could afford it'? and pork was consumed on special occasions such as at Christmas. Sausages, by comparison, were inexpensive.

To some extent low chicken consumption was compensated for by a relatively higher intake of chicken as take-away, since 25% of Kempsey Aborigines' take-away meat products was chicken, compared to only 7% of take-away in the national sample. Kempsey Aboriginal women ate almost twice as much take-away meat products as Australian women but male intakes for the two groups are comparable. It may be that Kempsey women were supplementing a relatively small share of meat served at home by buying take-away chicken in town, when they had the opportunity. It seemed that take-away foods were seldom purchased with housekeeping

Table 5.3 Mean daily consumption of different meat types by Australians and Kempsey Aborigines.

		consumption (g)	
Meat type*		Australia#	Kempsey Aborigines
beef	M	73	92
	F	42	27
lamb	M	32	5
	F	22	18
pork	M	23	2
	F	13	<1
sausage	M	13	32
	F	8	15
mixed dishes	M	28	3
	F	15	9
poultry	M	29	6
	F	21	3
take-aways	M	39	42
	F	14	29
deli-meats	M	9	7
	F	4	4
offal	M	2	0
	F	5	0
totals	M	248	189
	F	144	106

Source: Commonwealth Department of Health 1986

* Beef (all cuts); lamb (all cuts); pork (all cuts, bacon, ham); sausages (beef, pork, saveloys, frankfurters); mixed dishes (stews, curried meats, bolognese, meat substitutes [none consumed by Kempsey Aborigines] including quiche, shepherds pie, spinach pie - does not include many more mixed dishes coded as ingredients of recipes rather than as 'dishes'); poultry (all types except take-away chicken); take-aways (non-fish - chicken, chiko rolls etc., hamburgers, meat pies, pasties, pizza, sausage rolls); delicatessen meats (corned beef, luncheon meats, salami etc; offal (not consumed by K/Aborigines).

money and taken home to form the basis of a meal. Rather they tended to be consumed away from the home by individuals shopping with their own cash.

Aborigines did not eat any offal meats, compared to a mean daily consumption in Australia of 2 grams for males and 5 grams for females. Beef was largely consumed as minced beef, with very little steak. Kempsey Aborigines probably ate slightly more meat than is shown here because they also consumed 90 grams (M) and 21 grams (F) of soup, 76% of which was meat based. In comparison, only 28% of soups consumed by Australians (mean daily consumption 74 gms for males and 58 gms for females) was meat based.

Of the meats cooked at home, 25% were prepared as 'stew' or 'gravy', composite dishes made with lamb (flaps or chops), minced beef, sausages or chicken (rarely) and a variety of vegetables.⁴ The widespread use of these dishes and meat-based 'soup' was probably a retention of one-pot cooking practices, but also a device for making meat foods feed a larger number of people than is possible with separate meat portions. There did appear to be a tendency for the few households with comparatively high incomes to serve more meat as a single rather than a composite dish, e.g. in the form of steak, but I have no quantitative data to support this observation.

(b) fish.

Fish was also a popular and much-discussed food but for most people it was secondary to meat and its rate of consumption was not as high as

⁴ This is not reflected in the mean daily intake of 'mixed dishes' in Table 5.3, because for the most part the ingredients of the stews and soups were coded separately, rather than as composite dishes.

that of meat. Thus 24 hour recall subject's meals contained meat 198 times in 126 days, at a mean daily rate of 1.6, while the mean daily rate of consumption of fish was 0.2.

Interweek difference in meat consumption in Kempsey was partially compensated for by a rise in fish intake. The mean daily rate of consumption of fish (fish and shellfish combined) doubled from 0.1 in pay week to 0.2 in off pay week. Mean daily consumption of fish/shellfish is shown in Table 5.4. The amount shown for females in off pay week should be interpreted with caution because n is small and the result has an upward bias from a 564 g 'feed of oysters' eaten on one day by one informant.

Although these amounts are relatively small, fish makes an important contribution to the local diet and Kempsey Aborigines consume more fish than the national average. Furthermore, Kempsey Aboriginal fish consumption was predominantly of fresh fish. With the exception of one serve of sardines, all the fish and shellfish consumed by Kempsey Aborigines was fresh (oysters, pipis, river mullet and marine species such as bream and blackfish), whereas Australians consumed approximately 25% of fish as canned products and spreads.

In Kempsey, fish was almost never bought from the fish shop, being described there as 'too dear' or 'not fresh'. People would however, get fish from the fishing depot at Jerseyville when a boat came in with a fresh catch. The increased intake of fish in off pay week suggests there may have been some financial incentive to go fishing, but no-one ever spoke of going fishing because they were short of meat in particular, or food in general. Fishing was also a popular, inexpensive leisure pursuit (see below), and may have increased in off pay week

because this was a time when there was less cash available for other activities.

Table 5.4. Mean daily consumption of fish/shellfish.

	consumption (g)			
	Australia#	Kempsey Aborigines		
		total	pay	off pay
males	21	31	16	43
females	17	20	8	31

Source: Commonwealth Department of Health 1986

These data also suggest that overall, meat was preferred to fish, the later being consumed more often when the former was not so readily available (in off pay week). However, it is also possible that this was a desired pattern of consumption. Interestingly, although expense was invoked as a reason why fish was not bought from the fish shop, it was not mentioned as a food which would be bought more often, if more money was available. Furthermore, not everyone liked fish or shellfish.

(c) eggs, nuts and seeds.

The contribution of eggs to the diets of Australians and Kempsey Aborigines was the same. Mean daily consumption of eggs is shown in Table 5.5.

Nuts and seeds made relatively insignificant contributions to both diets, with a mean daily consumption of 5 gms and 7 gms for Kempsey Aboriginal and Australian males (respectively) and <1 gm and 5 gms for

Kempsey Aboriginal and Australian females. Aboriginal consumption was derived entirely from nuts, the bulk of which was in the form of peanut butter.

Table 5.5. Mean daily consumption of eggs.

	consumption (g)			
	Australia#	Kempsey Aborigines		
		total	pay	off pay
males	22	23	25	21
females	16	19	17	21

Source: Commonwealth Department of Health 1986

(d) cereals and grains.

Mean daily consumption of cereals and grains (not including cakes and pastries) is shown in Table 5.6. Consumption of cereals and grains in Kempsey rose in off pay week as might be expected, since they are cheaper foods than meats. Of the total intake, bread comprised 50% for Australians and just over 70% for Kempsey Aborigines, of which 40% and 20% respectively was wholemeal bread. Some Aborigines, particularly the diabetics, had tried unsuccessfully to incorporate wholemeal bread into their diets. The main complaint was that they could not buy it because other household members didn't like it. While this could have been circumvented by buying separate bread, it seemed that having reserved food within a context of domestic sharing was problematic, especially if the person buying the food was in effect making special provision for herself. Furthermore, foods reserved for individual consumption and therefore eaten more slowly are more subject to wastage.

Table 5.6. Mean daily consumption of cereals and grains (excluding cakes and pastries etc).

	consumption (g)			
	Australia#	Kempsey Aborigines		
		total	pay	off pay
males	226	214	190	233
females	147	153	144	160

Source: Commonwealth Department of health 1986.

In line with an assumed fall in disposable household income in off pay week in Kempsey, the proportion of the total intake of grains provided by bread fell also and there was a corresponding rise in the intake of flour prepared as damper. Damper consumption was largely responsible for the greater amount of grains consumed as 'flour' by Kempsey Aborigines (10 gms) compared to Australians (4 gms). It was widely stated by Kempsey Aborigines that damper 'goes further' than bread, probably because of its greater density per slice than white sandwich bread. Thus there appears to be some economic imperative to make damper as cash remaining for the purchase of bread falls in off pay week.

[I make] damper when I feel like it. Or if I run outa money to buy bread I make damper.

It is a moot question whether or not damper making would be so prevalent if money was always available in off pay week to replenish the household bread supply. It may be that in many households, having damper during the fortnight was a preferred pattern which would not change if income was increased.

Overall consumption of breakfast cereals was about the same for Australians and Kempsey Aborigines but the sex differences were reversed (Table 5.7). Thus Australian women ate 30% less breakfast cereal than their male counterparts, while Kempsey Aboriginal women ate 30% more than Kempsey men. Wholemeal cereals comprised 15% of the Australian consumption of breakfast cereals, but over 25% of the Kempsey consumption. Oatmeal cereals comprised 40% of Australian and 68% of Aboriginal consumption. However, Kempsey Aborigines did not eat muesli which comprised 21% (male) and 27% (female) of Australian breakfast cereal consumption.

Table 5.7. Mean daily consumption of breakfast cereals.

	consumption (g)	
	Australia#	Kempsey Aborigines
males	33	20
female	22	35

Source: Commonwealth Department of Health 1986

Breakfast cereals consumed in Kempsey covered a narrow range of products, with weetbix being the most important. This was partly due to the vigorous promotion by Medical Service staff of weetbix, as a whole grain food, which was incorporated into dietary advice to both diabetics and those attempting to lose weight.

Starchy staples not widely consumed in Kempsey were rice (mean daily consumption of <2gms compared to over 30 gms for Australia) and pasta

(7gms for Kempsey Aborigines and 20 gms for Australians). While this was originally considered within a cultural framework in which these foods were not 'food', it is also a product of dietary adaptation in the context of a particular historical experience since Carter (pers comm) has noted that rice was an important starchy staple for urban Aborigines in Cairns, where there has been an important Chinese influence.

(e) vegetables.

Twenty-five varieties of vegetables were consumed in Kempsey, including potato, pumpkin, carrot, peas, green beans, cauliflower, cabbage, brussel sprouts, onion, tomato, lettuce, cucumber, spinach, celery, corn, zucchini, broccoli, turnip, parsnip, beetroot, choko, mushroom, navy beans (as baked beans), and spring onion. Garlic was used in cooking but only rarely. With the exception of salad vegetables consumed in sandwiches, raw and salad vegetables were not frequently consumed.

Kempsey Aborigines consumed significantly less vegetables than Australians, the differences being greater for men (38% less) than for women (24% less) (Table 5.7). However, much of it was consumed in 'stew' and 'gravy' and 'soup' and these dishes are often predominantly vegetable with a small amount of meat only. Thus the coding rules applied to Australian dishes of this type may not be relevant, resulting in an under-estimate of vegetable consumption by Kempsey Aborigines. Thus one 'stew' contained sausages, cauliflower, cabbage, potato, pumpkin, carrot, onion, turnip, tomato.

Kempsey males consumed a lower proportion of vegetables as potato (25%) and a greater proportion as pumpkin (18%) than Australian males (39% as

potato and 6% as pumpkin). Aboriginal females consumed a greater proportion both as potato (40%) and pumpkin (19%) than Australian females (31% as potato and 6% pumpkin) (Table 5.8).

Table 5.8. Mean daily consumption of vegetables.

	consumption (g)			
	Australia#	Kempsey Aborigines		
		total	pay	off pay
males	299	184	171	196
females	239	182	206	160

Source: Commonwealth Department of Health 1986

Overall the most significant difference in the consumption of vegetables is the relatively low consumption of green and leafy vegetables eaten by Kempsey Aborigines (Table 5.9). This was at least partly due the low consumption of salads and salad vegetables.

Certain vegetables were probably relatively recent additions to the local diet. One informant singled out broccoli, which she fed to her family but described as 'strange stuff' that she only 'got to like' as a result of eating at restaurants (see below). People's accounts of the produce grown 'in the old days' in domestic gardens included roots (parsnip, turnip, swede and beetroot), pumpkins and squashes, but fewer leafy greens. From the household interviews, it was clear that the most popular vegetables were potato, pumpkin, cabbage, and (frozen) peas and beans.

Table 5.9. Mean daily consumption of different vegetables.

		consumption (g)	
Vegetable*		Australia#	Kempsey Aborigines
potato	M	115	46
	F	74	72
pumpkin etc	M	27	37
	F	26	37
peas/ beans	M	30	22
	F	23	16
cabbage/ cauli	M	33	20
	F	29	9
tomato	M	29	14
	F	26	19
carrot	M	17	10
	F	15	7
leafy greens	M	17	2
	F	18	3
onions	M	13	24
	F	12	13
parsnip etc	M	6	9
	F	6	3
other	M	12	<1
	F	10	3
total		184	182

Source: Commonwealth Department of Health 1986

* Potato (excludes potato crisps, sweet potato n/c, yams n/c); pumpkin etc (pumpkin, cucumber, zucchini, choko, marrow n/c, eggplant n/c, capsicum n/c); peas/beans (green peas and green beans, broad beans n/c); cabbage/cauli (cabbage, cauliflower, broccoli, brussel sprouts); tomato (tomato and tomato paste); leafy greens (celery, spinach, lettuce, chicory n/c, sprouts n/c, endive n/c, cress n/c); onions (onions, shallots, garlic, leeks n/c); parsnip etc (beetroot, parsnip, turnip, radish n/c, swede n/c, celeriac n/c); other (includes pulses and legumes, all types, and other - mushroom, sweet corn, artichoke n/c, asparagus n/c). (n/c = not consumed by Kempsey Aborigines).

As shown in Table 5.8, intake of vegetables did not conform to a uniform pattern. Vegetable intake for females overall was close to male intake, but inter-week variation was reversed. Thus vegetable intake rose in off pay week for men and fell for women.

(f) fruit.

Of all the food groups, fruit was the most under-represented in the Kempsey Aboriginal diet. Aboriginal men and women ate only one third (35% and 32% respectively) the amount of fruit consumed by Australians (Table 5.10). In particular, Kempsey Aborigines did not consume any fresh stone or berry fruit (in spite of its availability during the survey period) and very little dried fruit. Fresh fruit consumed covered a narrow range, with bananas and apples accounting for 75% of non-citrus fruits. Kempsey males had a mean daily consumption of 52 gms of citrus fruit compared to 58 gms consumed by Australian males. Kempsey Aboriginal females and Australian females had a mean daily consumption of citrus fruit of 22 gms and 65 gms respectively.

Some tinned fruit was consumed in Kempsey (apple, pineapple, peach, pear, fruit salad), but tinned fruit contributed a relatively small amount to the total fruit intake. Lemons were a popular 'bush' fruit, and were gathered from trees growing at the roadside at a few locations in the valley. They were usually consumed whole, including the skin, often liberally garnished with salt.

There was not only a relatively low intake of fruit overall, but also a substantial fall in consumption in off pay week. Fresh fruit was not cheap in Kempsey, and the price of stone fruits was usually prohibitive.

Table 5.10. Mean daily consumption of fruit.

	consumption (g)			
	Australia#	Kempsey Aborigines		
		total	pay	off pay
males	177	60	114	14
females	182	57	72	44

Source: Commonwealth Department of Health 1986

Although fresh fruit did not play an important role in the diet this was at least partly due to its high cost, because windfalls of cheap oranges, or 'bush' lemons picked from roadside trees near Bellbrook, were consumed in large quantities when the opportunity arose. It seems that in many households fresh fruit purchased on pay day was consumed over the succeeding few days and the stock was not replenished until the following fortnight.

(g) milk and milk products.

Whereas Australians consumed almost all their milk as liquid milk, Kempsey Aborigines consumed theirs predominantly as powdered milk (64%). Negligible amounts were consumed by both groups as condensed products (not shown). Liquid milk was seldom purchased in Kempsey for home consumption, but it was consumed at work where it was provided. The use of powdered milk has in part an historical basis; there was no refrigeration on Aboriginal reserves or in the fringe camps, and fresh milk could not be kept. Part of the explanation given for the retention of this practice however, was that fresh milk 'makes your tea cold'.

That is, adding liquid refrigerated milk to tea lowered the temperature of the tea, more than did the addition of powdered milk. Subjectively, there appeared to be other factors involved. Having powdered milk in the house discouraged people from drinking milk as a beverage, a practice which would be quite^{expensive} in large households. In addition, milk was much cheaper in powdered than in whole form.

When the powdered milk is converted to liquid milk equivalence, Kempsey Aborigines consumed 20% (males) and 8% (females) less milk than Australians (Table 5.11).

Table 5.11. Mean daily consumption of liquid and powdered milk (in liquid milk equivalents)

	consumption (g)			
	Australia#	Kempsey Aborigines		
		total	pay	off pay
males	267	214	221	209
females	224	200	202	199

Source: Commonwealth Department of Health 1986

Other milk products were also consumed by Kempsey Aborigines to a lesser extent than by Australians. Notably, cheese consumption was 80 to 90% lower, and Kempsey Aborigines ate no yoghurt, less cream and less icecream (Table 5.12). Rassaby (1978:37) reports that cheese was amongst the food items included in the low cost food parcels provided for at-risk Aboriginal children in Sydney which were chosen 'with consideration given to their known acceptability to the Aboriginal community'. This suggests that cheese might be more widely incorporated

in the diet in other areas than it is in Kempsey.

Table 5.12. Mean daily consumption of milk products.

		consumption (g)	
Milk product		Australia#	Kempsey Aborigines
cheese	M	19	4
	F	18	2
creams	M	7	5
	F	5	2
ice creams	M	17	3
	F	8	6
yoghurt	M	6	0
	F	8	0
total	M	49	12
	F	39	10

Source: Commonwealth Department of Health 1986

(h) fats.

The mean daily consumption of fats for non-cooking uses was considerably greater for Kempsey Aboriginal males (39 grams) than for Australian males (24 grams) (Table 5.13). However, Kempsey Aboriginal females and Australian females had the same mean daily consumption of 15 grams.

Comparisons of the types of spreads used were made difficult by the fact that many Aborigines could not specify which margarine was used, so it could not be classified as to the ratio of polyunsaturated to saturated fats (i.e. had to be coded as margarine, domestic, type unknown).

However, polyunsaturated margarines were quite popular, in spite of the fact that they tended to be more expensive than regular table

margarines. Australian males and Kempsey Aboriginal males consumed the same proportion (29%) of non-cooking fats as butter. Australian females consumed 33% as butter, compared to only 6% for Kempsey Aboriginal females.

Table 5.13. Mean daily consumption of fats, non-cooking uses.

	consumption (g)	
	Australia#	Kempsey Aborigines
males	24	39
females	15	15

Source: Commonwealth Department of Health 1986

(i) other foods.

Popular perceptions of Aborigines as heavy consumers of sugars and snack foods are not supported by the data from Kempsey. Consumption of cakes and biscuits, sugars, confectionery and snack foods by Kempsey Aborigines was comparable to Australian consumption (Table 5.14). Aboriginal consumption of cakes and biscuits etc was in fact considerably lower, largely because these are relatively expensive foods, considered to be luxury items. Most households purchased only a very limited quantity of biscuits, if at all, at the 'big shop.'

That's it, when they're gone, they're gone an' I don't buy no more 'till pension day.

While the apparent low consumption of cakes and confectionery may have been influenced by the number of diabetics in the sample, non-diabetic households also seemed to place a low budgeting priority on these foods. They were more likely to be purchased occasionally with personal cash,

than with household shopping money. However, almost all householders did buy these commodities in limited amounts for their children. Anderson (1982) describes similar shopping behaviour on a reserve in Queensland in which essentials (including meat, tea, flour, sugar, potatoes, and onions) are purchased, then fresh fruit and vegetables are added if there is cash left over (and if they are available), then soft drinks, biscuits and 'lollies' will be bought mostly at the instigation of children.

Table 5.14. Mean daily consumption of other foods.

		consumption (g)	
Foods*		Australia#	Kempsey Aborigines
cakes	M	50	19
etc	F	41	14
sugars	M	28	30
	F	18	19
confec	M	8	9
tionary	F	7	2
snacks	M	2	<1
etc	F	1	1

Source: Commonwealth Department of Health 1986

* Cakes (pastry, cakes, crackers, biscuits, desserts with cereals); sugars (sugars, jams, honeys, syrups); confectionery (all types); snacks (potato chips; extruded snacks).

(j) beverages.

Kempsey Aborigines consumed two to three times as much tea as Australians but only one quarter to one half as much coffee. Tea was overwhelmingly the most popular non-alcoholic beverage (Table 5.15). It

was an important token of hospitality and accompaniment to social interaction. Instant coffee was seldom bought for home consumption, probably due to the cost, because employed people for whom coffee was provided in the workplace consumed a large amount of coffee.

Table 5.15. Mean daily consumption of beverages.

		consumption (ml)	
Beverage		Australia#	Kempsey Aborigines
fruit juices	M	64	21
	F	49	26
f/juice drinks	M	22	-
	F	15	-
soft~ drinks	M	67	160
	F	42	74
soft+ drinks	M	35	25
	F	31	30
cordial	M	3	12
	F	3	3
tea	M	432	1564
	F	469	980
coffee*	M	483	104
	F	460	216

Source: Commonwealth Department of Health 1986

~ sweetened

+ artificially sweetened soft drinks and mineral water

* includes coffee substitutes

The relatively higher consumption of sweetened soft drinks by Aborigines is influenced to some extent by the inclusion in the Kempsey sample of teenage to mid-twenties subjects who were not included in the national

sample. On the whole, older adults did not seem to drink much cordial. The results of the national dietary survey of children are not yet available, but a preliminary impression is that the consumption of confectionery and sweetened beverages will be considerably higher amongst children than amongst adults (Chidgey pers comm).

In Kempsey, neither tea nor coffee were sweetened as commonly as anticipated. Only 42% of informants added sugar and 42% used no sweeteners (see Table 5.16). Artificial sweeteners were used both by diabetics and people trying to loose weight.

Not everyone drank tea. The Seventh Day Adventists drank coffee substitutes made from cereals. One woman said she had reared her children as vegetarians and never gave them tea. She used to make her own 'coffee' with bran and treacle baked in the oven. I occasionally saw tea in babies bottles, a practice commonly reported amongst Aborigines.

Table 5.16. Use of sweeteners in tea and coffee by Kempsey Aborigines.

	sweeteners %		
	total	diabetic	non-diabetic
no sweeteners	42	80	29
sugar	42	nil	57
a/sweeteners~	13	20	11
other*	2	0	3
n =	38	10	28

~ artificial sweeteners

* Did not drink tea for religious reasons.

The place of 'bush foods' in the diet

Apart from fish and shellfish, only one item of 'bush food' (an acacia or 'wichety' grub) was reported in the 24 hour food records. It seems reasonable to conclude that, with the exception of fish and shellfish, 'bush foods' made a very small and irregular contribution to the diet.

'Bush foods' which informants had eaten at some time included wallaby, cobrah or 'wood oyster' (Torido nautilus), 'porcupine' (echidna), emu eggs (when visiting out west), turtle, goanna, eel, wichety grubs, a variety of fish and shellfish, wild honey, wild cherries, and yams.

Responses to questions about the continued consumption of 'bush foods' varied greatly. Many had at least tried foods such as wallaby, cobrah, turtle and porcupine. Wallaby and cobrah in particular were still eaten sporadically.

I 'ad some wallaby three or four weeks ago.

I haven't had it [wallaby] for about three years. Now I wouldn't eat it.

I've [tried] wallaby and porcupine [in the past], but that's about it.

Yeah, I had a feed of wallaby last Sunday. ----- had a leg baked, up there [West Kempsey], [with] baked vegetables. I went straight in to 'ave a feed [laugh]. First time I 'ad a taste of it for over twelve month, an' I haven't 'ad a feed of cobrah for donkey's ages.

I can't remember the last time I 'ad a taste of wallaby. I'd love to 'ave a feed of it.

I'd 'ave a taste [of wallaby] if someone put it in front of me, but I wouldn't go out lookin' for it.

I had expected to find the continued consumption of bush food to be more common amongst the older adults, but age was not a good predictor of a

positive response. In addition, people's perceptions of what bush foods continued to be eaten in the community were not always accurate.

No, we don't bother with it [turtle] now. I don't think anyone eats turtle any more.

The kids eat turtle.

If we get one [turtle] we might chuck it on the coals [when fishing up the river].

As discussed in chapter two, part of the incorporation of Aborigines into the dominant society was the denigration and suppression of Aboriginal foods and cooking ('dirty blackfella food'). This typification formed part of a broader portrayal of Aboriginal lifeways as dirty/polluting, and less than human. It is possible that to some extent this historical experience underpinned some of the expressions of disgust which were given in response to questions about bush food. Interestingly, disgust was most often expressed about cobrah, one of the least attractive bush foods from a white perspective.

I haven't tried turtle or goanna. Just thinkin' about it would kill me.

Oh no! I did have kangaroo or wallaby once, but not cobrah, oooh!

Cobrah? Na! [laugh]. Don' like it [laugh]! No way! Pippis [shellfish] and stuff like that, ---- eats, but I can't stand 'em!

A lot of 'em [Aborigines] don't fancy it [cobrah], just by lookin' at it.

On the other hand, many relished cobrah, and it was said to have sedative properties and be good to eat 'if you're grog-sick'.

The revival of a positive Aboriginal identity may have increased the extent to which Aborigines in Kempsey were prepared to acknowledge, to

whites, that they sometimes ate these foods.⁵ Whether or not this cultural resurgence had in recent years increased the consumption of bush food was difficult to assess, but there was little to indicate that it had. Most replies indicated that the consumption of bush food had in fact declined, though this seemed to refer to a decline over many years rather than in the last few years.

I haven't had any of them [wallaby or porcupine] for a long time.

You've been away from it [cobrah] for so long that you just, y' know, the taste, you've more or less tasted everythin' else and forget about the taste of it, actually. When I was a kid we used to go all along the river.

One of the reasons given for not eating wallaby any more was that it was infected with parasites. However, other reasons were also given.

Wallaby was frequently claimed to be 'very tough' and had to be prepared by soaking in brine over one or two days to tenderise the flesh. I was also told:-

Ya can't eat too much of it [kangaroo], it upsets ya stomach.

One of the Seventh Day Adventist, vegetarian women said that she used to eat wallaby, but she wouldn't touch it now because it was 'meat'.

Getting wallaby, turtle, wichety grubs or cobrah seemed to be quite sporadic and not necessarily in the context of the purposeful pursuit of food. A turtle might be picked up if it was seen on the road; a wallaby that was shot 'after the rain' was then stored for some weeks in the freezer; two wichety grubs were found and shared amongst a family having a barbecue beside the river, each getting 'a mouthful'; and young males

⁵ Most of the whites I spoke to about this disclaimed any knowledge that Aborigines in Kempsey still ate 'bush foods'. The exceptions were the few white people who knew Aborigines well.

occasionally went off to look for cobrah, as much to have something to do as find something to eat.

Contraction of hunting grounds with private ownership and denser settlement of rural land had no doubt had an impact on the frequency of consumption of some 'bush foods'.

Trouble is, when we used to go out past Burnt Bridge for wallaby there's too many people livin' there now, we fired a shot at one there one day an' there was a house up behind us. It's too risky.

Several people mentioned that cobrah was harder to find with the clearing of the river banks.

Two women, both living in the town, independently raised the idea of 'surviving in the bush', but it was clear from the discussion that survival was considered in terms of contingency action (e.g in the event of getting lost), not subsistence activity.

----- [partner] and I make sure the kids know how to survive in the bush.

[inaudible] see if I could survive if I got lost in the bush. I dunno. I might. I think I'd be able to eat what I think I could eat.

Special foods

In response to questions about 'special foods that you can or can't eat, say when you are pregnant or breast-feeding a baby'? most women looked quite non-plussed and said there was nothing special about this. A few responded by discussing cravings for certain foods (pica) that they had had while pregnant. No-one cited any foods which were barred to any

people under certain conditions. The only sickness foods⁶ mentioned were junket, chicken noodle soup, and other 'watery stuff' (one person listed these); and several said that cornflour and water for the treatment of diarrhoea was an 'old' remedy.

The absence of food taboos should not be taken as evidence that traditional classification of foods has been entirely lost. Rather, the foods on which traditional systems were based have been largely lost from the diet, and the system has not been transferred to the new foods. Food taboos became irrelevant in the context of the new diet. This is not surprising since they were part of a cosmology, classifications being made according to a system which demonstrated the links between people and the natural world. That some of this knowledge is still retained in the community is demonstrated by Morris (1986) who notes the anxiety expressed by some Dhan-gadi about the possible breaking of food taboos resulting from the bush-knowledge revival for young males that was being organised in the early 1980s⁷.

Fish and Damper

Two foods appeared to have particularly significant cultural value. They were damper (and fried scone) and fish. Damper, made from a dough

⁶ One elderly informant recalled the use of infusions of certain plants, which he said were efficacious in the treatment of cancer and tuberculosis. He argued that knowledge of the use of such plants was not to be disclosed, because whites would 'steal our secrets'. An elderly woman also talked about the application of a leaf to skin lesions, one side applied for 'drawing' and the other for 'healing'. She said that plant infusions were also used in the treatment of diarrhoea. All of the above remedies were no longer used.

⁷ This revival focused on men's hunting and was an entirely male enterprise.

of self-raising white flour, salt and water, occupies a significant place in the Aboriginal diet in Kempsey as 'blackfella' food. While it was not necessarily eaten in all households, it was a much discussed food. It was often deemed to be irresistible by diabetics and those wanting to lose weight who been told to 'cut down on the damper'.

Damper is as much a borrowing from introduced food habits as an expression of Aboriginal culture, since it was also the carbohydrate staple of the early settlers. Ryan (1964:154) quotes an early historian who wrote:-

flour they could knead on a sheet of bark and make a damper quite as well as any white man [emphasis mine].

That it was so readily embraced by Aborigines in the early days was probably due to the fact that an almost identical food and cooking style was already in existence, using flour prepared from native plants (see chapter two). The new flour would have been welcomed as an energy-saving, good-tasting substitute for one of the important products of women's gathering. Indeed it has been argued that the introduction of white flour made possible the sedentism of women and children in permanent camps in the early days of settlement, when rural labour was available for itinerant males (Morris 1986). Since it was as much 'whitefella' food as 'blackfella' food in the days of settlement it probably did not evoke the disgust that was accorded other 'dirty blackfella food', and thus survived as a widely-acknowledged 'traditional food'. Thus 'damper and tea are symbols ... of the blackfellow way of life' (Fink 1955, cited in Bell 1965:412).

Damper dough may be baked as a loaf in the oven or electric frypan, baked as individual scones in the same way, or made into scones and

fried in dripping (animal fat drained from beef or lamb roasts). Attempts by health personnel to introduce wholemeal flour as a substitute for white flour in the preparation of damper have met with little success, since the heavier brown flour does such violence to the special texture so important in a 'good damper'. It is interesting that damper is being reclaimed and revitalised as part of white Australian heritage and is now sometimes served in restaurants offering 'good old-fashioned Australian fare'. Damper has certainly remained an integral part of Australian bush life for whites so it occupies a unique position, claimed by both whites and blacks as 'traditional food' with little acknowledgement that it is in fact a rural dietary universal.

Fishing and fish consumption by Aborigines in Kempsey was interesting because the amount of fish consumed bore little relationship to the amount of time and energy (both human and vehicular) spent on fishing. It was a very popular leisure activity, the pursuit of which was not significantly diminished by lack of a catch. Fishing for riverine species, particularly mullet, was done 'up the river' on the Macleay, favourite fishing sites dotting the road to Bellbrook. Fishing on the river was a safe family activity compared to coastal fishing from the rocks, which regularly claimed lives in the area.

Aborigines are exempt from needing the licence which others are required to have to fish in inland waters in New South Wales, but they are subject to the same regulations regarding the season and approved methods (e.g. netting in inland rivers is prohibited). Scant regard was paid to these regulations however; line fishing was a year round activity, and netting was done at spawning time bringing in hundreds of roe-laden fish. Certain conditions were recognised as unfavourable for

line fishing in the river, such as when the water was dirty after heavy rain, but fishing was clearly valued as an activity per se since people still went 'up the river' at these times, stating they were unlikely to catch anything.

It seems likely that the prevalence of fishing was partly due to its low capital outlay; it was a pleasurable pastime within the reach of almost everyone. Large earth worms, dug from the rich alluvial soil at well-known sites along the river bank, were used to bait nylon lines spooled around soft drink bottles. Fishing at the coast was done using rods, but these were more generally regarded as luxury items.

That fishing and 'a feed of fish' occupied such an important place in the behaviour and discourse of Aborigines in Kempsey may have partly due to the fact that it was an aspect of Aboriginal behaviour which was never suppressed by Whites. Fishing was another universal local activity, and fish would therefore not have been categorised as 'dirty blackfella food'. Indeed, fishing was encouraged by at least one of the managers of Burnt Bridge, who reportedly took residents out to the beach, in the back of his truck, to fish and collect shellfish.

Large catches of fish were sold within the community so some individuals sporadically derived an income from fishing.⁸ In 1985 no Aborigines were commercial fisherman, although some of the residents of the nearby coastal communities, such as Hat Head, had fished commercially in the past. (The fact that they no longer did so seemed to be due, in part, to changes in the local fishing industry).

⁸ A few people caught bait worms from the coastal beaches and sold then to traders. This was quite a lucrative pastime, a successful wormer being able to earn hundreds of dollars a week.

Foods for Special Occasions

Christmas was the only important feasting occasion of the year.

Responses to the question, 'what do you have at Christmas'? always emphasised the variety of meats consumed, including chicken, corned beef, roast beef, turkey, roast pork, ham and roast leg of lamb.

Sometimes the accompanying vegetables were also mentioned and/or the sweets, the latter including trifle, pavlova, pudding, cakes, custard and icecream.

Some families clearly had quite lavish meals:-

I went 'ome [to Armidale]. Ah, look [laugh] we had turkey, chicken, everythin' we 'ad, pavlova, ahh [laugh], couldn't even eat it all!

Mum does all the cookin' ... oh, chicken, roast, silverside, baked vegetables, and salad, an' she cooks cakes and everything.

Oh, sweets and everything. I forget about the sugar [diabetes] then [laugh], worry about it later.

Others however, 'just had really simple food'.

Cold, nothin' hot, corned roll and chicken an' I let it cool, cooked veges, fruit and icecream.

Wedding breakfasts were occasionally held at hired function facilities, where the catering was taken care of. Funerals were not associated with large feasts, although there was often considerable drinking afterwards.

Food and hospitality

Some households shared food with non-residents 'almost every day', while others said they 'hardly ever' had anyone calling in who stayed to eat.

There was a clear pattern for older women with large families to be host to a constant stream of visitors, though there were exceptions to this.

In many cases therefore, the sharing of food was unidirectional (see

Eckerman 1988), because the children were seldom obliged to reciprocate.

As far as I could ascertain, formal invitations to share a meal were extremely rare. Eating together was either an impromptu affair, or a regular occurrence, as when a son went from work to his mother's home for lunch, or daughters with young children regularly spent the day visiting with their mother or their sisters. The food consumed on these occasions was usually described in terms of 'a sandwich an' a cup of tea' or 'whatever's goin'`.

While it seemed to be that, according to the rules of hospitality, visitors had access to food, hosts were expected to share only what was immediately available. They were not under any obligation to over-extend themselves. In this way food sharing was controlled, either by exhaustion of the immediate supply, or by the host pretending that nothing more was available. On two occasions I observed that food was stored in a locked cupboard or concealed in another room of the house, a practice also reported by Carter (1984).

Some people complained about the drain visitors made on their food. They tended to be the people for whom food sharing was not reciprocal. Visitors seldom brought food with them. Responses to the question, 'if someone comes and shares a meal with you, do they bring some food with them'? were predominantly in the negative. On the other hand, those for whom the system was more balanced, cheerfully accepted its obligations.

One day 'ere I had all my lot [twenty one people] and [counting] another ten kids plus three grown-ups. So there wasn't enough, an' I shared out what I 'ad, an' I said, anyone who' still hungry go'n make weetbix or cornflakes [laugh]. I don't mind. Cos you never know when I go over there.

One woman said that there was always enough food for someone to 'drop in' because she always cooked more than she needed to feed her own family.

Restaurants

Responses to a question about eating in restaurants were quite varied. They need to be interpreted in the context of Aboriginal 'shame' in relation to food; and to eating in the presence of, or with utensils used by, whites. Although many of the barriers have broken down, some people appeared extremely self-conscious when eating in cafes and restaurants in Kempsey. Also, at least some of the reasons given for not doing so seemed to embody a rejection of places where Aborigines were not welcome. A significant theme in the responses was that you couldn't enjoy your food because you were being observed [though by whom was not specified].

I just buy somethin' an' bring it home, then you can sit up and enjoy it!

Notably, several of the people who spoke about eating out in other places, such as Sydney or Taree, also said that they did not go to restaurants in Kempsey.

He's [husband] never taken me out. He's asked, but I haven't been out. Oh look, when I was in Sydney last year we used to go to a restaurant every night, [pause] that might be why [I don't go now].

Reasons for not eating at restaurants included that they 'didn't like it', it was too expensive, the food was no good, and people preferred their own cooking.

Na, it might be 'alf-cooked. I don't like 'alf-cooked stuff.

A couple of women said that some hygiene issue had put them off going to

restaurants (e.g a fly on the food), an interesting inversion of the stereotype invoked against Aborigines.

School lunches

Although I was not specifically interested in the diets of children, I asked about school lunches, whether they were packed or bought at school, and what children bought with their lunch money. Of those with school-age children, about half packed the children's lunches. Those that did mentioned vegemite sandwiches, peanut butter sandwiches, meat and salad roll, braised steak sandwiches, cake, and fresh fruit. One of the reasons given for packing lunches was the high cost of buying lunch at school.

They sell sandwiches there [at school] but they're that dear, I'll be better off with a packed lunch.

There seems to be some social pressure against taking lunch from home.

I think I'll start [packing lunch] with ----- [son]. But I think he get shame takin' lunch to school. I packed 'is lunch last week then I said to ----- [partner] I better give 'im 'is lunch [money] 'cos I think 'e gets shame, all the others buyin'. [pause] Probably alot of 'em take it.

Two women said their children came home for lunch. Those who gave their children lunch money tended not to know what was bought with it. One woman did say however:-

I think they get the sandwich, vegemite sandwich, they might buy and apple, an' they might buy an icypole an' a packet of chips.

It was clear that children had the right to determine how their lunch money was spent. This also applied to pocket money, which was given to most children, and was spent on confectionery at the child's discretion. As one woman put it 'it's 'er business what she wants to eat'.

Nutritional knowledge

About half of the household informants had had some western dietary education at some stage in their lives, and talked about foods in terms of its nutritional value. Meat, vegetables, and fruit were all listed as 'good for you'. It was clear from the 24 hour food records that this basic knowledge was translated into dietary practice to a considerable extent.

Those who had not had this education tolerated these questions very poorly, and seemed to be conscious of being made to look ignorant. Those who would reply, tended to do so only in terms of foods that they liked (= 'good food'). Interestingly, there seemed to be no clear relationship between living conditions, general knowledge, and dietary knowledge. For example, two of the women with a sound basic nutritional knowledge lived in shacks at Burnt Bridge, without refrigeration, and did their cooking over open fires. They were also people who had had little formal general education.

Several women attributed Aboriginal sickness, especially diabetes, to a western diet.

See when you eat those things, bush tucker, we never had any sickness ... not till the European people come an' feed all that bad stuff to us, sugar an' everything. See we cook alot of stuff now with fat or whatever, but they didn't do that one time ago. They just cooked it in the ashes.

These ideas had been disseminated in the community by white health personnel, partly to increase Aboriginal pride in their old lifeways, and partly to encourage people to reduce the consumption of sugars and white flour. They are also however, part of a broader elaboration of Aboriginal ideology in Australia.

Dietary change

Responses to questions of the type; 'Do you eat the same sort of food now as you used to eat before? (or as a child? or on the mission?)', were quite varied. Many said they ate the same sort of food. One woman said the food was the same but there was more of it, 'cos we didn't have much money in those days'. Two others claimed that they used to eat more jam and syrup 'in the old days ... damper an' syrup an' milky tea'. Another said her diet had changed somewhat:-

When Dad used to do the cooking, see, we used to have potato and pumpkin, squash and cabbage and spinach and all that stuff, but like the broccoli and, what do ya call it, [pause] brussel sprouts, he never used to cook it; until I started goin' to restaurants and eating it myself, then I started gettin' it myself.

It may also be that more perishable food is consumed now, because one woman offered the comment that less tinned food was eaten than in the past.

Very seldom I go into someone's 'ouse an' see a whole lot of tinned stuff.

This change was no doubt partly due to the increased availability of refrigeration.

Others had changed their eating habits as a result of contracting diabetes. These people generally claimed to have made significant changes to their diets, especially giving up sugars and damper.

I've given up the white stuff. No white bread, no sugar. I used to like my damper, I used to like my fried scones, then I found out it wasn't any good for me.

He [doctor] said, y' know, I could go into a coma, so I knocked it [eating sugars] right off.

I don't make damper 'cos it puts my [blood] sugar up. I used to always make damper, save buyin' the bread, but if it's 'ere I'll eat it, so that's why I don't cook damper no more.

Conclusion

It can be seen that the food categories of the dominant society formed the basis of the diet of Aborigines in Kempsey. Indeed, subjectively, they appeared to be eating a typical, working class, Australian diet.⁹ There are however, some features of the diet which are distinctive. These include the relatively low consumption of dairy products, insignificant use of rice and pasta as starchy staples, the making of damper, one-pot cooking of stews and 'gravy', and the sporadic consumption of bush foods.

What factors determined the dietary practices observed? As a community largely dependent on welfare, food choices were limited to some extent by limited financial means. It was however, extremely difficult to evaluate the role of income as a determinant of diet, particularly in the absence of household income and expenditure data.

The pay week / off pay week comparisons of food intake indicate that the pay cycle did have some effect on diet, but it was variable. Meat consumption was the same for men in pay week and off pay week, but it fell for women in off pay week. Fish and cereal consumption rose in off pay week for both sexes, vegetable consumption rose for men and fell for women, while fruit consumption fell for both sexes. This suggests that meat was less available in the second week of the pay cycle, but women's meat intake was more likely to be affected than that of men. The rise in fish intake (both sexes) in off pay week may have been due to the reduced availability of meat, but may also have reflected changes in use of leisure time as money dwindled. It is also possible that it was a

⁹ There is unfortunately very little quantitative information available on working class diets in Australia.

preferred pattern of consumption which had developed as a result of ration-based diets i.e. eating meat when it was available, then eating fish which could be obtained fresh at any time. The fall in consumption of fresh fruit in off pay week was clearly supported by the information obtained during household interviews, which indicated that a limited quantity of fresh fruit was purchased at the beginning of the pay fortnight and the supply was not replenished until the next 'big shop'.

Some people certainly indicated that they were not able to eat what they desired to eat all the time. In particular, meat intake may have been lower than desired in some households. There were also some indications that the variety of vegetables and the amount of fresh fruit consumed, increased with increased income, although this could have been related to several factors, one of which was income.

On the other hand, food choices seemed to be influenced at least as much by the priorities attached to commodities and activities in the apportioning of total available income. There can be no doubt that consistent gambling throughout the pay fortnight decreased the amount of money available for the purchase of all commodities, including food, in many households, in spite of the fact that in most instances food shopping took first priority on pay day. Women clearly set aside money for gambling in their reckoning of cash disposal, so a woman who said she did not buy a particular food because it was too dear, may have been making that judgement in the context of allowing \$100 per fortnight for her gambling. In so far as the gambling expenses were seen as a need, buying sausages instead of steak was a valid ordering of priorities. Similarly, someone who described fruit as 'too dear' may have been paying for a video recorder on time payment.

Comparatively large sums of money for petrol were 'needed' to drive forty minutes to the next town to shop for groceries, 'just for a change'. Lavish expenditure on funerals and tombstones; the purchase of household goods such as microwave ovens and video recorders; the large sums needed by each member of the family to spend at the annual Easter Show¹⁰ and for other entertainment; and drinking and gambling money, all had to be accommodated in a context of limited means.

I would argue that, generally speaking, people were not short of food in the sense of being hungry, but that they sometimes perceived a shortage of specific foods, which could be attributed to economic factors.

Economic constraints were however, due to choices made about the disposal of available cash as much as to income. Furthermore, the money set aside for food was allocated according to priorities which emphasised meats, vegetables and cereals. Fresh fruit was not accorded a high priority in the allocation of food money and nor were cakes, biscuits and desserts.

While I am not disputing the fact that poverty can cause real hardship, I would argue that in most instances the relatively low incomes of Aboriginal households in Kempsey were adequate to purchase a nutritious diet, pay for housing and utilities, provide private transport, and acquire household goods such as television sets. Those households where poverty was most severe constituted a syndrome of disadvantage. They were characterised by dilapidated housing, apathy and hopelessness, heavy drinking, domestic violence, poor health and subjectively very

¹⁰ One woman with six children set aside \$20 for each of them to take to the show.

poor nutrition (though I did not get 24 hour records from any of these households). It was clear that poverty as a determinant of diet did not relate solely to income, but to a complex of social conditions which were translated into neglect (and abuse) of self and family, including diet.

Historical and cultural factors account for some of the distinctive features of the diet. The relatively limited use of dairy products, particularly cheese, may have been habitual practice due to lack of refrigeration until the last decade or so.¹¹ Certainly, the almost universal consumption of milk in powdered form had an historical basis; after decades of use it 'tastes better' than fresh milk and 'doesn't make your tea cold'. The exclusion of Aborigines from the local dairy industry (see chapter 4), may have negatively influenced the incorporation of other dairy products into the contemporary diet. The very low consumption of offal meats in Kempsey may be due to the fact that they had in the past been acquired from the killing yards to supplement inadequate rations.¹² Such foods may have acquired negative symbolic value as white people's waste, consumed under dire financial circumstances.

In spite of the fact that the consumption of bush foods was denigrated in the past (as part of a much broader denigration of Aboriginal lifeways), they have survived as foods for which people have a 'taste'. As such they clearly represent Aboriginal resistance to incorporation

¹¹ Milk avoidance may have a genetic basis in lactose intolerance, constituting what Messer (1984:221) describes as an 'adverse physiological reaction culturally encoded as [a] food dislike'.

¹² Miller (1985:99) quotes an informant who used to go to the killing yards and bring 'the guts home in a 50lb flour bag ... for everybody on the mission'.

into the dominant society. Significantly, they were eaten only sporadically. Their symbolic value lies not in regular consumption, but in having tried them, or being able to eat them 'if someone puts it in front of me'. The critical factor is knowing these (Aboriginal) foods. That they were so readily discussed with me may be a relatively recent phenomenon, having to do with a more general cultural resurgence amongst Aborigines.

While the patterns of consumption outlined above show that Aborigines in Kempsey consumed predominantly the same foods as other Australians, the nutritional consequences of these patterns need to be evaluated. In the following chapter the nutrient intakes of men and women in Kempsey are compared with the nutrient intakes of men and women in the national survey.

CHAPTER SIX

THE NUTRIENT VALUE OF THE DIET

From the preceding chapter it is apparent that, in general, Aborigines in Kempsey ate foods typical of the Australian diet. This chapter concerns the nutrient yield of the foods they consumed which will again be compared with the results of the national survey. It will be shown here that although Aboriginal intakes of vitamins and minerals were not optimal when compared to Australian RDIs, nor were the intakes of significant proportions of the national sample. Furthermore, I will argue that low nutrient intakes amongst Kempsey Aborigines was most likely to do with the quantity of food consumed (or reported) than with the composition of the diet.

Intake of nutrients - an overview

Mean daily intakes of energy, protein, starches and sugars, total fats, cholesterol and selected vitamins and minerals are summarised in Tables 6.1 and 6.2. In each case, the mean intakes of respondents in the national survey exceeded the mean intakes of Kempsey Aborigines. Since it is likely that under-reporting of food intake occurred in both surveys (see chapter four), it can be assumed that the mean nutrient intakes shown here are under-estimates of real intakes. It is not possible however, to determine whether the extent of under-reporting was the same in both surveys. It may be the case that Kempsey people had lower mean nutrient intakes than the national average.

Table 6.1. Mean daily intakes of selected nutrients - males.

	Australia# n = 3021		Kempsey Aborigines n = 12	
	mean	SD	mean	SD
energy (kJ)	11010	4946	8402	2276
protein (g)	106	55	81	23
CHO: total (g)	274	165	213	83
CHO: starch (g)	151	110	127	30
CHO: sugars (g)	123	110	86	62
fat (g)	110	55	98	25
cholesterol (mg)	417	330	353	95
retinol eq. (μ g)	1420	5496	1007	423
thiamin (mg)	1.38	1.1	1.00	0.3
riboflavin (mg)	2.27	1.65	1.42	0.45
niacin eq. (mg)	41.2	22.0	31.1	8.11
vitamin C (mg)	127	165	66	107
iron (mg)	15.9	11.0	10.9	2.9
calcium (mg)	876	605	594	244
zinc (mg)	14.7	11.0	11.0	3.9
magnesium (mg)	378	165	244	55

Source: Department of Community Services and Health 1987. Standard deviations were calculated from the published standard errors.

Table 6.2. Mean daily intakes of selected nutrients - females.

	Australia# n = 3234		Kempsey Aborigines n = 26	
	mean	SD	mean	SD
energy (kJ)	7410	3981	5589	1802
protein (g)	74	57	50	16
CHO: total (g)	192	114	161	66
CHO: starch (g)	100	57	95	34
CHO: sugars (g)	92	57	65	46
fat (g)	76	57	57	19
cholesterol (mg)	311	455	226	130
retinol eq. (μ g)	1820	19905	598	315
thiamin (mg)	1.04	0.57	0.81	0.34
riboflavin (mg)	1.77	2.8	1.20	0.46
niacin eq. (mg)	28.7	22.7	21.2	6.53
vitamin C (mg)	112	170	59	68
iron (mg)	11.6	11.4	7.9	2.9
calcium (mg)	707	682	455	249
zinc (mg)	10.6	11.4	9.2	12.4
magnesium (mg)	276	170	189	62

Source: Department of Community Services and Health 1987. Standard deviations were calculated from the published standard errors.

Comparison with recommended dietary intakes

The Department of Community Services and Health (1987) compared mean daily nutrient intakes with recommended dietary intakes (RDIs)¹ by calculating the proportions of the sample whose intakes were less than RDI, less than 70% of the RDI (.7RDI) and less than 50% of the RDI (.5RDI).² These proportions have been used for comparison with the Kempsey Aboriginal sample (see below).

However, the use of RDIs is not unproblematic. They are set with a wide margin of safety so that they 'usually exceed the physiological requirements of nearly all of the group' (Truswell et al 1983:942) [emphasis added]. According to Truswell this is to allow for (i) the needs of extreme individuals; (ii) uncertainties regarding the criteria on which requirements should be established; (iii) the common stresses of everyday life; and (iv) the inefficient utilisation of nutrients by the body. Recommended intakes are also frequently based on measurements of food intake rather than on physiological requirements of individuals in a given population (Rivers and Payne 1982) so to some extent they simply reflect the customary dietary traditions of that population (Truswell et al 1983). As noted by the Department of Community Services and Health (1987:20):-

intakes less than the RDIs for any particular nutrient should not be interpreted as defining nutritional deficiency in the population. However, when many people in a given population are consuming significantly less than the RDI (e.g. less than 70 per cent of RDI) for a particular nutrient this should signal the need for further assessment of nutritional status.

¹ The RDIs used are shown in Appendix.

² Values shown for national survey men are for ages 25-64 years. Kempsey men's ages ranged from 17-62 years. Womens ages are shown on the Tables.

Table 6.3. Percentages of persons consuming less than the recommended dietary intakes (RDI) - minerals

		% <RDI			
		Males		Females	
		Aust#	Kemp/A	Aust	Kemp/A
calcium	all	50.8	66.7	70.0*	92.0~
	Austr	47.7		66.5	
	U.K	47.9		59.5	
	N.E	57.1		68.4	
	S.E	63.3		66.8	
	Asia	59.9		79.7	
	O.R	66.7		n.a	
magnesium	all	38.3	75.0	53.7*	84.6~
	Austr	36.0		54.2*	
	U.K	35.0		46.1*	
	N.E	44.2		56.5*	
	S.E	56.8		64.3*	
	Asia	35.9		48.0*	
	O.R	37.2		n.a	
iron	all	3.8	16.7	62.0*	73.0~
	Austr	3.0		75.6	
	U.K	3.6		74.7	
	N.E	3.3		71.3	
	S.E	8.4		69.9	
	Asia	3.8		75.7	
	O.R	11.5		n.a	
zinc	all	54.3	50.0	79.8*	88.5~
	Austr	51.7		80.6	
	U.K	59.4		80.1	
	N.E	54.7		87.9	
	S.E	62.7		67.4	
	Asia	52.4		78.0	
	O.R	60.8		n.a	

Source: Department of Community Services and Health 1987.

Women: 25-54 years unless, * = 25-64 years, ~ = 15-67 years.

Table 6.4 Percentages of persons consuming less than the recommended dietary intakes (RDI) - vitamins.

		% <RDI			
		Males		Females	
		Aust#	Kemp/A	Aust	Kemp/A
retinol eq.	all	39.5	25.0	49.8*	61.5~
	Austr	32.9		48.6*	
	U.K	44.0		43.1*	
	N.E	49.9		48.1*	
	S.E	61.6		55.2*	
	Asia	46.3		71.9*	
	O.R	61.4		n.a	
thiamin	all	38.4	66.7	33.5*	38.5~
	Austr	35.5		33.7	
	U.K	34.3		33.4	
	N.E	45.5		40.8	
	S.E	53.0		47.0	
	Asia	48.1		29.9	
	O.R	43.4		n.a	
ribo- flavin	all	34.1	75.0	29.7*	53.8~
	Austr	28.5		28.5	
	U.K	30.2		23.5	
	N.E	43.2		40.5	
	S.E	59.2		51.5	
	Asia	50.9		61.6	
	O.R	48.1		n.a	
niacin eq.	all	5.3	0.0	5.2*	11.5~
	Austr	3.2		5.7	
	U.K	4.8		2.7	
	N.E	3.4		13.1	
	S.E	14.7		9.9	
	Asia	12.3		5.2	
	O.R	13.7		n.a	
vitamin C	all	26.8	50.0	19.8*	38.5~
	Austr	24.4		20.7*	
	U.K	26.3		16.5*	
	N.E	33.9		20.5*	
	S.E	34.0		21.3*	
	Asia	32.8		16.8*	
	O.R	32.2		n.a	

Source: Department of Community Services and Health 1987

Women: 25-54 years unless, * = 25-64 years, ~ = 15-67 years.

Table 6.5. Percentages of persons consuming less than .7 of recommended dietary intakes (.7RDI) - minerals.

		% <.7RDI			
		Males		Females	
		Aust#	Kemp/A	Aust	Kemp/A
calcium	all	28.4	66.7	45.1*	73.0~
	Austr	25.1		39.7	
	U.K	20.8		30.2	
	N.E	36.8		45.0	
	S.E	45.6		46.1	
	Asia	43.4		69.6	
	O.R	41.2		n.a	
magnesium	all	12.1	33.3	21.6*	61.5~
	Austr	9.9		20.6*	
	U.K	11.2		14.8*	
	N.E	12.6		26.6*	
	S.E	22.9		33.8*	
	Asia	14.6		23.6*	
	O.R	26.6		n.a	
iron	all	1.3	16.7	35.3*	61.5~
	Austr	0.9		41.6	
	U.K	1.2		41.1	
	N.E	1.6		47.2	
	S.E	3.4		49.4	
	Asia	2.7		52.8	
	O.R	0		n.a	
zinc	all	27.4	41.7	54.4*	80.7~
	Austr	24.7		55.5*	
	U.K	31.7		54.1*	
	N.E	29.3		60.8*	
	S.E	40.1		50.5*	
	Asia	21.9		49.2*	
	O.R	28.1		n.a	

Source: Department of Community Services and Health 1987

Women: 25-54 years unless, * = 25-64 years, ~ = 15-67 years.

Table 6.6. Percentages of persons consuming less than .7 of recommended dietary intakes (.7RDI) - vitamins.

		% <.7RDI			
		Males		Females	
		Aust#	Kemp/A	Aust	Kemp/A
retinol eq.	all	23.7	16.7	33.0*	50.0~
	Austr	17.5		31.6*	
	U.K	25.4		23.8*	
	N.E	34.1		31.2*	
	S.E	45.8		39.0*	
	Asia	34.7		65.1*	
	O.R	41.0		n.a	
thiamin	all	16.7	25.0	13.1*	26.9~
	Austr	13.4		12.6	
	U.K	15.4		8.9	
	N.E	15.2		16.4	
	S.E	34.3		31.8	
	Asia	24.3		14.8	
	O.R	30.8		n.a	
ribo- flavin	all	14.7	25.0	12.5*	15.4~
	Austr	9.7		11.3	
	U.K	9.8		6.6	
	N.E	22.0		18.1	
	S.E	37.5		30.6	
	Asia	32.7		31.6	
	O.R	31.0		n.a	
niacin eq.	all	1.3	0	1.3*	0~
	Austr	0.9		1.5	
	U.K	1.7		0.3	
	N.E	0.8		1.5	
	S.E	3.8		1.7	
	Asia	1.6		2.7	
	O.R	1.3		n.a	
vitamin C	all	16.8	50:0	11.9*	12.0~
	Austr	24.4		12.1*	
	U.K	26.3		9.6*	
	N.E	33.9		16.1*	
	S.E	34.0		11.2*	
	Asia	32.8		12.9*	
	O.R	32.2		n.a	

Source: Department of Community Services and Health 1987

Women: 25-54 years unless, * = 25-64 years, ~ = 15-67 years.

Table 6.7. Percentages of persons consuming less than .5 of recommended dietary intakes (.5RDI) - minerals.

		% <.5RDI			
		Males		Females	
		Aust#	Kemp/A	Aust	Kemp/A
calcium	all	13.3	8.3	24.3*	50.0~
	Austr	10.9		19.3	
	U.K	9.1		13.0	
	N.E	14.5		26.6	
	S.E	23.7		31.1	
	Asia	25.8		40.1	
	O.R	28.0		n.a	
magnesium	all	2.6	0	5.7*	12.0~
	Austr	2.1		5.5*	
	U.K	2.5		2.9*	
	N.E	4.4		4.8*	
	S.E	5.2		12.0*	
	Asia	1.8		8.1*	
	O.R	5.8		n.a	
iron	all	0.6	0	15.1*	27.0~
	Austr	0.5		17.3	
	U.K	0.8		14.7	
	N.E	0.8		24.3	
	S.E	0.7		31.6	
	Asia	0		18.0	
	O.R	0		n.a	
zinc	all	11.3	8.3	30.1*	54.0~
	Austr	9.1		31.4*	
	U.K	12.9		23.1*	
	N.E	8.7		35.9*	
	S.E	23.7		33.1*	
	Asia	10.8		22.8*	
	O.R	14.6		n.a	

Source: Department of Community Services and Health 1987

Women: 25-45 years unless, * = 25-64 years, ~ = 15-67 years.

Table 6.8. Percentages of persons consuming less than .5 of recommended dietary intakes (.5RDI) - vitamins.

		% <.5RDI			
		Males		Females	
		Aust#	Kemp/A	Aust	Kemp/A
retinol eq.	all	12.8	8.3	18.9*	23.0~
	Austr	7.9		16.2*	
	U.K	13.7		15.1*	
	N.E	18.8		20.2*	
	S.E	31.9		25.2*	
	Asia	19.0		48.6*	
	O.R	32.0		n.a	
thiamin	all	5.6	8.3	4.5*	7.7~
	Austr	4.5		4.5	
	U.K	4.8		1.8	
	N.E	7.5		6.6	
	S.E	11.4		11.7	
	Asia	6.0		9.5	
	O.R	10.7		n.a	
ribo- flavin	all	4.9	0	5.1*	7.7~
	Austr	2.9		4.0	
	U.K	2.8		1.9	
	N.E	3.8		6.4	
	S.E	15.7		15.6	
	Asia	10.5		16.3	
	O.R	16.8		n.a	
niacin eq.	all	0.5	0	0.5*	0~
	Austr	0.4		0.5	
	U.K	0.3		0.3	
	N.E	0.8		0	
	S.E	1.1		0.8	
	Asia	0.3		1.8	
	O.R	0		n.a	
vitamin C	all	11.5	25.0	7.9*	7.7~
	Austr	9.4		8.1*	
	U.K	10.2		5.0*	
	N.E	19.2		13.0*	
	S.E	17.7		6.1*	
	Asia	16.3		8.2*	
	O.R	22.1		n.a	

Source: Department of Community Services and Health 1987

Women: 25-54 years, unless 25-64 years, ~ = 15-67 years.

Furthermore, low blood assays of vitamins have been found in 'socially deprived but otherwise healthy children ... [with] no clinical evidence or overt deficiency diseases (Clements 1976:5). The proportions of the national respondents (daily intakes) and Kempsey respondents (mean daily intake) with nutrient intakes below RDI, below .7RDI and below .5RDI are shown in Tables 6.5 to 6.10. As can be seen, considerable proportions of both the Australian³ and Kempsey samples had intakes of vitamins and minerals below these levels. Interestingly, quite large proportions of the national sample had intakes of retinol, iron, calcium, zinc and magnesium below .7RDI.

Energy

The popular perception of the Aboriginal diet as very high in fats and carbohydrates is not supported by a comparison of energy sources in the diet of Kempsey Aborigines and the Busselton and national samples.

Kempsey Aboriginal males who consumed no alcohol consumed slightly more energy as fat than either the national or Busselton samples but less energy as carbohydrate than Busselton (Table 6.9).

Kempsey Aboriginal females derived less of their energy from both fat and protein than their male counterparts, which is consistent with their lower intake of meat reported above. A greater proportion of energy intake was derived from carbohydrate in Kempsey Aboriginal women than in Busselton women, women in the national sample or Aboriginal men, the differences being 3.1%, 4.1% and 5.5% respectively (Table 6.10).

³ The values for different geographic regions of birth identified in the national survey are also included for comparison. (All - all regions of birth; Austr - Australia, New Zealand, Papua, Cocos Islands, Norfolk Island; U.K. - United Kingdom; N.E. - northern Europe and including U.S.S.R; S.E. - southern Europe; Asia - including middle and south east Asian countries; O.R. - other regions including Africa, north and south America and the Pacific Islands.

Table 6.9. Proportions of energy from protein, carbohydrate, fat and alcohol - males.

	% Energy - Males			
	Protein	CHO	Fat	Alcohol
Australia#	16.8	40.3	36.6	6.3
Busselton*	13.5	44.0	39.2	3.0
Kempsey Aborigines	16.5	40.5	42.9	0.0

Source: Department of Community Services and Health 1987 (25-64 years).

* Source: Hitchcock and Gracey 1978, (15-55 years).

Table 6.10. Proportions of energy from protein, carbohydrate, fat and alcohol - females.

	% Energy			
	Protein	CHO	Fat	Alcohol
Australia#	17.7	41.9	37.0	3.3
Busselton*	14.3	42.9	41.6	1.2
Kempsey Aborigines	15.3	46.0	37.9	0.8

Source: Department of Community Services and Health 1987, (25-64 years).

* Source: Hitchcock and Gracey 1978, (15-55 years).

Kempsey Aboriginal males and females had considerably lower energy intakes than the national average. Mean intake for Australian males was 11 010 kilojoules compared to 8402 kilojoules for Kempsey males, while mean intake for Australian females was 7410 kilojoules compared to 5589 kilojoules for Kempsey females (Table 6.1 and 6.2). As already discussed above these are likely to be underestimates of actual intakes in both groups. Although I have no way of knowing if under-reporting was to the same extent in both the national and Kempsey surveys, the

data do suggest that these Aborigines consumed less energy than the national average.

It was also apparent from the Kempsey survey that energy intake was related to the intakes of other nutrients. Where energy intakes were low, the intakes of other nutrients were also low. In order to have some way of evaluating the nutritional quality of the diet with respect to each of the selected nutrients, I calculated the proportions of the Kempsey sample whose energy intakes met an RDI using a standard based on age, sex and the weight for the 'reference male' (70kg) or 'reference female' (58kg) (National Health and Medical Research Council 1987:3). These RDIs for energy have been used only as a guide, since they make no allowances for variations in body weight, activity levels, or individual metabolic differences.⁴ The intakes of vitamins and minerals in relation to the adopted RDIs for energy are shown below. Notably, only 25% of Kempsey Aboriginal males and 19.2% of Kempsey Aboriginal females exceeded these RDIs for energy. Fifty eight percent of males and 57.7% of females exceeded .7 of these RDIs.

The main sources of energy are shown in Table 6.11. The two groups are similar in the proportions of energy they derived from the three main food groups. The low proportion of energy from alcohol for Kempsey Aborigines is the result of the biases introduced into the study by the problems outlined in chapter four. Clearly it should not be considered as representative of Aboriginal populations in general.

Not surprisingly, Kempsey Aborigines derived smaller proportions of energy from both fruit and vegetables than the Australian sample.

⁴ The Department of Community Services and Health (1987) did not apply RDIs for energy or protein in the evaluation of their data.

Table 6.11. Sources of energy in the diet.

	Energy %	
	Aust#	Kempsey/A
cereals	27.0	27.2
meat/meat products	20.6	20.3
milk/milk products	12.0	10.2
vegetables	8.5	5.9
fats~	6.3	n.a
alcohol	6.2	0.7
fruits	4.4	1.7
sugars	3.7	5.6
other	11.3	15.6

Source: Department of Community Services and Health 1987

~ All non-cooking uses

I could not calculate the proportion of energy derived from fats in non-cooking uses only, because I did not differentiate, in the coding process, between spreads (butter and margarine) used on bread etc and that used in cooking.

Protein

Mean protein intakes were lower for Kempsey Aborigines than for respondents in the national survey. Australian males had a mean intake of 106 grams compared to a mean intake of 81 grams for Kempsey males (Table 6.12). Australian females had a mean intake of 74 grams compared to a mean intake for Kempsey females of 50 grams (Table 6.2). The relatively lower protein intake for Kempsey Aborigines may have been partly due to some restriction on the purchase of meat as a result of budgeting choices, because meats were commonly cited if respondents said that there were foods they would consume more of, if more money were available. There was also some indication that meat was more frequently

served as a separate dish, rather than in combination with vegetables, in households with higher incomes (see above).

The mean protein intake of Aboriginal women was only 61.7% of the mean protein intake of Aboriginal men, compared to a mean intake for women in the national survey which was 69.8% of the mean intake of national survey men. It may be that in a context of relative economic hardship, Aboriginal men have some advantage over Aboriginal women in terms of their protein intake. It may also be the case that men in other low income sections of the Australian community have a similar protein intake advantage over women, although there are no data to either support or refute this. In the Busselton study, females aged 15 to 55 years had a mean daily intake of protein of 60g which was 64.5% of the mean daily protein intake of Busselton males (93.4g - 15 to 55 years).

The main sources of protein are shown in Table 6.12. For sources of protein, Kempsey Aborigines were more dependent on cereals and fish and less dependent on milk products and vegetables than respondents in the national survey. National survey women derived 6.4% less of their protein from meat and 3.4% more from milk products than national survey men.

Aboriginal women derived 9.9% less of their protein from meat and 4.3% more from milk products than Aboriginal men. Aboriginal women derived 3.3% more protein from vegetables than their male counterparts whereas the proportion of protein from vegetables for national survey men and women was approximately the same. In off pay week Aboriginal women derived almost 10% less of their protein from meat (41.4% down to 31.8%) while there was no difference between pay week and off pay week for

Aboriginal men. Women proportionally increased their protein intake from grains, egg and fish in off pay week.

Table 6.12. Main sources of protein in the diet.

	Protein %	
	Aust#	Kempsey/A
meat/meat products	46.6	41.6
cereals	17.8	22.6
milk/milk products	15.2	13.5
vegetables	6.3	5.1
fish	4.0	6.4

Source: Department of Community Services and Health 1987

Carbohydrate

The results of this study do not provide support for the widely held belief that Aborigines consume large amounts of refined sugars. Both Aboriginal males and Aboriginal females consumed a smaller proportion of total carbohydrate as sugars than did national survey males and females (Table 6.13). However, a higher proportion of sugars in the Australian survey than in the Kempsey survey would have come from fruits.

Furthermore, the low reported consumption of alcohol would have influenced to some extent the proportion of energy derived from sugars. Thus the energy from sugars in beer is around 3% of the total (Cashell pers comm).

This figures provide some support for the food consumption patterns reported in chapter five which show that the Kempsey Aboriginal adults surveyed consumed few desserts, biscuits, cakes or confectionery and only some of them took sugar in their tea and then not in large quantities.

Table 6.13. Sugars as a proportion of total carbohydrate intake.

	sugar %	
	Aust#	Kempsey/A
males	44.9	40.4
females	47.9	40.4

Source: Department of Community Services and Health 1987

Fats

Kempsey Aboriginal males and females had lower mean intakes of fat than national survey males and females. The main sources of fat are shown in Table 6.14.

Table 6.14. Main sources of fat in the diet.

	Fat%	
	Aust#	Kempsey/A
meat/meat products	29.8	28.9
milk/milk products	17.4	12.6
spreads	16.8	32.9
cereals/cereal prods	15.5	11.7
vegetables	7.1	1.8
nuts and seeds	3.0	1.6
eggs	2.9	2.9

Source: Department of Community Services and Health 1987

Kempsey Aborigines derived twice as much energy from spreads (butter and margarines) as the national average, and less from milk products and vegetables.

The ratio of polyunsaturated to saturated fats was higher in Kempsey than for Australians in the national survey (Table 6.15). The relatively lower intake of saturated fat would be largely attributable to the lower consumption of meat and dairy products by Aborigines.

Table 6.15. Fatty acid ratios - polyunsaturated/mono-unsaturated/saturated (P/M/S).

	fatty acid ratios	
	Aust#	Kempsey/A
males	0.36/0.93/1	0.5/1.03/1
females	0.36/0.92/1	0.45/1/1

Source: Department of Community Services and Health 1987

Cholesterol

Kempsey Aboriginal males and females had lower mean cholesterol intakes than national survey males and females (Tables 6.1 and 6.2). The main sources of cholesterol are shown in Table 6.16. Kempsey Aborigines derived a greater proportion of their cholesterol from eggs and a lesser proportion from meat than Australians in the national survey.

Table 6.16. Main sources of cholesterol in the diet.

	Cholesterol%	
	Aust#	Kempsey/A
meat/meat products	43.6	33.2
eggs	23.4	32.8
milk/milk products	14.5	13.2
cereals/cereal prods.	7.2	6.0
spreads	5.3	6.0
fish	4.3	6.2

Source: Department of Community Services and Health 1987

Calcium

Larger proportions of Aborigines had calcium intakes below the RDI and below .7RDI than respondents in the national sample (Tables 6.3 and 6.5). Calcium intakes below .5RDI were less common in Kempsey males (8.3%) than in national survey males (13.3% - all ages) but more common in Kempsey females (50%) than in females in the national survey (24.3%) (Table 6.7).

Kempsey Aborigines derived the same proportions of their calcium intake from the different food groups as did the national sample, but they consumed less of them (see chapter five), with the exception of cereals and grains for which mean consumption was approximately the same (see Table 5.5). The main sources of calcium in the diet are shown in Table 6.17.

Table 6.17. Main sources of calcium in the diet.

	Calcium %	
	Aust#	Kempsey/A
milk products	58.9	59.4
cereals	12.5	12.5
fruit/vegetables	11.5	11.6
meat/meat products	6.8	5.2

Source: Department of Community Services and Health 1987

The significance of low calcium intakes is far from clear. Calcium is an essential component of bone which is constantly broken down and redeposited throughout life. However, osteoporosis (bone atrophy) is:-

not more common in those parts of Africa and Asia⁵ where diets are low [in calcium and protein] ... [which] might be due to a genetic factor or more probably to differences in physical activity (Davidson et al 1979:92).

Adult Bantu receiving only 300 mg of calcium per day have been found to have normal plasma and bone concentrations (Davidson et al 1979).

Although Aborigines did not consume milk products prior to European settlement there is no evidence to suggest that they suffered more from osteoporosis as a result.

According to Davidson a report published by Sherman (1941, cited in Davidson et al 1979:97) claiming that the mixed diet of North Americans and Europeans was more deficient in calcium than in any other nutrient started a 'milk-drinking neurosis' which may have contributed to atherosclerosis as a result of a rise in intake of fatty acids. The RDI for calcium adopted by the FAO\WHO (1974) is 400-500 mg for both males and females (twenty years +) and a similar standard has been set in many other countries including Finland, Hungary, the Caribbean, Mexico, Turkey and Indonesia (Truswell et al 1983). The 'minimum safe intake' (MSI) adopted by New Zealand for persons over seventeen years of age is 400 mg (Truswell et al 1983:979). Sixty-eight per cent of Kempsey Aborigines above this age exceeded this MSI. In a study of young (non-Aboriginal) women in Sydney, Brown et al (1975) found that 13.8% had daily intakes of calcium below 400 mg.

As can be seen from Table 6.3 large proportions of both males and females in the national survey had calcium intakes below RDI - 50.8% of all males, 63% of males from Southern Europe, 66% of males from 'other

⁵ Notably, 43.4% of Asian males (25-64 years) and 69.6% of Asian females (25-54 years) in the national survey had calcium intakes below .7RDI.

regions', 70% of all women, 83% of women ages 55-64 years and 85.4% of women (all ages) from Australasia had calcium intakes below this level. The 50% of Aboriginal women who had intakes below .5RDI compares with 40.1% of Asian women (25-54) with intakes below this level. Since cheese and milk (and other milk products) are by far the richest sources of calcium, the relatively lower consumption of these foods by Aborigines (see Tables 5.10 and 5.11) is probably the major factor in low calcium intakes. Two of the Kempsey Aborigines who reached the adopted RDI for energy had calcium intakes below .7RDI (25%).

Iron

More Aboriginal males than males in the national survey had iron intakes below RDI but fewer Aboriginal males had iron intakes below .7RDI (1.3%) and below .5RDI (0.0%) than national survey males (16.7% and 0.6% respectively) (Tables 6.3, 6.5 and 6.7). While a high proportion of Aboriginal females (73%) had iron intakes below RDI so too did 62% of all females, 75.6% of Australasian women and 75.7% of Asian women 25 to 54 years and 77.6% of women 45 to 54 years. More Aboriginal females than Australian females had intakes below .7RDI (61.5% compared to 35.3%) and below .5RDI (27.0% compared to 15.1%).

A comparison of the main sources of iron in the diet are shown in Table 6.18. Kempsey Aborigines derived more of their iron from cereals and less from vegetables and fruit. Of the lesser sources of iron (not shown), fish (4%) and eggs (4.5%) were more important in the Kempsey diet than in the national diet (1.8% and 2.8% respectively). Only one of the Aborigines who satisfied the adopted RDI for energy had an iron intake below .7RDI. The relatively low consumption of meat and iron-rich vegetables would be largely responsible for low intakes of dietary

iron in Kempsey Aboriginal women.

The health significance of low iron intakes is far from clear. Iron absorption is highly variable and influenced by the synergistic effects of different foods - vegetable foods slightly reduce the absorption of

Table 6.18. Main sources of iron in the diet.

	Iron %	
	Aust#	Kempsey/A
cereals	30.8	36.9
meat/meat products	30.5	31.6
vegetables/fruit	19.8	13.4

Source: Department of Community Services and Health 1987

iron from meat, while meat in the meal doubles the absorption of iron from maize and beans. It is also known that an iron deficit in the body increases absorptive efficiency (Davidson et al 1979).

RDI's for iron for menstruating women in different countries vary considerably⁶ from an upper range limit of 28mg in Argentina (Truswell et al 1983) to a lower range limit of 12mg in Australia (National Health and Medical Research Council 1987). The greater loss of iron from the body in women of childbearing age through menstruation, pregnancy and blood loss during childbirth is often difficult to replace by dietary means so that 'anaemia is very common in women in all countries of the world' (Davidson et al 1979:101). A study which followed the weights and dietary habits of United States female college graduates for forty

⁶ There is also considerable variation in the age after which the higher RDI drops to the lower menopausal level, from 40 years in Finland (Truswell et al 1983) to 55 years in Australia (National Health and Medical Research Council 1986).

years from 1935 found, in 1973, that iron (and magnesium) intakes did not even approach the present (U.S.) allowances 'except in a few isolated cases' (Ohlson and Harper 1976).

Magnesium

Considerably more Aboriginal males and Aboriginal females than males and females in the national survey had magnesium intakes below RDI (Table 6.3). Almost three times as many Kempsey Aboriginal males (33.3%) and Aboriginal females (61.5%) as respondents in the national survey (12% of males and 21.6% of females) had magnesium intakes below .7RDI (Table 6.5). However, 22.9% of males from Southern Europe and 26.6% of males from 'other regions'⁷ in the national survey also had magnesium intakes below .7RDI as did 26.6% of women from Northern Europe and 33.8% of women from Southern Europe. On the other hand no Aboriginal males had magnesium intakes below .5RDI compared to 2.6% of the national sample (Table 6.7). Only 5.7% of females in the national sample had intakes below .5RDI which compares with 12.0% of Kempsey Aboriginal women but also with 12.0% of Southern European women in the national sample with intakes below this level.

As noted above, a longitudinal study of female college graduates in the United States found that magnesium intakes were well below recommended allowances in all but a few subjects (Ohlson and Harper 1976). Because so many foods 'contain useful amounts of magnesium' (Davidson et al 1979:98) it seems reasonable to conclude that low food intake is largely responsible for the high proportion of Kempsey Aborigines with low

⁷ The regional breakdown for the national survey is Australasia, United Kingdom, Northern Europe, Southern Europe, Asia, other regions (Commonwealth Department of Health 1987).

magnesium intakes. Only one of the recall subjects whose energy intake was 100% of the adopted RDI had a magnesium intake below .7RDI.

Important sources of magnesium in the diet are shown in Table 6.19. Kempsey Aborigines got rather more of their dietary magnesium from cereals and less from vegetables than the national average.

Table 6.19. Main sources of magnesium in the diet.

	Magnesium %	
	Aust#	Kempsey/A
cereals	27.9	33.4
vegetables	15.4	12.8
meat/meat products	12.0	13.3
beverages (non-alcohol)	11.9	11.5
milk/milk products	11.7	12.9

Source: Department of Community Services and Health 1987

Zinc

A smaller proportion of Aboriginal males (50%) than males in the national survey (54.3%) had zinc intakes below RDI, but a larger proportion of Aboriginal females (88.5%) than national survey females (79.8%) had intakes below this level (Table 6.3). Nevertheless, 83.4% of women aged 35 to 44, 83.6% of women aged 55 to 64 and 87.9% of women from Northern urope had intakes below RDI. While a greater proportion of Kempsey Aborigines (41.7% of males and 76.9% of females) than respondents in the national survey (27.4% of males and 54.4% of females) had zinc intakes below .7RDI, 60.8% of national survey women born in Northern Europe also had magnesium intakes below this level (Table 6.5). No Aboriginal males had zinc intakes below .5RDI (compared to 11.3% of the national sample) but 54% of Aboriginal men had intakes below this level compared to 30.1% of women in the national sample (Table 6.7).

Zinc intake seems to be more closely linked to dietary composition rather than simply to overall food intake because 50% of Kempsey Aborigines whose energy requirement was 100% of the adopted RDI still had zinc intakes less than .7RDI. The main dietary sources of zinc are shown in Table 6.20.

Table 6.20. Main sources of zinc in the diet.

	Zinc %	
	Aust#	Kempsey/A
meat/meat products	48.2	46.3
cereals	17.2	17.8
milk/milk products	12.9	10.2
vegetables	8.9	6.4

Source: Department of Community Services and Health 1987.

Oysters, which are readily available in Macleay Valley estuaries, are a very rich source of zinc. They were consumed only sporadically but then often in large quantities as 'a feed', so they would make an important contribution to zinc intake. Lower meat intakes may be the most limiting feature of the Kempsey Aboriginal diet with respect to zinc intake.

Vitamin A

A smaller proportion of Aboriginal males than national survey males but a greater proportion of Aboriginal females than national survey females had vitamin A intakes below RDI (Table 6.4). A smaller proportion of Kempsey Aboriginal males (16.7%) than respondents in the national survey (23.7%) had vitamin A intakes⁸ less than .7RDI (Table 6.6). However,

⁸ Vitamin A intake is expressed as Retinol Equivalents (RE) and is calculated using the formula:- 1RE = retinol + 1/6 carotene.

50% of Kempsey Aboriginal women, compared to 33% of women in the national survey had Vitamin A intakes below this level. The Aboriginal proportion was exceeded nevertheless by Asian women in the national survey of whom 65.1% had vitamin intakes below .7RDI. Once again fewer Aboriginal males (8.3%) than males in the national sample (12.8%) had intakes below .5RDI but the reverse was true of women - 23% of Aboriginal females and 18.9% of females in the national sample had intakes below .5RDI (Table 6.8).

There were also some striking differences in the sources of Vitamin A between the Kempsey and the national surveys (see Table 6.21).

Table 6.21. Main sources of Vitamin A in the diet.

	Vitamin A %	
	Aust#	Kempsey/A
meat/meat products	42.8	1.4
vegetables	28.7	44.6
fats	10.8	33.6
milk/milk products	8.9	11.5

Source: Department of Community Services and Health 1987

The markedly lower proportion of retinol derived from meat by Kempsey Aborigines was due to their non-consumption of offal meats because 39.4% of retinol equivalents in the national survey came from offal meats and only 3.4% came from other meats. Kempsey Aborigines thus derived considerably more of their retinol from other sources. None of the Kempsey Aborigines whose energy intakes reached the adopted RDI had Vitamin A intakes below .7RDI

Niacin

Comparatively small proportions of both samples had niacin (equivalents)⁹ intakes below RDI, .7RDI and .5RDI (Tables 6.4, 6.6, 6.8) and the differences between the two samples were not great. Kempsey Aborigines derived slightly more of their niacin from cereals, milk products and non-alcoholic beverages (mainly tea) and less from meat and vegetables than respondents in the national survey (Table 6.22).

Table 6.22. Main sources of niacin equivalents in the diet.

	niacin %	
	Aust#	Kempsey/A
meat/meat products	43.0	39.2
cereals	19.1	23.8
vegetables	8.7	6.9
milk/milk products	7.3	10.4
beverages (non-alcoh)	6.5	9.0

Source: Department of Community Services and Health 1987

All of the Kempsey Aborigines who met the adopted RDI or had in excess of .7RDI for energy had niacin intakes which exceeded the RDI for niacin.

Thiamin

While a much greater proportion of Kempsey Aboriginal males than national survey males had thiamin intakes below RDI the difference between Kempsey Aboriginal females and national survey females was small (Table 6.4). More Southern European national survey males (34.3%) than Kempsey Aboriginal males (25%) had thiamin intakes below .7RDI but the overall proportion of males in the national survey below .7RDI was 16.7%

⁹ Niacin equivalents = niacin + 1/6 dietary protein.

(table 6.6). There was little difference between the proportions of Kempsey Aboriginal males (8.3%) and males in the national survey (5.6%) with thiamin intakes below .5RDI (Table 6.8).

As with the males, more Southern European females (25-54 years) (31.8%) than Kempsey Aboriginal females (all ages)(26.9%) had thiamin intakes below .7RDI although the overall proportion of the national survey females (all ages) below this level was 13.1% (Table 6.6). There was only a small difference in the proportions below .5RDI for Kempsey Aboriginal females (all ages)(7.7%) and females in the national survey (all ages) (4.5%) (Table 6.8). Kempsey Aborigines derived considerably more of their thiamin from cereals and considerably less from meat and fruit compared to respondents in the national survey (Table 6.23). However, fish made an important contribution to thiamin intake (6.4%) in Kempsey.¹⁰

Table 6.23. Main sources of thiamin in the diet.

	thiamin %	
	Aust#	Kempsey/A
cereals	31.5	43.1
vegetables	17.6	14.9
meat/meat products	17.3	9.9
milk/milk products	9.8	11.1
fruits	8.2	4.2
fish	n.a.	6.4

Source: Department of Community Services and Health 1987

None of the Kempsey Aborigines whose energy intake met the adopted RDI

¹⁰ In the national survey, fish is included as a thiamin source only under 'all other food items' which together accounted for 7.7% of thiamin intake.

had thiamin intakes below .7RDI and only one of those whose energy intake met .7RDI had a thiamin intake below .7RDI.

Riboflavin

While a higher proportion of Aboriginal males and Aboriginal females had riboflavin intakes below RDI than national survey respondents the Aboriginal proportion (female) below RDI was exceeded by that of Asian females (Table 6.4). A greater proportion of Aboriginal males than males in the national survey had riboflavin intakes below .7RDI (Table 6.6) but a smaller proportion had intakes below .5RDI (Table 6.8). In the national survey 15.7% of Southern European males and 16.8% of males from 'other regions' had intakes below .5RDI. For Aboriginal females (all ages) the proportions below .7RDI and .5RDI were slightly higher than for females (all ages) in the national survey (Tables 6.6 and 6.8) but were exceeded by the 15.6% of females from Southern Europe and 16.3% of Asian females (25-54 years) with riboflavin intakes below .7RDI. The main sources of riboflavin are shown in Table 6.24.

Table 6.24. Main sources of riboflavin in the diet.

	riboflavin %	
	Aust#	Kempsey/A
milk/milk products	30.0	28.7
meat/meat products	23.9	23.5
cereal	17.0	15.4
vegetables	7.0	5.3
beverages (non-alcohol)	3.2	11.0

Source: Department of Community Services and Health 1987

In the national sample 5.0% of riboflavin came from yeast and meat extracts (e.g. 'vegemite') but Kempsey Aborigines cited these foods only

rarely. Eggs contributed 4.2% of riboflavin in the national survey and 6.9% in the Kempsey survey (not shown). High tea intake is largely responsible for the high riboflavin intake from non-alcoholic beverages for Kempsey Aborigines. Once again none of the Kempsey Aborigines who met the adopted RDIs for energy had riboflavin intakes below .7RDI and only two of those whose energy intakes met .7RDI for energy had riboflavin intakes below .7RDI (14%).

Vitamin C

Many more Kempsey Aboriginal males than national survey males had vitamin C intakes below RDI (50% compared to 26.8%), below .7RDI (50% and 16.8%) and below .5RDI (25% and 11.5%) (Tables 6.4, 6.6, 6.8). Nevertheless, 22.1% of males in the national survey from 'other regions' also had vitamin C intakes below .5RDI. Whereas a higher proportion of Aboriginal women than national survey women had intakes below RDI (Table 6.4) the proportions of Aboriginal women and women in the national sample with vitamin C intakes below .7RDI (12% and 11.9% respectively) and below .5RDI (7.7% and 7.9% respectively) were approximately the same (see Tables 6.6 and 6.8). Main sources of Vitamin C are shown in Table 6.25.

Table 6.25. Main sources of vitamin C in the diet.

	Vitamin C %	
	Aust#	Kempsey/A
beverages (non-alcoh)	32.0	27.5
fruits	31.8	59.3
vegetables	31.3	38.4
milk\products	3.2	6.3

Source: Department of Community Services and Health 1987.

Kempsey Aborigines were more dependent on fruits as a source of vitamin C but consumed considerably less of them (see Table 5.9) than respondents in the national survey.

Dietary quality and energy intake

The relationship between energy intake and intake of other nutrients is summarised in Table 6.26. Thus, when energy intake exceeded the adopted RDI, the mean number of nutrients below .7RDI was only 0.6 for men and 2.0 for women. Aboriginal men tended to have some advantage over Aboriginal women in terms of the nutrient content of their diet since the mean numbers of nutrients below .7RDI at energy intakes above the RDI and below .7RDI (though not between .7RDI and RDI) were greater for women than for men.

Table 6.26. Mean number of nutrients below .7RDI in relation energy intake in Kempsey Aborigines.

energy intake	number of nutrients*	
	males	females
>RDI	0.6	2.0
<RDI but >.7RDI	3.0	2.8
<.7RDI	3.4	5.5

* calcium, magnesium, iron, zinc, retinol equivalents, thiamin, riboflavin, niacin equivalents, vitamin C.

As noted above, it is likely that the low mean daily energy intakes are an underestimate of actual intake. Interestingly, similarly low energy intakes have been reported for Aborigines by others (Kamien et al 1975; Hitchcock and Gracey 1975), which suggests that under-reporting (or reduced consumption in the case of Kamien et al's weighed survey) may be

a typical response to nutrition research in Aboriginal as well as other communities.

Although it is unlikely that Aborigines in Kempsey were regularly eating as little food as these data suggest there was nevertheless some voluntary control of food intake. As will be recalled from chapter four, the survey sample contained high proportions of diabetics and overweight and obese subjects (83% of males and 69% of females were overweight or obese). Even though the blood sugars of diabetics were generally not well controlled (as demonstrated by the regular blood sugar readings taken at Durri AMS), and weight reduction was largely ineffective, 57.5% of recall informants were 'on diets' of some sort. This included three subjects (9.1%) whose weight was within a normal range (see chapter seven) and the remainder who were diabetics and/or overweight or obese. Fifteen percent of the total sample had extremely low mean energy intakes. Thus one woman with normal weight was on a severely limited self-imposed diet which provided only 28% of the adopted RDI for energy. She was quite open about the fact that she had put herself 'on a diet' and was very concerned about 'putting on weight again' (she had previously been overweight). A very obese twenty four year old woman, and an overweight twenty three year old woman also had very low mean energy intakes, below (adopted) .5RDI in both cases, because they wanted to lose weight. Interestingly, two of the recall subjects with the lowest intakes of energy and other nutrients actually consumed the most varied diets of meat, grains, vegetables and fruits. If their food (and energy) intakes had been higher they would almost certainly have met all the RDIs for vitamins and minerals.

Clearly the Kempsey sample was biased toward people who were concerned

about their blood sugar levels and/or weight and were attempting some measure of dietary control. However, under-reporting was probably also important in this group. This could help explain the inability of the overweight and obese to lose weight and the diabetics to have better blood sugar control. It may also be the case however, that Aborigines have a genetic predisposition to more conservative energy use, Neel's (1962) 'thrifty gene', which may relate to the high levels of diabetes and obesity found in Aboriginal communities. As will be discussed in chapter eight, the possibility that psychosocial stress causes changes in insulin production and metabolism, affecting both weight and a tendency to develop diabetes, also cannot be ruled out entirely.

The three teenage girls and one of the two teenage boys in the sample also had very low mean energy intakes, even though one was underweight (female) and three had normal weights. Their food intakes seemed to have more to do with the very erratic eating habits (subjectively) typical of the teenagers than with intentional control of food intake or shortages of food.

There were also some big eaters in the community and most of them would probably not have agreed to take part in the study. One man who declined to participate told a story about a journey he made 'out west' to help someone with a problem. While he was away he ran out of money. His hosts wouldn't lend him any cash to get home and he had to subsist on Sao crackers for two days. En route he called in to see an aunt who made him twenty sandwiches, with almost a whole cold roast leg of lamb. He claimed to have eaten all the sandwiches within a couple of hours on the last leg of his journey back to Kempsey. Another man (diabetic) refused to participate because he said he 'ate all the wrong things'.

The common usage of terms such as 'havin' a feed' and 'eating up' suggest that food consumption patterns may not be very uniform. Thus the need for a large number of recall repeats to derive an accurate estimate of real intake may be particularly important in Aboriginal communities. If 'havin' a feed' and 'eating up' were also common in the diabetic then the instability of people's blood sugars might be partly explained on this basis. However, erratic food intake is potentially dangerous for diabetics and the fact that diabetic emergencies were not common, in spite of widespread blood sugar instability, suggests that the diabetics at least were not 'eating up'.

There was widespread concern in the community about both diabetes and overweight. Durri AMS staff responded to a continuous stream of enquiries about 'diet sheets' and the medical staff were frequently asked to prescribe weight reduction drugs. This interest in weight control pre-dated the dietary survey. To some extent then, voluntary food control probably reflects dietary responses to health problems prevalent in the community. Clearly, the factors affecting Aboriginal dietary practices are much more complex than simply poor food choices or economic hardship.

In view of the likelihood of under-reporting it is not possible to draw conclusions about energy intake; it may be that excessive energy intake was a problem. The data suggest however, that if under-reporting was uniform rather than selective, then the diet of most Aborigines in this sample was comprised of foods adequate to meet requirements of most of the vitamins and minerals studied. They also indicate that the relative proportions of energy derived from carbohydrate, protein and fat were

similar to those of the rest of the Australian population. This does not provide support for conclusions drawn in previous studies that Aborigines eat a high fat, high refined carbohydrate, vitamin and mineral deficient diet.

Fortnightly fluctuations in nutrient intake

Apparent fluctuations in food intake between pay week and off pay week¹¹ did have some effect on the mean intakes of selected nutrients but the differences were not always in the expected direction and there was a marked variation between the sexes (Tables 6.27 and 6.28). Thus for males in off pay week there was a rise in the mean intake of energy, protein, fat, magnesium, iron, zinc, vitamin A and niacin and a fall in the mean intake of carbohydrate, calcium, and vitamin C. For females on the other hand there was a fall in the mean intake of all the selected nutrients with the exception of starch, cholesterol and zinc, which rose in off pay week. (It will be recalled that 'a feed' of oysters, which are rich in zinc, was consumed by one woman in off pay week.) There was thus a trend of diminished nutrient intakes amongst women in off pay week that was not reflected in the mean nutrient intakes of men. The fact that women's mean daily intakes of most nutrients declined in off pay week, with only a marginal increase in starch intake, suggests that there was an overall reduction in food intake but no great change in dietary diversity. That is, women did not simply increase their intake of sugars and starches in response to dietary constraints in off pay week.

¹¹ The values are derived from mean pay week and mean off pay week intakes for each individual. Because of the uneven repeated measures some individuals had values for both pay week and off pay week ($n = 29$), while others had only pay week values ($n = 4$) or off pay week values ($n = 5$). Statistical tests were not used because of these irregularities.

Table 6.27. Comparison of mean daily intakes of selected nutrients between pay week and off pay week - males.

	pay		off pay	
	mean	SEM	mean	SEM
energy	8657	677	8685	977
protein	81	6	85	10
CHO (total)	228	30	216	31
CHO (starch)	119	8	133	13
CHO (sugars)	109	26	82	19
fat	97	8	101	10
cholesterol	357	49	357	42
retinol ~	532	101	674	106
thiamin	1.03	0.15	0.97	0.09
riboflavin	1.59	0.17	1.41	0.18
niacin *	17.5	1.8	18.9	1.9
vitamin C	113	72	34	7
iron	10.6	0.9	11.8	1.4
calcium	749	129	550	70
zinc	10.7	1.0	12.5	1.8
magnesium	241	21	250	21

~ retinol, not retinol equivalents

* niacin, not niacin equivalents

Table 6.28. Comparison of mean daily intakes of selected nutrients between pay week and off pay week - females.

	pay		off pay	
	mean	SEM	mean	SEM
energy	6350	491	5494	437
protein	57	5	50	4
CHO (total)	181	17	159	14
CHO (starch)	103	9	96	8
CHO (sugars)	78	14	62	10
fat	66	6	55	5
cholesterol	234	29	252	45
retinol ~	358	51	344	33
thiamin	0.88	0.12	0.81	0.07
riboflavin	1.35	0.2	1.23	0.1
niacin *	14.6	1.3	12.5	0.8
vitamin C	60	15	43	10
iron	8.8	0.7	7.6	0.9
calcium	528	96	477	57
zinc	8.2	0.8	12.0	5.6
magnesium	210	19	182	13

~ retinol, not retinol equivalents

* niacin, not niacin equivalents

Conclusion

Kempsey Aborigines were not eating an optimal diet in relation to current RDIs in Australia. However, compared to the rest of the Australian community, and different sub-sections within it, their diet was not as poor as expected. In particular the high fat, high sugar, largely vitamin deficient diet frequently assumed to be ubiquitous in Aboriginal communities is not supported by this survey.

There is some evidence that the diet of the Aborigines studied may have been influenced by fluctuations in available cash during the pay fortnight. This is interesting in view of the fact that the majority of householders said they did not have any trouble making the food or food money 'spin out' over the pay fortnight. Women were nevertheless subject to reductions in the intakes of most nutrients in off pay week. Men on the other hand either maintained or increased their mean intake of most nutrients in off pay week. It is possible that sociocultural factors relating to the distribution of food in a context of mild scarcity determine the sex differences observed. In spite of the lack of perceived food shortages, the possibility that Aboriginal women were not eating as much food as they would have liked in off pay week clearly cannot be ruled out entirely.

Data gathered during informal interviews indicated that food choices were restricted by limited cash. In particular overall meat consumption and the selection of different meat cuts/ products appeared to have been influenced by economic considerations. A limited household budget also appeared to be a constraint on the purchase of fresh fruit and to a lesser extent vegetables. As I have argued in the previous chapter,

cash expenditure on food was influenced not only by (comparatively) low income but by budgeting choices both between different foods and between food and non-food expenditure.

It is likely that under-reporting of food intake is partly responsible for the observed low intakes of nutrients. However, the low mean daily intakes of nutrients by Kempsey Aborigines were to some extent also likely to have been due to voluntary control of food intake because of diabetes and/or attempted weight reduction. One of the implications of possible low food (and nutrient) intakes is that dietary education aimed at diabetic or overweight people in such a population could produce a further reduction in energy intake and a further reduction in intakes of nutrients, if dietary patterns remained the same. Clearly a thorough knowledge of food consumption patterns and careful attention to dietary composition in a context of limited energy intake would be essential part of any weight-loss or blood sugar control programs. Indeed, there are indications that a baseline study of the energy and nutrient intake of overweight and diabetic subjects would be a necessary prerequisite to ensure that possible low energy and nutrient intakes were not further reduced by diet control.

While this survey is totally inadequate to assess the impact of alcohol consumption on community health it is also true that high mortality is affected by but not confined to alcohol abusers. There were also many non-drinkers and low alcohol users in Kempsey, although this was impossible to quantify. If alcohol consumption in the community had been measured in the dietary survey it would have had an effect particularly with respect to energy intake and energy sources in the diet. For very heavy drinkers, for whom alcohol intake replaces food

intake for several days each fortnight and little or no food is consumed for several days afterward while they are 'grog-sick', the intakes of some vitamins and minerals would also be lower than these data indicate.

It is also true however, that the explanation for alcohol-related deaths lies not only with nutrition and the physical effects of alcohol but also with the underlying factors which produce high alcohol intake. To state that many Aborigines are dying from the effects of alcohol is not to show why these people are dying but only how. High alcohol abuse in a community should be considered as a proximal cause of poor health in the context of a particular set of social conditions.

I have shown that Aboriginal health is extremely poor when compared to that of other Australians. Aborigines in settled Australia have a very low life expectancy, predominantly due to high adult mortality from heart and blood vessel disease and cancers. These are diseases in which diet is known to play an aetiological role and diet has gained pre-eminence as an assumed major cause of poor Aboriginal health. The main conclusion to be drawn from this analysis is that, comparatively speaking, the composition of the diet of Kempsey Aborigines was not as poor as predicted. While the sample cannot be said to have adequately represented the full scale of dietary quality found in Kempsey households, particularly with respect to alcohol consumption, the results do indicate the many Aborigines in Kempsey are eating a diet not unlike the average Australian diet.

Furthermore, it seems likely that similar studies of dietary practices in other urban communities would yield similar results. The Kempsey community is not unique. All Aboriginal communities in settled Australia have been subject to the same kind of sociocultural disruption -

dispossession, relocation, bureaucratic control and economic marginalisation. Loss of a subsistence base, the provision and manipulation of rations and the denigration of Aboriginal foods and cooking practices have everywhere shaped the contemporary diet. And in the present, the ubiquity of welfare dependency impinges on the social conditions and food choices of urban Aborigines. Given that these factors are characteristic of all urban Aboriginal communities (see for example Rowley 1972; Gale 1972; Commission of Enquiry into Poverty, 1975; Kamien 1978; Altman and Nieuwenhuysen, 1979; Goodall, 1982; Department of Aboriginal Affairs 1984) there appear to be grounds for challenging the extent to which the differential between Australian and Aboriginal mortality can be attributed to diet, and the extent to which Aboriginal dietary practices can be attributed to lifestyle, not only in Kempsey but in urban Aboriginal communities throughout Australia.

HEALTH AND THE DURRI ABORIGINAL MEDICAL SERVICE

As I have shown in chapter three, there was considerable improvement in the physical and social conditions of Aborigines in Kempsey after the closure of the station at Burnt Bridge in 1969. Consequently, in seeking explanations for the continuing poor health of this and other Aboriginal communities, attention turned from physical variables such as poor housing and sanitation to behavioural or lifestyle factors. Of these, poor diet and alcohol consumption were seen as primary. Yet the information on diet was at best fragmentary and at worst based on stereotypic conceptions of Aboriginal dietary practices. My dietary survey in Kempsey indicates that there are sufficient grounds for challenging the contemporary focus on diet as a major factor in poor Aboriginal health. How then can poor health be better explained?

Perhaps one of the potentially most important of the post-AWB changes in Kempsey, in terms of the health community, was the establishment of Durri AMS at Greenhill in 1977. This was one of a number of free AMSs established around the country in an attempt to deliver health care more effectively to Aboriginal populations who had, for a variety of reasons, always under-utilised public health care facilities. They were nevertheless, an adjunct to the many other health services which were by that time more readily accessible to Aboriginal people than they had been in the past, including the local hospitals, the community health service, private specialists and general practitioners. These services were expected to bring about significant improvements in Aboriginal health in the communities they served.

Operating primarily as a primary health care facility offering consultative, preventative and follow-up health care, the Service was controlled and administered by local Aborigines and funded by the federal government. It operated for almost a decade until its closure in 1986. The purpose of this chapter is to evaluate both its operation and its impact on the local community, in order to shed further light on the complexity of health problems in Kempsey.

I begin by briefly sketching the history of Aboriginal Medical Services in general, and Durri AMS in particular, in order to show how and why they were established. I will then review the available health data for Kempsey in order to assess the impact of the service on the local community. It will be shown that after almost a decade of operation, Durri AMS seemed to have had a rather limited impact on many local health problems. In the final sections the reasons for the Service's limited health impact are discussed.

History of health services to Aborigines in Kempsey

Prior to the 1960s, the Aborigines Welfare Board showed little practical concern for the health of the population under its protection, stating in its reports that health was 'excellent' or 'very good' or 'satisfactory' (AWB reports quoted in Parliament of New South Wales 1981:133). Nor was it officially recognised that Aborigines often did not make use of the health services which were available to Australians. Yet Kempsey, like other rural towns, had a long history of white community agitation against Aboriginal usage of public health facilities. Such protest dated back to the turn of the century when

public calls for the barring of Aborigines from the local hospital coincided with white community demands for segregated schooling. While the latter led to the establishment of the Aboriginal school at Burnt Bridge, the issue of hospital services was not so easily resolved.

Around 1905 Aborigines were being nursed in an annex of the Macleay District Hospital which is situated at Greenhill. Men, women and children were accommodated together and babies were delivered in a screened-off corner of the ward (Riggs 1981). At this time, white agitation for the building of a separate ward for Aborigines was 'defined [in the local press] on grounds that neither blacks nor whites wanted to be nursed in the same wards' (Riggs 1981:80).

However, when a new hospital was built 1914 and representations were made to government ministers for the establishment of a separate ward, they were unsuccessful, according to Riggs (1981) because the government refused to discriminate in the care of the sick. It seems possible that financial considerations were in fact the primary motivation for the rejection however, since the provision of a separate Aboriginal unit would have been a more costly enterprise.

The hospital committee responded to the rejection of their application by taking the matter into its own hands and establishing a separate ward. However, the Aboriginal population in Kempsey and the surrounding region increased during the 1930s (with the establishment of the reserve at Burnt Bridge, and gravitation of the Aboriginal population into the town as a result of the depression), and agitation against Aboriginal admissions to hospital continued. There were repeated calls on the APB to provide a separate hospital, but the APB consistently maintained that

it had no responsibility for hospital services which properly came under the control of the Hospitals Commission. Eventually very high admission rates and severe crowding made the situation at the hospital 'intolerable' (Riggs 1981:81), so that in 1938 the Hospitals Commission announced a compromise solution of extensions to the existing Aboriginal ward. This raised 'a storm' at the next meeting of the Hospital Board, which considered the proposal inadequate (Riggs 1981:81).

The protests by the white community over sharing health facilities with Aborigines continued throughout the 1940s. Meanwhile conditions in the Aboriginal ward deteriorated. On one occasion there were '19 patients including eight obstetric cases packed into two three-bed wards' and the women were being 'delivered amidst male and other patients' (Riggs 1981:82). Riggs (1981:80) quotes a nursing trainee at this time who recalls:-

At the end of the shift the junior did the rough washing. There was a bathtub in the room with a toilet beside it. We had to empty dirty nappies into the toilet then scrub them in the bath with a long-handled brush: linen with placenta from deliveries, faeces, worms It was a terrible job....We would empty the stuff in the toilet and vomit after it.

During this period the hospital was also forced to refuse requests from other hospitals to admit Aboriginal patients because of the severe crowding.

In 1948 the Hospitals Commission agreed to provide men's and women's toilets and washing facilities for the Aboriginal ward, but there was apparently little relief from the appalling conditions. Questions were also raised about the standard of care given to Aborigines, an issue which came to the fore in 1964 with the deaths in hospital of six Aboriginal children over a ten month period. This was reported in the

Macleay Argus and resulted in a special meeting of the Macleay District Hospital Board (Macleay Argus, October 15, 1964). It also sparked a lengthy debate in the New South Wales Parliament, and resulted in the first public challenge to the AWB's contention that the Aboriginal population enjoyed good health (Parliament of New South Wales 1981).

The Joint Committee of the New South Wales Parliament, appointed in 1965 to inquire into Aboriginal welfare, provided the first official recognition of apparently widespread ill-health amongst the Aboriginal population both on and off reserves. It also exposed the complete lack of health statistics, thus raising the veil of 'bureaucratic calm' (Parliament of New South Wales 1981: 133) behind which the AWB had for decades deflected attention from issues relating to health. However, the Committee did not go so far as to attempt any analysis of the historical circumstances that had led to poor Aboriginal health, attributing it only to ignorance of 'good health and hygiene practices' which better housing would significantly improve (Parliament of New South Wales 1981:131). The political changes of the sixties and seventies, including as they did an increasing awareness by both whites and blacks of Aboriginal marginalisation, provided the context in which Aboriginal under-utilisation of health services become an important political issue.

In the early 1970s, Aboriginal activists involved in the Aboriginal Legal Service which was established in Sydney in 1970, identified the need for a similar 'shopfront' health service to cater for the substantial Aboriginal population in the inner city (Foley 1982). In spite of the considerable difficulties of organising a 'voluntary action programme ... in an alienated group whose authority and leadership

structure [had] been destroyed (Briscoe 1974:168), the Redfern Aboriginal Medical Service opened its doors in 1971. Privately funded and staffed by volunteers, the Service operated for almost twelve months before it won official recognition from the federal government (Sykes 1978). In 1972 the Department of Aboriginal Affairs, newly established by the Whitlam government and basing its initiatives on the new policy of 'self-determination', provided funding for non-clinical services at Redfern, through its Aboriginal Health Branch, and the Commonwealth Department of Health took over responsibility for the payment of salaries. Encouraged by the success of the Redfern AMS, and drawing heavily on support provided by its staff, other community-controlled health services were established around the country, including the Durri Aboriginal Medical Service at Kempsey.

Durri AMS¹ opened in July 1977 and operated for nine years until May 1986 when its funds were frozen by DAA. Originally housed in a weatherboard cottage at Greenhill, it moved in 1980 to new premises built with funds from the DAA, on a different site at Greenhill. The Service was a cooperative with membership open to all. An all-Aboriginal Board of Directors was elected at the annual general meeting of members and was responsible for exercising general control over the operation of the Service. This structure, modelled on the Redfern Service, was to ensure that the Service's operation remained responsive to the changing needs of the community (Fagan 1984). Day to day management was by the administrator, an appointee of the Board, who occupied a full-time position and whose salary was paid by DAA. All staff were answerable to the Board of Directors through the

¹ The name was chosen by Mrs Ivy Smith and is a Gumbaingeri word meaning 'better'.

administrator. Consequently, medical and nursing staff were essentially employees of the community, and thus the patients, whom they served.

Durri AMS provided medical services to an area from Nambucca Heads in the north to Port Macquarie in the south, and dental services in the same area and also to Taree (see map 1). Nambucca Heads, Macksville, Bowraville, Bennelong's Haven, Bellbrook, Burnt Bridge and Port Macquarie were visited by a Durri medical practitioner on regular field trips. In addition, Aboriginal Health Workers and a nurse made regular trips to Stuarts Point, Hat Head and South West Rocks.

Thus years of Aboriginal marginalisation in the delivery of health care in Kempsey ended with the establishment of a separate health service at the instigation of the black community. The legacy of these years is however, continuing resentment of past hospital segregation; the crockery and cutlery marked 'ABO', the poor meals, the overcrowding and lack of privacy, and the inferior care. Fear of discriminatory treatment is also occasionally revived, as by the sudden death of an infant in a small hospital to the north in 1985. This hospital has long been perceived as providing inferior treatment for Aborigines - 'you wouldn't take a dog to that hospital'. There is also a continued reluctance on the part of Aborigines to seek medical help from mainstream health services, also reported in other communities (Yusuf and Hamilton 1983).

The opening of Durri clearly heralded a marked change in the availability of primary health care to Aborigines and could have been expected to bring about considerable improvements in health. It is important therefore, to attempt some quantitative evaluation of its

impact on the Kempsey community. Using data from a variety of sources it is possible to construct a health profile, albeit incomplete, which relates to the years of Durri operation. Much of this information is drawn from the findings of the Durri AMS Review (Roberts et al 1986), undertaken for the DAA in 1986, in which I participated. Unfortunately, it was not possible to compare these data with pre-Durri data because very little were available.

Health profile of the Kempsey community

As noted in chapter one, the overall Aboriginal mortality rate in NSW country regions 1980-81 was four and a half times that of the total NSW population, while for the younger adult age-groups it was much higher. For men the relative risk of mortality at ages 35-39 was 11.2 and at ages 40-44 was 13.5; for women the relative risk in these two age classes was 18.6 and 6.8 respectively (Julienne et al 1983). Mortality rates for different areas within New South Wales were not yet available but preliminary analysis suggested that Aboriginal mortality in Kempsey was slightly worse than the average for the state (Thomson pers comm).

As part of the Durri Review in 1986 (see below) we looked at Aboriginal deaths in Kempsey for which information was available at the Service. The death register could not be found. However, by examining the individual files of 92 persons who had died in the years 1978 to June 1986, we found that the mean age of death was 47 years, which certainly provided some support for the view expressed by Thomson. Almost all the deaths were attributed to multiple causes, the most common being heart and vascular disease, alcohol and diabetes (Table 7.1).

Table 7.1. Contributing causes of death, Durri AMS, 1978 - June 1986 (Source: Roberts et al 1986).

Contributing causes	% of all deaths
heart or vascular disease	43
alcohol	25
diabetes	23
respiratory conditions	17
other*	21
not recorded	6

* Epilepsy (8 cases), renal failure (3 cases), motor vehicle or other accidents (4 cases), suicide (2 cases), cancer (2 cases).

Low life expectancy was also reflected in a demographic profile derived by me from 1322 patient files at Durri AMS in 1985 (Figure 7.1). Only 3.1% of Durri patients were aged 60 years or more compared to 14% of the general Australian population and 4% of the total Aboriginal population. Truncation of the base of the pyramid also suggests a decline in fertility, which contrasts with previous high Aboriginal fertility (Gray 1983), but reflects the recent general fall in Aboriginal fertility (Young 1982, Gray 1983). In spite of the fall in fertility, over 39% of Durri patients were less than fifteen years of age, compared to 25% of the total Australian population and 43% of the total Aboriginal population in 1981 (ABS Census data, cited in Thomson 1984a).

Declining fertility is associated with increasing affluence and declining mortality, the so-called demographic transition, and Gray (1984) has attributed some of the decline in Aboriginal fertility to 'microeconomic' decisions made by Aboriginal women. Aboriginal mortality remains very high however, so the effect of declining fertility on population structure is quite different to the pattern characteristic of a demographic transition. Thus the ratio of births

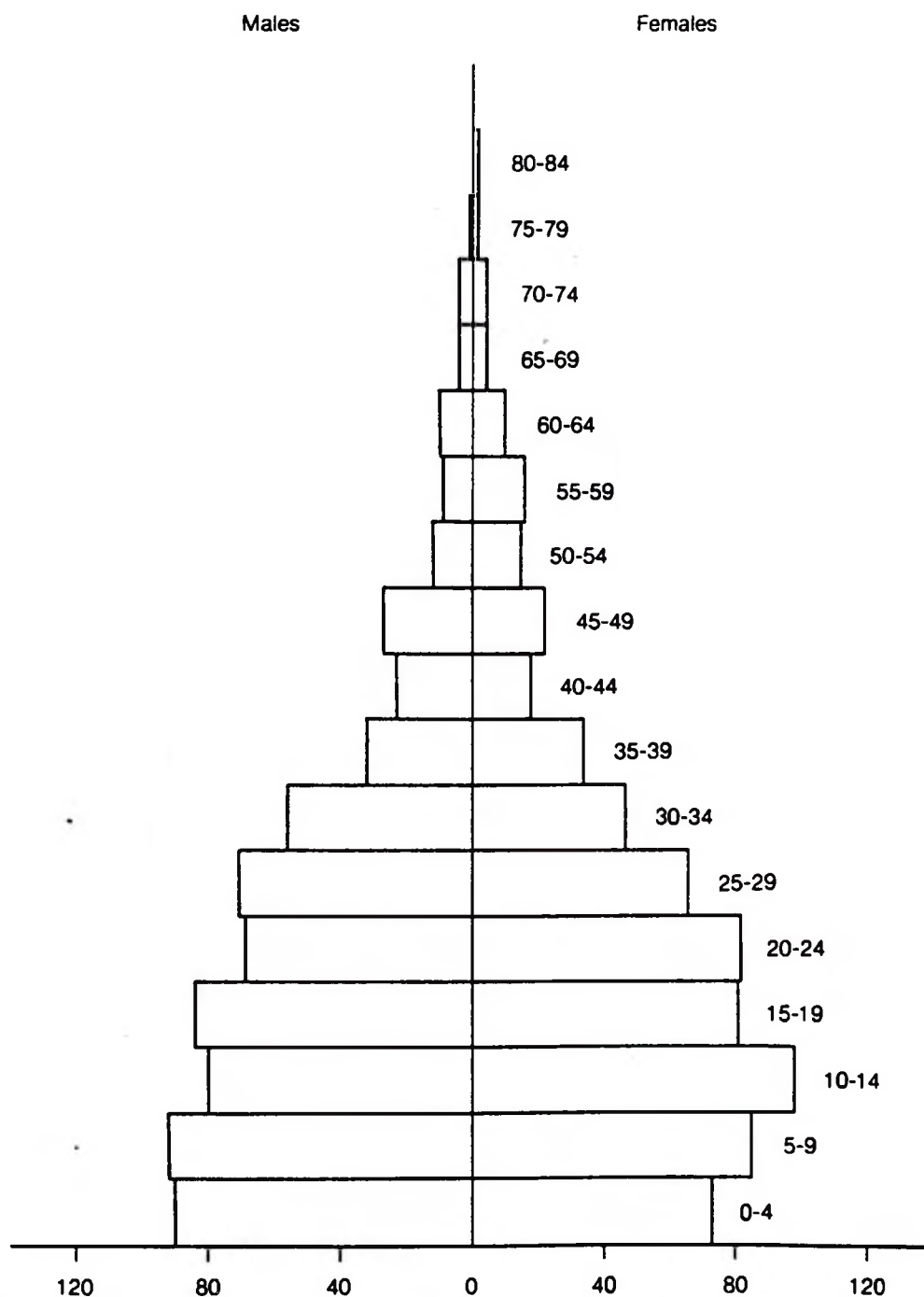


Figure: 7.1 Age structure of the population, Durri AMS central files, 1985

to deaths for Aborigines was much lower than in the Australian population. For the years 1978-1981 there were 21% less Aboriginal births relative to deaths in Kempsey and Macksville than in the total Australian population (Table 7.2).

Table 7.2. Ratio of Aboriginal births to deaths compared to the total Australian population, 1978-1981 (Source: Roberts et al 1986).

	Aboriginal births	birth:death ratio
Kempsey	135	2.1
Macksville	50	2.1
All Australia		2.67

While mortality rates indicate that Aboriginal health was poor, they only show what Moodie (1973:118) calls the 'tip of the iceberg'. The 'iceberg theory' is that the mortality statistics suggest but do not show the extent of the morbidity load in Aboriginal communities. Morbidity however, is much more difficult to assess because only an unknown proportion of all episodes of sickness result in recordable events (e.g. medical consultation or hospitalisation), and in the case of Durri even those events which were recorded were not used in any systematic way to generate health statistics.

There were no recent hospitalisation data available for Kempsey but the hospitalisation rate for Aborigines in the North Coast Region (which includes Kempsey) in 1982 was 450 - 500 per 1,000 population per year compared to the non-Aboriginal rate of 194 (Roberts et al 1986). This means that one out of every two Aborigines would have been hospitalised in any given year. Given that Aboriginal health in Kempsey seems to

have been at least as poor as elsewhere in country NSW, it seems reasonable to conclude that the Kempsey hospitalisation rate would not have been any better than this. There had been no follow-up of the work of Copeman (1980), so it was not known if the early fall in the hospitalisation rate for children, which followed the opening of Durri in 1977, was sustained or improved in the 1980s.

As noted above, there had been little attempt by Durri to produce any statistics which documented the level of morbidity in the community² so the 1986 review team attempted to evaluate morbidity by collating information on episodes of illness recorded from 1980 to May 1986 in 522 active files (approximately one third of the total). The sample was not random but its age structure reflected the age structure of the total Durri patient population. Visits to the doctor for follow-up of pre-existing conditions and renewal of prescriptions etc were excluded in order to confine the data to acute episodes of illness. Thus these figures do not represent numbers of consultations, nor do they adequately reflect the total morbidity level because, for example, the patient who presented with a respiratory infection who also had diabetes, hypertension and congestive cardiac failure was recorded only as suffering from a respiratory infection. Unfortunately, there were shortcomings in the way this part of the review was done, mainly due to lack of time and resources. The data were collected by three pairs of researchers and post-collection discussions raised some questions about the comparability of the three sets of data, relating to the basis on which decisions were made to include or exclude consultations as acute

² This was an important oversight because such figures had been used successfully by the Redfern AMS to demonstrate both a need for expanded clinical and preventive services and the positive health outcome of those services.

episodes. The results are included here (Table 7.3) however because no better data are available.

Table 7.3. Illness episodes 1980 - 1986, Durri AMS
(Source: Roberts et al 1986).

Illness	No. of cases	%
respiratory infection	894	29
other infections *	736	24
ear infection	282	9
trauma	275	9
gastric	190	6
stress related	125	4
hypertension	43	1
heart	41	1
diabetes	15	0.5
hardship and disability	13	0.5
other	515	16
Total	3219	

* predominantly skin infections

Each patient had had on average 5.9 episodes of acute illness during this period, a little over one per year. The 51 children who were under five years of age had each had, on average, one presentation for otitis media, 2.8 presentations for respiratory infection, 1.3 presentations for gastroenteritis and 1.4 presentations for other infections. The very high rate of infections is common amongst Aboriginal populations (see for example Moodie 1973, Thomson 1984a). What is striking however, is the very low rate of presentation with cardio-vascular disease which was the major cause of adult death in Aboriginal populations in NSW. Yusuf and Hamilton's (1982) figures for Aboriginal hospitalisation rates in NSW in 1978 reveal the same contradiction. They found that diseases of the respiratory system accounted for 20.5% of admissions compared to only 4.8% for circulatory disease. This suggests that Aborigines tended

not to present with the symptoms of the more acutely life threatening circulatory disorders until it was too late for effective treatment and this seems to hold true for both the Durri AMS and for public hospitals.

Intestinal parasites were still a major cause of morbidity in Kempsey in spite of substantial improvements in physical living conditions over the last fifteen years. Of ninety-two persons in twenty five randomly selected households in 1979/80, 62.8% had worm infestations, many of them multiple (Owusu-Ansah 1981). In addition, 56.1% of 241 faecal samples from Aboriginal children admitted to Macleay District Hospital between 1980 and 1983 had one or more parasites (Beard pers comm). Very high re-infestation rates (Owusu-Ansah 1981) indicated that the underlying conditions which contributed to worm infestation were not being adequately addressed. (It is also true however, that Kempsey is climatically ideal for some intestinal parasites, particularly hookworm, which was not a problem in Aboriginal communities on the south coast nor in the interior of the state (Moodie 1973)).

In Kempsey, as elsewhere in Australia, Aboriginal children suffered from high rates of infection, including gastro-enteritis, ear, respiratory and skin infections. Owusu-Ansah (1981) reported widespread gastro-enteritis in Kempsey which he attributed to inadequate diet, bacterial contamination of food, viral infections, worms, and lactose intolerance with or without Giardia infection. Ascaris pneumonitis was responsible for 'wheezy chests' in young children (Owusu-Ansah 1981). In 1986, a total of 41% of Kempsey Aboriginal children suffered some form of recurrent ear infection and more than half of this number had perforations in one or both tympanic membranes. Over 4% had significant hearing problems as a result of infection (Roberts et al 1986). Both

adults and children commonly suffered from boils and septic sores, while scabies and ringworm were common amongst children.

Other indices of morbidity in the community which were considered are obesity, diabetes and low infant birthweight. In order to estimate the level of obesity in Kempsey³ I measured the height and weight of 206 adults who came to Durri during a six week period in 1985, and who agreed to be included in a weight survey. This is not a random sample of the population but nor is it a sample only of people who were sick. Of those who were measured, 41% came to Durri to see a doctor, 28.8% were on social visits, 6.9% were staff, 6.8% were accompanying patients, 6.4% came for medicines or dressings, 3.4% came to have their blood sugar measured, 3.0% came to be weighed and 1.5% came to see the dentist. A small additional number (2.4%) were weighed at home during the collection of 24 hour recalls.

Overall 53% of males and 60% of females were 'overweight' or 'obese' (see Appendix for definitions) which compares with rates of 41% and 31% respectively for the Australian population (Table 7.4). Overweight is clearly an important health problem in Kempsey and must be considered as a contributing factor in high mortality from heart disease. It is worth noting, however, that the Australian data shown here are derived from capital cities, not from rural areas. A subjective evaluation of the non-Aboriginal community in Kempsey suggested that overweight was in fact widespread, most noticeably amongst women and possibly to a greater extent than in city populations. As part of the Busselton study in rural Western Australia, Hitchcock and Gracey (1978) report on a small sample of 62 adults who were 35 to 55 years of age of whom 27% of males

³ Very few patients had weights recorded on their files.

and 23% of females were obese and 53% of males and 39% of females were overweight. This gives a combined rate of overweight plus obesity of 80% for males and 61% for females!⁴ A coronary risk factor study in a rural Australian town also found consistently higher levels of overweight in all ages and in both sexes when compared to Sydney (Simons et al 1981). Thus the difference in the prevalence of overweight between Aborigines and non-Aborigines in Kempsey may not be as great as indicated by Table 7.4.

Table 7.4. Percentages of overweight and obesity - Kempsey Aborigines and all Australia, fifteen years and over.

	Males		Females	
	Abl	All Aust#	Abl	All Aust#
Underweight	2.0	2.9	2.9	5.9
Acceptable	45.0	55.7	36.2	62.6
Overweight	38.0	34.1	41.9	24.5
Obese	15.0	7.2	19.0	7.0
Overweight & obese	53.0	41.3	60.9	31.5

Source: The National Heart Foundation 1980.

In general Aboriginal perceptions of suitable body weight seemed to favour fat over lean, although this was a subject which I was only able to discuss with women. Even though many people were on self-imposed or medically supervised diets to control either weight or blood sugar, it is likely that desired body weight exceeded the medical definition of normal weight. As one woman put it:-

⁴ Their criterion for overweight is >110% ideal weight for height and of obesity >120% ideal weight for height.

When people see you're loosin' weight they say are you sick an'
I say no, I'm on a diet.

Ideas about the negative aspects of overweight had more to do with health concerns than with a socially defined ideal shape. Furthermore, overweight and obese people were seldom subject to derogatory comments about their size. Those who had nicknames related to bodyweight tended to be thin people whose 'boniness' was considered remarkable.

Reported rates of diabetes in Aboriginal communities range from 8 to 19% (Thomson 1984a) compared to 3.4% of the adult Australian population (Australian Diabetes Foundation 1986)⁵. Exact figures for Kempsey were not available because a systematic diabetes screening had never been done. Based on the number of known cases and the likely number of undetected cases it was estimated however, that 7 - 10% of the Kempsey Aboriginal population was diabetic (Beard pers comm). Many of the diabetics came to Durri every day or every few days to have their blood sugar tested. Most had poor control over their disease as demonstrated by the number of sufferers with chronically high and/or labile blood sugar levels. Diabetic vascular changes are implicated in the aetiology of heart and kidney disease, can cause blindness and lead to limb amputation and it was unquestionably a major health problem in Kempsey.

Low infant birth-weight, which may result from poor maternal health, is recognised as a health problem in Aboriginal communities. There were no figures available for Kempsey but in the northcoast region as a whole low birth-weight infants were 2 to 3 times more common amongst Aborigines than non-Aborigines. From 1979 to 1981, 12 - 13% of

⁵ There has been a 50% increase in the prevalence of diabetes in Australia since 1966 and a further 50% increase is projected by 1996 (Australian Diabetes Foundation 1986).

Aboriginal births and 4.5 - 5% of non-Aboriginal births were of low birthweight infants (Roberts et al 1986).

The most important health problem for which no data were available is alcohol consumption although the high proportion of deaths recorded at Durri in which alcohol was a contributing cause (see Table 7.1) attests to widespread alcohol abuse in the community. There is in fact little quantitative information on alcohol consumption in Aboriginal communities anywhere (New South Wales Task Force on Aboriginal Health 1983)⁶. Kamien (1975) reports heavy drinking in 53.2% of men and 3.1% of women in Bourke, predominantly episodic or 'binge' drinking since only sixteen out 124 males and one out of 128 females drank every day. The New South Wales Task Force on Aboriginal Health (1983) discusses a submission prepared in 1977 by the Redfern Aboriginal Medical Service which indicated that alcohol abuse affected 60% of males and that one in five of the patients seen at the Service had alcohol related problems. An analysis of NSW Health Commission data also showed that alcohol was mentioned as a significant problem on 53% of male death certificates and 21% of female death certificates (New South Wales Task Force on Aboriginal Health 1983). Aboriginal hospital admissions for alcohol-related diseases and conditions (including motor vehicle accidents) in New South Wales in 1977 totaled 99.2 per 1000 population compared with 30.5 for non-Aborigines (Hunt 1981). The hospital admission rate for alcoholism in rural New South Wales was 100 per 1000 for Aborigines and 7 per 1000 for whites, although these figures did not differentiate

⁶ Alcohol consumption is particularly difficult to evaluate in any community and social disapproval may be reflected in withholding information about alcohol abuse from medical records and death certificates. Peever and Webster (1984) suggest that failure to cite alcohol as a contributing factor may be more common on white death certificates than on Aboriginal death certificates, thereby influencing comparative statistics.

repeated admissions (Parliament of New South Wales 1981).

Alcohol abuse is also present as a factor in other health problems. For example, interpersonal violence and motor vehicle and other accidents (especially burns) are frequently directly attributable to alcohol, and relate to high death rates from 'injury and poisoning' in Aboriginal communities. In NSW country regions in 1980-81, Aboriginal men were over three and a half times more likely to die from injury or poisoning than non-Aboriginal men, this category being second only to circulatory system disease as cause of death. Aboriginal women were almost four and a half times more likely to die from these causes than non-Aboriginal women (Julienne et al 1983).

There are many health ramifications of alcohol abuse. Heavy alcohol consumption causes liver disease (which impairs the breakdown of nutrients and depletes vitamin stores) and cerebral degeneration and is a factor in hypertension, heart disease, birth defects and some cancers. In the diet, alcohol displaces energy from other sources and affects the intake of thiamin, riboflavin, niacin, iron and retinol activity when it provides more than 35-50% of total dietary energy (Wood 1975). It also suppresses the appetite by causing nausea and vomiting. Alcohol-induced gastric atrophy may lead to malabsorption of Vitamin B12 and iron, thiamin absorption is impaired by the presence of alcohol and folate depletion due to poor absorption may impair metabolism of alcohol (Wood 1975).

Kempsey residents had ready access to an Aboriginal-run live-in alcohol rehabilitation facility situated in the Macleay valley. However, few local residents had ever stayed there, apparently because they were 'too

shame' to openly admit to being 'a drunk' so close to home. Workers at Durri argued furthermore, that it was almost impossible for a person to 'dry out' when the social group, in which their drinking was fostered, remained so close at hand.

Marijuana use, particularly by young people, was also widespread in Kempsey but there was no petrol-sniffing, a major health problem in some Aboriginal communities in remote Australia.

Two important conclusions can be drawn from this health profile. The first is that the health of the community was poor. The second is that there may have been little substantial improvement in health in spite of both dramatic improvements in many aspects of the physical and social living conditions of Aborigines in Kempsey over the previous fifteen years, and almost a decade of operation of Durri AMS.

This apparent lack of significant improvement in health may be inferred from the comparison of Moodie's (1973) Aboriginal mortality data for New South Wales stations for 1955-64, with the more recent mortality data of Julianne et al (1983) for New South Wales country regions 1980-81 (see Chapter 1). Not only does there appear to have been little improvement in Aboriginal mortality for the State as a whole, but preliminary regional analyses indicate that Kempsey mortality rates in 1980-81 were slightly worse than average (Thomson pers comm, see p275). This is borne out by the marked truncation of the demographic pyramid derived from Durri AMS active files (p277) and by the very low mean age of death derived from the death register (p275).

For the period covered by the operation of the medical service the available data are no more encouraging. A comparison of the worm

infestation rates described by Owusu-Ansah (1983) for 1979/80 and Beard (pers comm) for 1980-83 (p281) do not indicate that there was a significant decline in intestinal parasitism, in spite of the operation of Durri AMS throughout this period. Nor do Copeman's data fully substantiate his claim that the medical service had had a major impact on hospitalisation rates of Aboriginal children in Kempsey (see p290). Furthermore, even though they cannot be evaluated as trends over time because of a lack of longitudinal data, the high rates of diabetes, obesity, middle ear infections, skin disorders, low infant birth weight and presentations with acute health problems (described earlier) suggest that the impact on health of both the medical service and the improved living conditions may have been marginal at best.

In trying to account for the apparent limited impact on health of the AMS two possibilities present themselves. Either the health care provided was still inadequate in some way, or the underlying causes of poor health had not been adequately addressed, in spite of improvements in living conditions. I suggest that in fact both explanations are correct. While the second is dealt with in the following chapter, I will consider here the operation of Durri AMS to highlight the difficulties for such an organisation in addressing local health problems.

Community control - advantages and disadvantages in primary health care.

By all accounts Durri AMS operated successfully for the first couple of years after it was established in 1977. The administrator was competent and hard-working and a doctor who was well-liked by the community provided clinical services. A nurse who had worked with Aborigines for many years at the local hospital, and was known to be sympathetic to their needs, joined the staff when the Service was first established and remained there until early 1986.

However, the first administrator did not remain very long, leaving Durri to take up a government position. This is a recurrent problem in small Aboriginal communities where an increase in Aboriginal positions in the public sector has acted as a significant drain of qualified people out of the communities in which they gained their experience. Unfortunately, the service did not again benefit from the direction of such a competent administrator and this ultimately contributed to its closure.

In 1980 several thousand dollars of Durri funds were embezzled by a relative of the new administrator. The administrator resigned, but even though the theft was common knowledge it did not result in prosecution. While it has never been made clear why the DAA, in its capacity as Registrar, did not take action against the embezzler, it seems possible that the matter was dealt with leniently to allow the newly established service to 'find its feet'. Unfortunately such action, even though well-intended, was not well received by the community, who in effect lost faith in both DAA and their own organisation.

Shortly after, the Durri Board became the focus of factional struggles between Ngaku and DAETC who were competing for both formal recognition

from DAA and for housing funds in the region. The DAA's persistent support for Ngaku carried over into the affairs of the Medical Service which then struggled to maintain some kind of order after DAETC gained control of the Board from Ngaku at a hotly contested election in 1981. An internal investigation carried out by DAA into the factional disputes in Kempsey clearly showed that a strong bias on the part of some officers of DAA was an important factor in the divisiveness of local politics (Reiner pers comm). That DAA's attitude was biased against DAETC was illustrated by a comment made to me by a senior employee of DAA in 1985 that 'all Durri's problems started when DAETC took over'.

There are no records to show how well the Service operated during these years and people were consistently vague in response to my questions. The general attitude however, was that Durri operated better then than in 1984, when I made my first visit, and certainly better than in the subsequent two years leading up to it's closure in 1986. Nevertheless, research conducted from June 1979 through to March 1980 by one of the doctors employed at Durri showed remarkably high bowel parasite infestation rates in the community (see below) which indicates that more than two years of Durri operation had done little to improve one of the major health problems in the community. This tends to counter-balance the implications of the much-cited article by Copeman (1980) which showed a decline in both the numbers of Aboriginal children admitted to Kempsey District Hospital and in the numbers of 'bed-days' spent by those children in hospital, between 1976 and 1979. This decline Copeman attributed to the establishment of the service, dismissing the possibility that improved living conditions may have been largely responsible because they had been offset by declining Aboriginal employment. He believed that seeking medical intervention at an earlier

stage in children's illness had reduced both the admission rate and the severity of illness of admitted children and attributed this to the availability of a Service 'staffed and run by local Aboriginal people' (Copeman 1980:5). I have no doubt that this is partially true but it is interesting that the most dramatic decline in both admissions and bed-days was in 1977, even though Durri did not open until July of that year. In the following year there was virtually no further decline and only marginal improvement in the year after that (1979). This certainly does not provide good support for Copeman's (1980:5) claim that 'the preventive activities which are integrated with the clinical aspects of the service (such as immunization, vitamin supplementation, nutrition education, and regular screening of the 'under-fives')' were making substantial inroads into the high morbidity levels in the community. Certainly when I arrived in 1984 none of these 'activities' was operating beyond some informal advice given occasionally at consultations, and childhood vaccinations which the 1986 Durri Review showed were severely in arrears.

By mid-1984 there was already established a deeply entrenched conflict between DAA and the Durri management, with the sympathies of the staff lying somewhere in between. At this time there were two male doctors and two female doctors (their wives) all providing clinical services on a part-time basis, one trained nurse (non-Aboriginal), one Aboriginal nurses aid, four Health Workers (one woman working in the clinic and three men working as drivers) and two clerical staff, in addition to the administrator. There was also a full-time dentist and his assistant. In addition to the permanent staff, temporary staff were employed for work experience in both the clerical and nurse assistant areas. These positions were funded by the Commonwealth Employment Service, for

periods of six months each.

Unfortunately, the administrator did not have either the experience or the qualifications necessary to run such a high-budget, diverse organisation and coped with this by frequently absenting himself. Staff morale deteriorated, exacerbated by internal divisions amongst the doctors, staff absenteeism and a decline in the maintenance and cleanliness of the clinic. In 1985 Durri was reviewed by a team consisting of representatives of DAA, NAIHO (National Aboriginal and Islander Health Organisation)⁷, Commonwealth Department of Health and the NAC (National Aboriginal Congress), during which all staff were interviewed. The resulting report identified numerous areas in which the services provided were inadequate but surprisingly the committee found that Durri 'continues to provide a well used and effective clinical medical service ... [although its] effectiveness ... as a community health service has been limited by a number of problems'.⁸ There was probably no other politically acceptable finding. The staff felt extremely ambivalent about both the review and the consequences of its findings and recommendations and most were not prepared to be completely frank about the shortcomings of the service. The committee on the other hand was undoubtedly committed to support for community controlled services. Its recommendations, though very constructive, were inadequate to address some of the major underlying difficulties involving the Service's management. Unfortunately this turned out to be the last chance for the sweeping reforms needed to head off the further

⁷ A national committee comprised of representatives of Aboriginal health services which was funded by the Commonwealth Government. NAIHO's funding was terminated on January 1 1987.

⁸ From the unpublished 'Summary of Report' of the 'Review of Durri Aboriginal Medical Service, Kempsey' to the Department of Aboriginal Affairs.

decline of the Service and its closure twelve months later.

During that twelve months deterioration was rapid. One of the doctors resigned, disillusioned with his inability to develop any of the programs he felt were needed at the clinic and with the perceived lack of support from his main colleague. A replacement doctor was mysteriously hired by the latter without any consultation with the Board or the administrator. Subsequently the nurse resigned also and she was replaced by someone who was less acceptable to many of the patients in spite of the fact that her appointment was made by the Board and the administrator. Funds went missing, the building was broken into and not properly repaired, cleaning was seldom done and staff absenteeism reached a crisis point. Ultimately, major auditing problems precipitated intervention by DAA and the Service was closed.

After the DAA suspended funding of the Service in 1986 it commissioned another review, conducted on the understanding that a speedy appraisal and report would result in rapid reorganisation of the Service and its immediate reopening. Partly for this reason the community remained calm about the closure, believing it to be an interim measure with the promise of a better Service in the near future. Their failure to protest was subsequently construed by DAA (and others) as lack of community support and interest in the Service's continued operation.

The second review,⁹ hastily convened and conducted under considerable pressure, disagreed with the earlier review that the Service was

⁹ The team consisted of the Administrator of Redfern AMS (also National Secretary of NAIHO), the National Preventive Health Coordinator for NAIHO, three former employees of the Durri AMS (a doctor, a nurse and an Aboriginal Health Worker), and myself.

'effective' and recommended wide-ranging reforms at every level of management and operation. Some of the major problems identified were:- the failure of the Board to adequately represent the different geographic areas and political factions served by Durri; the Board's lack of direction over the operation of the Service, particularly with respect to program policy or forward planning; the lack of training and experience of the administrator; the complete lack of any in-service education program for the Aboriginal Health Workers who were under-utilised and derived little satisfaction from their work;¹⁰ the lack of any health prevention or health education programs, in particular the absence of any family planning services or programs for the under-fives, aged/infirm, disabled, alcoholic and drug dependent and diabetic¹¹, and the inadequate pre- and post-natal programs and arrears in child vaccinations;¹² the inadequacy of facilities in outlying communities in some of which the doctors held their clinics out of the back of a station wagon; the lack of a community health profile and diabetes screening; inadequate and incomplete patient records; the failure of the

¹⁰ On the initiative of one of the doctors two male Aboriginal Health Workers had commenced Health Worker training by correspondence with the Cumberland College of Health Sciences in Sydney but, for a variety of reasons including lack of support from Durri management, they did not complete their course.

¹¹ A diabetes education program had been conducted by one of the medical officers in 1984. At the end of the seven month period thirteen people lost a total of only 24kg (less than 2 kilos per person), three had no change and four gained a total of 8kg. Random blood sugar levels improved in nine people, remained unchanged in ten and deteriorated in one. The gains were clearly small and the medical officer was not optimistic about long term positive effects (Beard 1984).

¹² From 1980 through June 1986 there were a total of 219 infants recorded for triple antigen and polio immunisation. In June 1986 only thirty nine (18%) of them were up to date. Some years were worse than others but of forty one births recorded in 1982 none was up to date in June 1986. Measles vaccinations were similarly poor. Childhood infectious diseases constitute the most important preventable causes of morbidity and mortality amongst children yet over 80% of the Durri community's children lacked full protection.

Service to generate any health statistics; and finally the poor design of the clinic and lack of equipment necessary to implement any programs (Roberts et al 1986). Many of these problems were attributable to poor management of the Service.

It was also noted that there was a high level of disillusionment in the community about the operation of Durri. Patients had little faith in the confidentiality of their medical records (which was probably having some effect on the control of venereal disease) and did not feel comfortable with the doctors who, in the last period, were providing the clinical services at Durri. They were also critical of the lack of maintenance and cleanliness, the ineffective management, increasing staff absenteeism, abuses of time and misuse of Service vehicles. Attendance records however, do not show any systematic decline during this period so the Service continued to be used, in large part because there were limited alternatives in the town - namely the public hospital and two doctors who would see Aboriginal patients.

The DAA's position with respect to the management and decline of the Durri AMS is problematic. Since the Service was community-controlled and managed, all managerial, policy and program initiatives were supposed to come from the administrator and the Board of Directors. The DAA's role as registrar was primarily one of funding control and it focused its attention on this aspect, which from time to time was cause for considerable concern. From the Durri staff's perspective therefore, DAA appeared to be largely unconcerned about the deficiencies in the Service's operation. For this it was frequently criticised, even though it was in many respects beyond its brief to interfere in internal matters. On the other hand, DAA was undoubtedly unsupportive of the

political faction controlling the Board, which resulted in poor communication between DAA and the Board and contributed to managerial instability.

Unfortunately, the Board did not exercise any control over the administrator, who in his turn did not provide administrative direction to the staff. Just as importantly, neither the administrator nor the Board members had any training or experience in management or public health. Thus, they simply did not have the skills to develop policy or implement health programs. They relied to some extent on the medical staff for advice in the health field, but still lacked the organisational skills to implement their recommendations. In an important respect then Durri AMS was effectively not community controlled, since neither the Board nor the administrator exercised control over the Service's operations and neither were actively representing the interests, or responding to the health needs, of the community. One example was the Board/administrator's failure to remove from service one of the doctors about whom the patients had made numerous complaints and who was uninterested in providing anything other than minimal clinical care. Another was the Board/ administrator's failure to revoke the privileges of a private physician who used Durri (free of charge) to operate the Aboriginal part of his practice, but would not make his records available to the Service. The 1985 Review had recommended in the strongest terms that this practice cease but no action was taken.

Durri's failure is not a failure of community control per se but a failure in the operation of that control, because insufficient attention was paid to the skills and training of those in charge. Many of the

problems could have been circumvented. In the 1986 review we placed the highest priority on two major reforms. The first was the replacement of the administrator by the man who had been in charge of the Service when it opened in 1977. He was once again in a position to accept this post and had considerable administrative experience and community respect. The second was the appointment of an Advisory Panel comprised of accounting, managerial, medical, and Aboriginal health representatives who could advise the Board/administrator on all aspects of both management and health care delivery. These recommendations were well received at the community meeting at which we presented our preliminary report.

Factionalism had also played a role in Durri's problems, both because of the destabilising effect of the struggle for control of the Board, and the preoccupation of virtually all the senior activists in the community with other major disputes, involving land and housing. At the time, these issues tended to eclipse the needs of the health service for greater interest, involvement and support.

A further problem in Durri management related to the ambiguities inherent in different leadership styles. As discussed in chapter three, there was some covert conflict between the 'old way' of consensus decision-making, with its indirect modes of social control and authoritarian leadership, with its associated direct confrontationism. The former, because of its slow, processual and flexible character contributed to management inefficiency. The latter, when attempted, was negatively received by Aboriginal staff who complained that they could tolerate that behaviour from a white person (in authority), because it wasn't the right way for blacks to do things.

A health worker became upset because he had had an argument with the Chairman of the Board over mounting complaints from the community that the Health Workers were not doing their job. He complained to me that he didn't like blacks complaining about blacks, and sacking [dismissing] blacks, because that wasn't the right way to do things. He said that if white people were running the Service, people would lodge their complaints in a more civil manner, and they [the Health Workers] would be given a chance to explain and put their case, and that their opinion would be sought as to how the problems might be solved.

There was thus also some sense on the part of Aboriginal workers that management decisions were not fair decisions, although this was partly due to the lack of skills of the administrator.

The staff also had little faith in the financial management of the Service and were frequently anxious that they would not get their wages at the end of the week, or receive their holiday pay on time.

One of the employees received a summons from a local store for non-payment of hire purchase repayments on a video recorder, which were months in arrears. According to the employee, these payments were supposed to have been regularly deducted from his pay and he immediately suspected the administrator of having deducted the money from his pay for his own purposes.

It was clear that balancing the complex Aboriginal and non-Aboriginal demands and expectations of the Durri community was beyond the capabilities and training of the Durri administrator and the Board of Directors in the years leading up to its closure.

Culturally specific health care - beyond a matter of style?

While Durri could be said to have provided a service for the community which was tailored to suit Aboriginal needs, the exact nature of that tailoring warrants examination because it has a bearing on broader issues relating to the provision of segregated health (and other) services.

First and foremost, Durri provided an atmosphere where Aborigines felt comfortable and were free from the kind or scrutiny to which they were subject in any public place in Kempsey. Informality characterised the relationship between staff members and between staff and patients, although this informality was sometimes overplayed by some staff to the point of neglecting patient care. This was largely a management problem however, because I have been in Aboriginal Medical Services where informality and high quality care and attention were blended together most successfully.

Because of the comfortable environment and the free service at Durri, supervision of many patients was greater than would ever have occurred if Aborigines had access only to private practitioners and hospital outpatient services. In particular, many diabetics came every day or two to have their blood sugar tested, and even though their was in most cases poorly controlled, informal dietary and other relevant education took place at these times. This contributed to the practical understanding that many patients had of the relationship between their diet, medication, and disease and of the warning signs of life-threatening blood sugar fluctuations. Such regular supervision was important in the early detection of such changes. Mothers with ill children also seemed to present when symptoms were relatively mild and patients requiring wound dressings usually returned for follow-up care.

What was practiced at Durri, however, was medical care based on a western scientific model of disease causality. Thus, while the services offered to Durri patients were culturally appropriate in terms of style, they may not have been as appropriate in terms of Aboriginal beliefs

about health and sickness. Perhaps both of these components of health care delivery need to be evaluated in any assessment of the benefit of Aboriginal Health Services.

(a) Aboriginal beliefs about sickness and death.

There has been very little attempt to understand the extent to which non-scientific models of health and sickness are still important in urban Aboriginal communities. Researchers have tended to focus, once again, on communities which have appeared more 'traditional'. However, there has almost certainly been some reluctance on the part of people in urban communities to share their alternative explanations with whites. Nevertheless, from my experience, there appear to be two models operating simultaneously. On the one hand the scientific explanation of how someone is sick ('bad heart' or 'sugar') is accepted and in many cases understood. On the other hand why someone is sick or dies (e.g. from a 'bad heart') is frequently perceived as resulting from the intervention of external malicious forces, depending on both the circumstances of the illness or death and on the age and social standing of the victim. In other words, biological episodes may be explained more in social terms - sickness and death may be quite widely seen as outcomes of perturbations in the social\spiritual world.

During 1985, three sudden deaths in the community were attributed to the fact that an old man who had not been through 'the rules' (there were at this time three initiated men still alive) had taught what were allegedly old Dhan-gadi dances to the young tribal dancing troupe in Kempsey, who then performed them in public. A middle-aged man who 'went mad' and died (some years before) was said to have been 'sung' when menstrual blood was put in his drink. Some species of bird in some

circumstances were harbingers of evil or death (see also Reay 1949; Fink 1957), and deaths were believed to come in threes, both phenomena reported also by Gray (1987c) in Aboriginal communities further north. Since sudden death of middle-age-adults is such a marked feature of Aboriginal life, such beliefs obviously help to give meaning to the social reality, but they also show that alternative models of health and disease may still have cogency for urban Aborigines.

Furthermore, the spirits of deceased relatives were still recognised as being benevolently or malevolently active (see also Reay 1945) and of entering living animals such as birds, cats and in one instance a pony (see also Fink 1957). Burning of a deceased person's material possessions immediately after her death, to rid the house of her spirit which was suspected of malicious intent, took place on vacant land at Greenhill in 1985. This is a 'traditional' practice which Reay (1949) believed no longer happened.¹³ In another case, the material possessions of a deceased relative were stored, undisturbed, for 12 months before being shared amongst her family.

Though this discussion barely scratches the surface in analysing urban Aboriginal beliefs about health, sickness and death it does suggest that there may be two systems of understanding, only one of which is incorporated into the provision of health care, even though the health service is run by and for Aborigines. Are healers operating on alternative models still active in urban communities, including Kempsey? Franklin (1984:2) cites an Aboriginal man's explanation of his son-in-law's illness:-

¹³ It is described however, by Kelly (1944).

Its something you whites don't understand. He has done things he shouldn't have done. These old fellows are pretty powerful.

When Franklin asked if the sick man could find a cure for his complaint she was told that he would need to see a 'clever-fellow'.

Could primary health care for Aborigines be more effective if it embraced alternative health practices and if so how? It seems unlikely that the employment of Aboriginal medical practitioners¹⁴ (did they exist) would make a significant difference, for they too would be skilled practitioners of medicine according to a scientific model. It may be that alternative healers have no place in a clinic environment, since the beliefs and the practices of the two could not be melded into a coherent therapeutic approach. It may also be the case that the two systems of understanding have in fact been successfully integrated, so that only informal recognition need be given to alternative explanations of disease causality (social/spiritual). Clinic treatment can thus be focused on the 'how' (of the scientific model) rather than the 'why', in much the same way that many other contemporary religious and other non-scientific models are integrated with scientific medicine.

The issue of Aboriginal beliefs about disease causality also relates to the important area of health prevention. For example, to what extent do Aborigines believe that they are agents in the maintenance of their own well-being (and might therefore be committed to behaviour modification) and to what extent do they believe that external agents are largely responsible? Do people ascribe to the beliefs which underpin

¹⁴ It is also a moot question whether or not the psychosocial difficulties, for example, of women being attended by male physicians, especially for obstetric or gynaecological complaints, would be diminished if the doctor was Aboriginal.

contemporary public health education? If not, many of the health promotion and prevention programs which have been transferred to Aboriginal health services may need to be either modified or abandoned.

(b) social relatedness and health care delivery.

An essential component of the political rhetoric used to justify community control is that local Aborigines are the people best-qualified to work in Aboriginal communities, by virtue of their Aboriginality and social relatedness, rather than their training. Yet in relatively closed communities the employment of insiders poses some problems. For example, confidentiality of patient files was an important issue in Kempsey, and it was clear that patients suffering from complaints they considered sensitive were discouraged from using Durri for fear that information about them would be disseminated by staff members. Gray (1987d:171) has also noted that:

there is a view in some Aboriginal communities that information given to Aboriginal Health Workers may not be treated confidentially but the same reservation is never expressed about [white] nursing sisters.

In Kempsey, an Aboriginal drug and alcohol counsellor employed by the Health Department (NSW) in 1985 soon resigned, in the face of considerable resistance and antipathy, particularly from the residents of Bellbrook who had a severe drinking problem in their community. The failure of this counsellor to survive in an area with many alcoholics in need of support, was attributed by white staff at Durri to the fact that he was 'not local', even though he was married to a Kempsey woman. Aborigines whom I asked about his resignation stated however, that it was partly because he was local that people would not discuss their problems with him. They implied that this was the cause of a good deal of animosity towards him.

Whatever the justification for such beliefs it was apparent that social relations were the primary relations in Aboriginal communities and professional 'distance' was made difficult, if not impossible, by the social knowledge which linked and constrained the provider and his or her client. Furthermore, it was 'un-Aboriginal' to use probing personal questions of the type necessary to elicit information about health and personal habits. This caused both parties to feel 'shame'. When the answers were to be given to someone who was primarily classified as kin or not-kin, and who could use the information to damage the social standing of the respondent, then the provision of services became extremely complex and potentially threatening to both the giver and the receiver. Indeed, from this perspective Aborigines at times seemed to be the least qualified to provide services to people in their own communities, particularly where the service involves the exchange of information which was socially potentially damaging. It was certainly clear that many Durri clients were more comfortable in professional interactions with white staff than with Aboriginal staff and in many instances Aboriginal staff seemed intensely uncomfortable performing some of the tasks which their jobs demanded. Are there sufficient grounds therefore to challenge Foley's claim that:-

the only health delivery services available to Aboriginal people with proven ability to meet the need of the Aboriginal community ... are those controlled by the Aboriginal people (evidence to the Select Committee on Aborigines, Parliament of New South Wales 1981:138)?

Indeed, it may be that community control is more advantageous at the level of control than at the level of provision of health services. However, this is certainly counter to the expressed aim of Aboriginal health service activists, who perceive the employment of white staff as part of the transition to full Aboriginality as more Aboriginal

professional staff become available. It is possible that professional 'distance' can be learned, but does that in turn diminish the cultural specificity of Aboriginal care for Aborigines? Would an Aboriginal provider who has acquired professional distance still be 'of the community' in terms of social relations?

Ambiguities in the rationale for community control

I have attempted to raise some issues about the operation of a community controlled health service, based on my observations of Durri AMS in its final years of operation. There is one other important issue however, which relates more broadly to community-controlled health services in general.

From the beginning, the operation and funding of Aboriginal Medical Services was based on two different philosophies. On the one hand the Commonwealth Government intended from the outset, and consistently maintained, that AMSs were a step towards integrating Aborigines into national health services and not a permanent separate service (Stanbury pers comm), though this was never publicly stated. In the health context then 'self-determination' was to be an interim measure. The Aboriginal philosophy on the other hand was that Aboriginal Medical Services were here to stay and were indeed the only option for long-term improvement and maintenance of Aboriginal health. Couched in the morally and politically potent rhetoric spawned by self-determination, Aboriginal activists called for total control over their own affairs, including health (e.g. Sykes 1978; Briscoe 1981; Foley 1982). Thus the 'ultimate solution [to Aboriginal health problems] is total control of [our] own affairs' (Foley 1982:15).

This claim was picked up by white sympathisers, many of them respected people in politics and public health, and by various government reports, so that it is virtually impossible to find any discussion of Aboriginal health issues which does not provide support for this view (see for example Parliament of New South Wales 1981; McIlraith et al 1982; Franklin 1982; Reid and Kerr 1983; Hollows 1984; Houston 1985)). Only Thomson (1984b:946) strikes a cautionary note which reflects the government's approach, albeit without identifying exactly which programs he is referring to:-

It will still be necessary in the medium-term, of course, to have special Aboriginal health programs, but a closer degree of integration with the comprehensive programs is essential [emphasis added].

While the proliferation of Aboriginal health services of various types during the late 1970s reinforced the Aboriginal philosophy of separate control, and was perceived by them as progress in that direction, the government was at no time committed in any real sense to handing over that control. In fact, according to Waterford (1982) official policy was frequently to attempt to head off the establishment of more separate services and government funding always lagged behind their establishment by local activists. Hollows also (1984:163) notes that there were attempts by white bureaucracy to 'stifle or suppress' Aboriginal Medical Services. There were thus quite contradictory aims and expectations imposed on AMSs.

In the late 1970s financial cutbacks by the federal government led to fixing of the number of Aboriginal Medical Services at twelve (nationwide), and no more funds were available through the Department of

Health for special services,¹⁵ of which there were more than forty throughout the country. Funding for special services was transferred to DAA and the size and influence of the Aboriginal Health Branch in the Commonwealth Department of Health contracted. The latter increasingly fulfilled only an advisory role up until the present time, in spite of the recommendations of the Program Effectiveness Review (PER) 1980-81 which recommended that Aboriginal health become the sole responsibility of the Department of Health.

By the early 1980s less than 5% of the total national spending on health services for Aborigines went to community controlled services (Waterford 1982). In a carefully worded article in the Medical Journal of Australia in 1985 the then Minister for Aboriginal Affairs expressed his government's commitment to respond to the 'thoroughly discriminatory' treatment of Aborigines which is 'a continuing experience' by taking a 'holistic' approach to their health problems (Holding 1985:S42). This holistic approach had led it to rationalise control of health services for Aborigines, by transferring all remaining responsibility for Aboriginal health program funding from the Aboriginal Health Branch of the Commonwealth Department of Health to DAA.¹⁶ This was 'to permit closer integration of health with other services'. However, there was clearly no government commitment to community control of those services.

¹⁵ For example, alcohol rehabilitation services.

¹⁶ This rationalisation was in direct contradiction of the recommendations of the government's own Program Effectiveness Review (PER) 1980-81 which recommended that all responsibility for Aboriginal health be transferred to the Commonwealth Department of Health (Stanbury pers comm). Aborigines involved in the health field were extremely critical of the transfer of health matters to the DAA (Mayers pers comm 1986). The transfer left the Aboriginal Health Branch of the Commonwealth Department of Health with only a limited advisory role.

There has certainly been an expansion of segregated services - by 1985 there were 45 basic health care units (including 12 full Aboriginal Medical Services), 46 Aboriginal-controlled alcohol projects and 9 dental projects funded at a cost of \$13 354 600 (1984/85) (Holding 1985). However, this appears to have occurred without any reconciliation of the philosophical and practical paradox of government support and funding versus community-control and there is as yet no public statement as to the perceived future of such services from the government's point of view. Indeed, as Thomson (1984b) argues there is no coherent long-term national Aboriginal health policy at all! In the meantime, Aboriginal health services continue to provide primary health care to Aborigines, which is essentially divorced from mainstream health facilities. Aboriginal activists clearly believe that separate services are the only viable option, while the government refrains from making a categorical commitment to their long-term survival. This generates considerable uncertainty both with respect to continued funding of existing services and the aspirations of other communities to open new ones.

There are also wider political implications of funding segregated services in a society which is increasingly recognising both its own multi-cultural nature and the validity of multi-culturalism as a basis for social policy. Should all communities whose members have health disadvantages compared to other Australians be eligible for special health services, over and above those already provided by the national health scheme? It is argued that Aborigines have special rights because of the historical context of their dispossession, but the exact basis on which those rights are being recognised has not been spelled

out. NAIHO,¹⁷ in its submission to the Better Health Commission, referred to the fact that the World Health Organisation had adopted the Declaration of the International Conference on Primary Health Care which was held in Alma-Ata (USSR) in 1978. This states:-

That People have a Right and a duty to participate individually and collectively in the planning and implementation of their health needs (quoted in Better Health Commission 1986b:20).

It would appear therefore that NAIHO's appeal for community control of health services is predicated to some extent on the recognition of the rights of all ethnic minorities.

There appear to be two issues involved.¹⁸ The first is the right of ethnic minorities to expect cultural sensitivity in the delivery of health care from the services of the dominant society. The second is whether or not this needs to be translated into minority-community control of separate services. Thus the question remains as to whether or not the Australian public is making moral restitution by funding Aboriginal services, and if so, is this seen as a health 'catch-up' allocation, not available to other minorities and not needed in the long-term?

¹⁷ National Aboriginal and Islander Health Organisation.

¹⁸ There is in fact a third issue which relates to the needs/rights of all communities to have control of their health services. Hicks (1979) for example discusses the argument for lay control of medical resources, arguing that they are currently imbued with the values of practitioners, which are in turn related to the distribution of power and resources within society.

Conflict in the practical application of autonomy/control in health care delivery

A second ambiguity in community-control is that in a very real sense the medical services are not autonomous. They are financially dependent on the government, and therefore publicly funded.¹⁹ As such they remain accountable for their expenditure, must satisfy a government audit and dispose of funds in a manner approved by the government. Amidst increasing budgetary restraint, the apportioning of public funds is coming under ever-increasing scrutiny and restraint, and Gracey (1985) rightly points out that public accountability and 'good-housekeeping' will be a critical component to the future survival of Aboriginal medical services.

Accountability reflects the political reality - public funds cannot be made freely available to utilities to dispose of as they see fit. So how is it that the issue of community-control versus public accountability has been resolved? The answer is that it has not. This is demonstrated by the apparent frustrations which exist between some AMS personnel and the government officers responsible for supervising their spending. For example, programs that a service considers to be critical to improving health in the community are not afforded the same priority by the government and are therefore not funded. An example is the long-running dispute between DAA and the Redfern Aboriginal Medical Service over the funding of a nutrition program (Mayers pers comm; see also Sykes 1977). Similar disputes periodically arose at Durri AMS over the apportioning of funds and the medical staff at times felt extremely frustrated over the Service's inability to spend money on the health

¹⁹ Some Medical Services are funded outright while others 'bulk-bill' Medicare, the national health system, for clinical services.

projects they considered important.

The problem seems to be that the focus on clinical rather than social and preventive health, which is characteristic of contemporary health spending, has been transposed to Aboriginal health services, often with no real evaluation of the specific health needs that particular community. There is thus continuing conflict between Aboriginal communities' perceptions of their needs and the perceptions of government. As with land and housing, political tensions in the health field have to do with the tensions which exist between increasing autonomy and continuing bureaucratic control.

Conclusion

From this discussion it is clear that the health of Aborigines in Kempsey remained poor, in spite of the fact that they had had access to their own medical service for almost a decade. Morbidity and mortality statistics appeared no better than those reported for other Aborigines in the state, and compared very unfavourably with those of the rest of the Australian population.

It is also true however, that Durri AMS had not operated effectively for much of that time. The management was unskilled, both in administration and health care delivery, and was not able to develop health programs or policy. Nor could it ensure that those programs already in place, such as childhood vaccinations, were carried out effectively. Furthermore, while it provided a comfortable social environment in which Aborigines could seek treatment and advice, its health care delivery was hampered to some extent by the constraints imposed on Aborigines as service deliverers in their own community. The primacy of social relations in

social interaction made professional 'distance' and the protection of confidentiality difficult for Durri's Aboriginal personnel to provide and its clients to trust. In addition, there had been no attempt to integrate Aboriginal beliefs about the causes of sickness and death into the health care provided.

It could be argued therefore, that the community's poor health was largely attributable to the inadequacies and inefficiencies of its health service. However, Durri AMS was widely used and in spite of its many difficulties between 1984 and 1986 attendance records showed no decline. Even though preventative programs were non-existent or neglected, people in the community always had access, through the Service, to general practitioners, a dentist, an obstetrician/gynaecologist, a specialist physician and an ear, nose and throat specialist. They also had access²⁰ to a comprehensive range of other health services in Kempsey, Port Macquarie, Newcastle and Sydney, in most cases free of charge. The community was clearly not lacking in health care facilities.

What became clear was that all the health services available to the community, including Durri AMS, were providing ameliorative care only. They were treating diseases that arose as a result of a particular set of social conditions, but they were not treating the underlying causes of those diseases. I suggest that it was in fact quite beyond the capacity of Durri AMS to bring about significant improvements in the health of the Kempsey community. Only by looking to the underlying causes could an explanation for poor Aboriginal health be found.

²⁰ Transport was also provided to these places, either by ambulance or by some other means using Durri AMS funds.

CHAPTER EIGHT

AN ALTERNATIVE PERSPECTIVE ON ABORIGINAL ILL-HEALTH

Low socio-economic status, feelings of worthlessness, lack of educational and employment opportunities, loss of land and racial discrimination have frequently been cited as components of the structural basis of poor Aboriginal health (e.g Parliament of the Commonwealth of Australia 1979; Reid 1979; Parliament of New South Wales 1981; McIlraith et al 1982). It has frequently been assumed however, that these psychosocial variables are expressed through the same proximal causes of poor health as those produced by poor physical living conditions. Thus Taylor (1979:27) argues that unhealthy behaviour such as poor diet and analgesic abuse:-

are likely to be traced to a complex interaction of personal, social and economic factors such as low self esteem, boredom, loneliness, peer pressure, alienation, unemployment, low income, inadequate education, demoralisation, poverty, susceptibility to advertising of disease producing products, accepted cultural mores, frustration, and lack of power to control one's own life.

While this may be true it also seems possible that 'demoralisation ... frustration, and lack of power to control one's own life' are health factors in their own right.

Similarly, there is often an implicit assumption that intermediate variables are responsible for the health changes which accompany rapid sociocultural change. In his major review of the health effects of 'acculturation' Wirsing (1985) focuses solely on the role of diet and hygiene practices, the introduction of new pathogens and so forth. At no time does he consider the role of psychological factors associated with culture change as aetiological factors in patterns of disease. Dressler (1985:260) is critical of such an approach:-

Researchers from a biomedical perspective generally have treated modernization as a proxy variable for changes in diet and physical exertion, a logical inference of no small proportion.

It is perhaps not surprising therefore, that psychosocial variables have received negligible critical attention as causative factors in Aboriginal health, even though they have been recognised as underlying factors. In my view, the main problem has been a failure to address the question of how psychosocial factors may relate to disease and death. I would argue that it is not sufficient to assume that they always operate only through the agency of intermediate variables such as poor diet, though this argument is clearly more persuasive with respect to alcohol abuse.

As a result of the failure of medical science to account for the social distribution of the diseases prevalent in industrialised nations on a purely behavioural basis, stress has emerged as an important and coherent concept in contemporary health thinking (e.g Dodge and Martin 1970; Harrison 1980; Dohrenwend and Dohrenwend 1981; Weiner 1985; Eisdorfer 1985; Dressler 1985). Incorporating a belief in psychosomatic unity, stress theory attempts to account for disease prevalence by considering the impact on anatomy and physiology of psychosocial variables. It is an holistic approach which takes account of the totality of environmental factors which impinge on health.

In the following discussion I will briefly examine some of the research which has demonstrated the inadequacy of behavioural explanations for contemporary patterns of disease. Particularly pertinent here is the consistent cross-cultural finding that health is inversely related to social class. I will then provide a necessarily eclectic overview of theory and research on stress and health which involves taking a quite

broad multi-disciplinary perspective. I will argue that in spite of the fact that stress research is still a developing field, there is sufficient evidence to indicate that psychosocial stress may be an important factor in human health.

Following this, I will re-examine the issues of social and cultural change in Aboriginal communities described in earlier chapters in relation to the literature on stress, in order to analyse the relationship between the social conditions of Aborigines in settled Australia and their contemporary health status. Looking beyond the health picture created by morbidity and mortality data I will also consider other possible indicators of stress in Aboriginal communities such as mental ill-health and alcohol abuse and diabetes.

The social distribution of disease

Epidemiological investigations have improved our understanding of how certain environmental factors (diet, smoking, alcohol consumption etc) affect disease and longevity (Marmot and Madge 1987). At the same time however, such factors are inadequate to fully explain the incidence and prevalence of the diseases which are the major causes of death and disability in the developed world and are increasingly widespread in populations undergoing industrialisation. For example, even though the association between cholesterol and atherosclerosis is

incontrovertible:-

It is paradoxical that in free-living affluent populations no one has convincingly demonstrated a difference in nutrient composition of the diet between persons who develop coronary heart disease and those who do not ... though there is much to suggest that diet may be an important if not the key determinant of blood cholesterol in a population (Kannel 1974:374).

Furthermore:-

all of the known risk factors taken together, while related to age, cannot account for more than a fraction of the striking age trend in the incidence of atheromatosis¹ (Kannel 1974: 365).

Numerous other studies have failed to adequately account for the prevalence of 'lifestyle' diseases on the basis of 'lifestyle' factors. For example, a coronary heart disease gradient in Japanese men living in Japan, Hawaii and California could be only partly explained by the prevalence of risk factors in the three populations (Marmot et al 1975). Similarly, a major cross-cultural study of obesity and coronary heart disease could not find any significant relationship between measures of relative weight and death or myocardial infarction (Keys et al 1972). Neighbouring towns in the United States have been found to have a two-fold difference in deaths from myocardial infarction, unexplained by dietary or other physical factors (Stout et al 1964). Furthermore, the incidence of coronary heart disease has changed over time so that it now affects the lower classes more than the upper classes, and rural-urban differences in incidence are found in developing countries but not in industrialised nations (Marmot 1980).

Blood pressure shows an upward gradient in Black Africans, Jamaicans of African ancestry and American negroes, while Polynesian migrants to New Zealand show a rise in plasma lipids with migration even though the diet of the non-migrants is higher in fats (Marmot 1980). Blood pressure in Polynesians (Zimmet and Whitehouse 1981) and West Africans (Trowell 1981) has been shown to increase with increasing modernisation, and below standard energy intakes have been recorded in an urbanised ethnic minority with high levels of obesity (Wright St Clair 1972).

¹ The degenerative vascular changes associated with cardiovascular disease.

In addition, the argument that dietary change is largely responsible for contemporary patterns of disease (see the edited collections of Burkitt and Trowell 1975, of Trowell and Burkitt 1981; Chong 1983)² is countered, to some extent, by the lack of concrete evidence linking specific dietary factors to disease (e.g. Henry and Cassel 1969; West and Kalbfleisch 1971; Kolasa 1978; Mann 1982). For example, a high fat diet is thought to increase the risk of developing coronary artery disease yet the Inuit derived the bulk of their energy from fat and had a very low incidence of coronary artery disease.

As noted in chapter one, it is also a consistent finding of epidemiological studies that health is inversely related to social class. While some of the observed differential in morbidity and mortality statistics between social classes may be attributable to the social distribution of deleterious health variables such alcohol abuse and poor diet, it is impossible to account for other health differentials purely on this basis.

Why is it that death rates from atherosclerotic heart disease are consistently higher for whites than for nonwhites [in the U.S.]? If this is a matter of race, why is it that both white and nonwhite males consistently have higher rates than females ...why do widowed persons have higher rates [of atherosclerotic heart disease] than the single, married or divorced? Is this merely a matter of the greater age of the widowed? Apparently not, since the highest rates among the widowed occur in the younger rather than the older age categories. [Why is it that] coronary heart disease is persistently higher along the eastern and western seaboard than in the inland, rural farm states [and the] age-adjusted death rate for coronary heart disease in New York is consistently and appreciably higher than the age-adjusted death rates from all causes in North Dakota? (Dodge and Martin 1970:9)

² Some of these theorists adopt the view that the western diet deviates from that to which humans are adapted, and that diseases such as diabetes, obesity, hypertension, atherosclerosis, and diseases of the bowel are due to this dietary change (see Boyden's (1970) theoretical discussion of 'biological maladjustment').

The inability of modern medicine to account for the sociocultural distribution of disease³ has increasingly been attributed to a narrow and inadequate perspective of the environment as it relates to health. Particularly noticeable has been 'the failure to take the role of the psychosocial environment properly into account' (Marmot and Madge 1987:3; see also Dodge and Martin 1970; Harrison 1974; Windschuttle 1979; Doyal 1981). In response, there has been an intensification of interest in this area by researchers in many fields including epidemiology, sociology, anthropology, psychology, neurophysiology and immunology, and a stress model of disease (Dodge and Martin 1970) is being developed.

Stress and disease

Experimental interest in the role of psychosocial factors in disease has been traced back to the work of Cannon (Dohrenwend and Dohrenwend 1974) who in the late 1920s observed that strong emotional arousal led to changes in basic physiological processes.⁴ The most influential early work however, was done by Selye (e.g 1956) and by Wolff (1953), both of whom applied (the concept of stress) to disease. Subsequently, stress has become an overworked and ill-defined concept (Cassel 1976; Eisdorfer 1985; Weiner 1985; Marmot and Madge 1987). The term is used

³ It has in fact been argued that the failure of modern medicine to come up with more concrete answers to the health problems of today lies at the basis of the victim-blaming ideology of 'lifestyle' disease (Crawford 1977).

⁴ Henry and Stephens (1977) attribute the early development of the field of psychosomatic disease to Donnison (1938) and Halliday (1949). Donnison's interest was aroused by the absence of hypertension in over 1800 patients admitted to his hospital on the shores of Lake Victoria in Kenya. Halliday developed a theory of disease related to sociocultural upheaval and the changed conditions of humans in industrialised societies.

interchangeably in medicine to denote both cause and effect, resulting in the tautology that stressors are stimuli which cause stress and stress is caused by stressors (Eisdorfer 1985). In the popular view, stress has become synonymous with psychosocial stimuli, believed to have negative effects on physical and mental health. Selye (1956) and Wolff (1953) both defined stress as a bodily state which is induced by noxious environmental stimuli, essentially an adaptive response, and both were interested in sociocultural factors as causes of stress. Weiner, while supporting the concept of stress as a state rather than a stimulus, argues that since Selye's original formulation was based on his studies of neurophysiological responses to physical assault - heat, cold, wounds, fractures, and infections, but also danger - subsequent use of the term should be confined to responses to frankly traumatic events, that is 'to clearly specified, natural, and man-made catastrophes and disasters' which result in actual or threatened physical harm (Weiner 1985). Events of daily life, such as bereavement, migration, retirement and poverty, should not, he argues, be subsumed under the rubric of stress. I would argue that this narrow definition does not do justice to Selye's own subsequent interest in the panoply of harmful stimuli which constitute the environment, nor does it seem to be particularly helpful in delineating the boundaries of stress research. Even Weiner himself goes on to discuss numerous reported associations between mundane negative life events, and morbidity and mortality. Regardless of whether or not they were included in Selye's original formulation, sociocultural factors, and everyday life events, have been developed as major research interests in the field of psychosomatic medicine.

While there appears to be some consensus that the use of the term stress should be confined to bodily responses to environmental stimuli,

contemporary research application of the concept seems to deviate from Selye's original formulation with respect to its empirical measurement. According to Selye (1956) stress is adaptation to environmental stimuli, and chronic diseases are diseases of adaptation. Thus he argues that stress is observable only as outcome, in the form of changes to the structure and function of organs. It now seems to be widely accepted however, that measurable physiological responses to threatening stimuli constitute empirical proof of stress.

A large body of research has documented physiological responses to unpleasant stimuli, such as fear and anxiety, in humans.⁵ These include changes in blood pressure, heart rate, respiratory rate and skin conductance, and in serum levels of insulin, glucose, free fatty acids, cholesterol, triglycerides, catecholamines, cortisol, uric acid, growth hormone, renin, prolactin, thyrotropin and testosterone (see Weiner 1985). At least some of these variables are recognised as factors in the aetiology of certain diseases, e.g raised serum cholesterol and hypertension in the development of atherosclerosis.

According to Dodge and Martin (1970:42):-

the hypothesised causal sequence that the psychosomatic school of medicine adheres to is that sustained emotional disturbance ... leads to chronic functional disturbances of organs, which eventually leads to tissue changes and chronic organic disease.

Thus neurophysiological responses (stress) have a direct influence on organ pathology. However, the specific neurophysiological pathways by which stress results in physical pathology are not well understood, and studies on stress-related conditions do not always support the hypothesis that changes in body chemistry in response to negative

⁵ There is of course an even larger body of experimental research on animals which will not be reviewed here.

stimuli lead to disease (Eisdorfer 1985). There are also some stress/pathology associations which are claimed to be rather weak e.g. that of essential hypertension and stress (Mann 1986), although others argue that responses to the social environment may be highly significant to the aetiology of this condition (Henry and Cassel 1969).

It is clear from Cassel's (1976) discussion of the relationship between the social environment and disease that there is an alternative school in psychosomatic medicine which rejects the notion of sociocultural variables as specific aetiological factors. Rather it is argued that they act as:-

conditional stressors [which] will, by altering the endocrine balance in the body, increase the susceptibility of the organism to direct noxious stimuli i.e. disease agents (Cassel 1976: 109).⁶

Thus, while sociocultural variables are not themselves disease agents, they lower bodily resistance to disease agents and the:-

clinical manifestations of this enhanced susceptibility will not be a function of the particular psychosocial stressor but of the physicochemical or microbiologic agents harboured by the organism or to which the organism is exposed (p109).

Support for this hypothesis is derived from investigations of the pathological consequences of loss in animals which indicate that a number of organs can be affected (Henry and Stephens 1977; Cassel 1976), suggesting a generalised response to stress. Human studies have also shown that similar sets of sociocultural circumstances characterise people who develop tuberculosis, schizophrenia, become alcoholics, have multiple accidents and commit suicide (Cassel 1976), and victims of

⁶ Cassel (1976) subsequently admits that he may have to retreat from a complete rejection of the aetiological-specificity formulation, since recent data suggest that certain disease manifestations are associated with depression and hopelessness.

disasters display a wide variety of symptoms and diseases (Weiner 1985). Widowers have been found to have a death rate three to five times that of age-matched married men, for all causes of death (Kraus and Lilienfeld 1959). Hinkle and Wolff (1961, cited in Scotch and Geiger 1963) have argued that hypertension is just one of many diseases experienced by those who find life demanding, threatening or frustrating. Hinkle (1974) has also shown that in several different populations subjected to social change a small proportion of (susceptible?) subjects was responsible for the majority of disease episodes. A study of sickness episodes in U.S. school children in the 1940s found that illness and repeated illness in children correlated with illness in other children in the families of the 'at risk' children (Downes 1945).⁷

Baker (1987:1,8) reviews the literature which relates to a possible connection between 'psychological stress, the immune system, and human infectious, neoplastic and autoimmune disease' and asserts that 'there is now sufficient evidence to say that the emotions have important effects on the immune system'.⁸ According to Baker (1987:3), recent animal experiments suggest that further research will demonstrate:-

a general pattern in which acute stimulating stress alerts the immune system whereas chronic, frustrating stress ultimately impairs it.

⁷ Surprisingly, attacks of childhood communicable diseases were excluded from the evaluation of illness episodes in the school children on the assumption that 'these conditions do not select the sickly child for attack' (Downes 1945:594). However, according to a stress model of disease, which Downes was implicitly exploring, reduced susceptibility would render the at risk children more vulnerable to disease of all causes, including infections.

⁸ Nevertheless, others have noted that experimental results are not unequivocal (Solomon and Amkraut 1974).

The extremely complex nature of neurological modulation of the immune system is one of the major research challenges in this field.

Investigations of the neurophysiological basis of pathological changes due to stress are relatively new, and the evidence fragmentary. It seems reasonable to assume however, that both the approaches to psychosomatic research outlined above - that which attributes specific aetiological significance to stress and that which focuses on generalised increased susceptibility to disease as a result of stress - will contribute to an improved understanding of the role of stress in disease. In the meantime the coherence of a stress model depends to a significant extent on epidemiological studies which demonstrate associations between sociocultural variables, psychological factors and physical disease. As Eisdorfer (1985:12) argues:-

[Using] risk factor models... we now appreciate that it is not necessary to have a meticulous understanding of the [adverse effects of a disease agent] in order to make statistically significant predictions about its undesirable disease consequences.

There is mounting evidence that negative life situations of both an acute and chronic nature are associated with an increased incidence of mental and physical disorders (Holmes and Rahe 1967; Dodge and Martin 1970; Henry and Stephens 1977; Windschuttle 1979; Dohrenwend and Dohrenwend 1981; Brenner 1985; Eisdorfer 1985; Weiner 1985; Marmot and Madge 1987). Low socio-economic status (e.g. Dowding 1981; Moser et al 1984), social disadvantage (e.g. Neser et al 1971), bereavement (e.g. Kraus and Lilienfeld 1959), rapid social change (Tyroler and Cassel 1964), migration and 'acculturation' (e.g. Marmot and Syme 1976; Cruz-Coke et al 1964), adverse childhood experiences (e.g. Andrews et al 1978), negative life events (e.g. Holmes and Rahe 1967, see also Creed

1985), and catastrophic events (Weiner 1985) are some of the sociocultural variables which have been linked to increases in morbidity and mortality. Type A Behaviour Pattern⁹ may be associated with increased risk of coronary heart disease (Byrne 1987).

It is also evident that different individuals and groups respond differently to negative psychosocial events and situations. This has fostered research interest in the mediating effect of such variables as age, sex, personality type, 'coping' ability, the 'meaning' of events, and social support networks. (e.g. Solomon and Amkraut 1974; Cassel 1976; Henry and Stephens 1977; Andrews et al 1978; Weiner 1985; Eisdorfer 1985). In particular, social support networks seem to have a significant effect on responses to sociocultural stressors. Other studies suggest that cultural cohesion, in the face of challenges to the social order, has a mitigating effect on disease (see below).

While the mechanisms by which sociocultural variables (acting as stressors) result in disease are not clearly understood, there appears to be sufficient evidence to consider that they may make a significant contribution to the totality of environmental stimuli which impinge on health. How does this developing body of cross-cultural and interdisciplinary research elucidate continuing poor health in Aboriginal communities?

⁹ 'An action-emotion complex ... that can be observed in any person who is aggressively involved in a chronic, incessant struggle to achieve more and more in less and less time ... against the opposing efforts of other things or persons' (Freidman and Rosenman 1974:67).

Sources of stress in Aboriginal communities

While there are undoubtedly many sources of stress in Aboriginal communities, some tend to stand out, from both historical and contemporary analyses, as being particularly important. I have therefore focused on the following - dispossession and institutionalisation; separation and loss; unemployment; and alienation and equity. Also mentioned, but discussed in less detail are stigmatization and 'assimilation'.

(a) dispossession and institutionalisation.

Weiner (1985) differentiates between catastrophic and mundane negative life events, further differentiating between natural (fire, flood etc) and man-made catastrophes (war, terrorism etc). Few would gainsay the catastrophic nature and stressful effect of the early period of white settlement in Australia, from an Aboriginal perspective. Social and economic disruption, warfare and disease resulted in cultural disintegration and a dramatic early decline in the population. While much of the population decline due to disease is attributable to the introduction of biological pathogens to which Aborigines had not been previously exposed, it could also be argued that sociocultural factors were partly responsible for the very high mortality, due to increased susceptibility to disease.

As noted in chapter two, this early social disruption was followed in New South Wales (and in other states), by the 'protection' era with the legal forcible removal of children, the establishment of reserves and stations under varying degrees of government control,¹⁰ and all-

¹⁰ It might be argued that many aspects of station life are reminiscent of incarceration in prisoner of war camps, thus constituting what Weiner (1985) classifies as a man-made catastrophe.

encompassing restrictions on Aboriginal movement and behaviour. The lived experience of most of Kempsey's adults begins in this era at the AWB station at Burnt Bridge, the town camp at Greenhill and other reserves in the region. This is not a forgotten past but remains very much alive in their memories. Lack of health statistics and analysis have prevented any comprehensive evaluation of the health effects of 'protection'. However, a recent Queensland study provides some insight into the nature of possible relationships between psychosocial variables and health on government reserves.

Queensland is the only state in Australia still maintaining manager-controlled reserves which in 1978 were home to 11 463 people. Lincoln et al (1983a and 1983b) calculated mortality rates and relative risks of death for four categories of cause of death (cardiovascular disease, infections, accidents and violence, and all other causes) in the fourteen reserves, using data for 1976-80 provided by the Department of Aboriginal and Islander Affairs (Queensland). For all four categories, mortality rates significantly exceeded those of the Queensland population. Reserve Aborigines were almost nine times as likely to die from pneumonia as the rest of the Queensland population. They also had almost three times the risk of death from accidents and violence, and over twice the risk of death from cardiovascular disease and all other causes. There was however, considerable variation between reserves - four reserves had death rates from cardiovascular disease between three and four times the Queensland rate, while one reserve had a death rate from accidents and violence which is six times the state average. The implications of these findings are surely understated when the authors conclude that they 'raise doubts about the benefits derived from the reserve system by Queensland Aborigines' (Lincoln et. al. 1983: 360).

The observed variation between reserves was the subject of a subsequent study which investigated the associations between mortality rates, causes of death and a number of 'socioenvironmental' variables (Trigger et al 1983). Each reserve was ascribed to one of two groups within each of the following variables - whether or not it had been a receiving place for people relocated from other areas of the state and is located near a town or urban centre; tribal homogeneity on the reserve; population size; whether or not the community has a beer canteen; the presence or absence of predominantly European-style housing; whether the sanitation is predominantly sewerage/septic or sanitary pan/pits; the type of administration (church or government) before and after 1957;¹¹ the racial descent of the group; and finally the degree of 'traditionality' (ceremonial life, language and the use of bush resources).

For all causes of death combined significant differences in mortality rates were associated only with administrative history and tribal homogeneity. Reserves controlled by the government both before and after 1957 had higher mortality rates than those which historically had some church administration.¹² Tribally heterogeneous communities (consisting of sub-groups whose members originally come from areas more than 100 kilometres away) had higher mortality than more homogeneous reserves.

There were however significant associations between the different

¹¹ After 1957 the Queensland government began taking over many of the church-run reserves.

¹² Nevertheless the total death rate for one of the church reserves is amongst the highest of all the reserves.

variables and causes of death. For example, significantly higher death rates from cardiovascular disease were associated with being a receiver of relocated people and close to an urban centre, the majority of dwellings having sewerage/septic sanitation, the majority of residents being of mixed racial descent, and the population less 'traditional'. Death rates from infectious diseases were positively associated with less tribal homogeneity and large population size (in excess of 800 people). For deaths from accidents and violence the positive associations were with being a receiver of relocated people and close to an urban centre, having a beer canteen, having predominantly European-style housing, having predominantly sewerage/septic sanitation, having always been administered by the government, having predominantly people of mixed racial descent, and having a less 'traditional' population. For deaths from all other causes being a receiver of relocated people and close to an urban centre, having a majority of European-style housing, having predominantly people of mixed racial descent, and having a less 'traditional' population show positive associations.

What inferences can be drawn from this? Firstly, it would appear that some of the variables may have been linked. For example, closeness to an urban centre may have been related to having predominantly sewerage/septic sanitation; predominantly European-style housing to predominantly sewerage/septic sanitation; and predominantly mixed racial descent to less traditionality. However, Trigger et al (1983) do not appear to have tested for possible associations between the variables themselves. Thus, they find the association between improved sanitation and increased deaths from cardiovascular disease 'difficult to explain' (362) even though there is also an association with closeness to an urban centre. Nevertheless, their research raises the

possibility that the psychosocial effects of historical, cultural and social variables had had a significant effect on the health of these communities. It can be assumed that at least some of the stresses to which these communities were subjected were shared by institutionalised communities elsewhere in Australia, including that at Burnt Bridge before 1969.

One variable consistently related to increased mortality rates from all four categories of cause of death was being a receiver of relocated people and close to an urban centre. Trigger et al (1983:362) note that closeness to town may be important in that it 'may be related to greater stress and hypertension' while more remote communities suffer less from 'intercultural and interracial interaction and conflicts'. This point is particularly relevant to Kempsey. Although the town to which a reserve was close must have affected the extent to which intercultural and interracial contact resulted in 'conflict', there is no question that for Burnt Bridge residents proximity to Kempsey was a source of considerable stress.

Trigger et al's comment about stress and hypertension might also be related just as readily to the other component of that variable, namely being a receiver of relocated people. Others (Reay and Sitlington 1948; Bell (1965) have described the tensions produced elsewhere (in New South Wales) by migration and resettlement. But what produces these tensions? Although Cawte (1969) has attributed mental illness amongst Aborigines to high density camp life, it seems much more likely that who is living in the camp is more critical than absolute density. While animal experiments show that chronic social stress due to crowding produces a variety of somatic diseases, particularly of the

cardiovascular system (Henry and Stephens 1977), Cassel (1976) points out that it is not crowding per se which is incompatible with good health. Some of the highest density societies enjoy high levels of physical and mental health. He argues rather that the critical factors are changes in group membership and disruption to the usual order of social relationships¹³ are the critical factors. Support for this hypothesis may be found in von Sturmer's (1973) analysis of intra-group hostilities in northern Australia. Even Cawte (1969, cited in Moodie 1973) observed an increase prevalence of mental illness amongst Aborigines resettled on Mornington Island compared to the island's original inhabitants.

What then were the nature and extent of the stresses on both the local residents and the relocated people from the north when Burnt Bridge became a station and remained isolated under government control for over thirty years? Ex-residents of Burnt Bridge do not readily discuss with outsiders internal divisions in the community created by the mass resettlement of residents from Yellow Rock in 1937. However, since some of the current tensions over rights to power and land in Kempsey relate to who is seen to 'belong', it might be inferred that the resettlement had a profound effect on the sub-groups forced together at Burnt Bridge.

Clearly, there are historically-based attachments and loyalties which have developed around camps and reserves. These attachments would have reinforced particular patterns of group allegiance and interaction, and of co-operation and conflict when 'outsiders' were forcibly settled in. Overcrowding, forced containment and poor living conditions would have

¹³ Experimental changes such as this in animal populations are associated with significant changes in neuroendocrinal regulatory systems.

made social distance difficult to maintain. It is therefore not surprising that there has been a history of disputes and conflicts over issues to do with local group access to, and control of, old reserve lands such as Burnt Bridge.

It is not surprising that Trigger et al (1983) have also shown that improved physical conditions did not ensure improved health. Those reserves with predominantly European-style housing and urban-style sanitation did not appear to have a health advantage over the reserves without these facilities. Similarly, resettlement in Kempsey for most of the residents of Burnt Bridge did not appear to have brought about a dramatic reduction in overall morbidity and mortality, though there was a change in the main causes of death from infectious to degenerative diseases. Even morbidity from intestinal worm infestations however, commonly associated with poor housing and sanitation, remained extremely high. Thus the failure to control infectious diseases, even with improvements in physical conditions, was at least partly attributable to the continued presence of adverse sociocultural factors which lowered resistance to disease.

Reid (1979) refers to Goffman's (1961) analysis of the effects of institutionalisation in order to explain Aboriginal responses to the reserve experience which she notes include violence, withdrawal, self-destructive behaviour and passive compliance (see also Wilson 1982). However, if we apply the stress model of disease to these communities we would expect to find that the burden of sociocultural stressors was reflected not only behaviourally but in chronic disease as well, and this appears to be supported by the Queensland study. Other populations subjected to similar experiences, such as North American Indians, have

had similarly high rates of disease and death (e.g U.S. Congress 1986).

(b) separation and loss.

Perhaps the most neglected aspect of the impact of the 'protection' years on Aboriginal health is the effect of the removal of children, which may have involved as many as one in every six or seven Aboriginal children in New South Wales during the years of the APB\AWB (Read n.d.). Gale's (1972) study showed that almost one half of Aboriginal children in Adelaide aged 10 to 19 years at the time of her survey had been separated from their families at some time. Weiner (1985:61) writes that:-

loss, separation and bereavement [is one the two events] most fully studied in their psychobiological panoply ...

and that:-

Human relationships, it seems, are crucial to the maintenance and restoration of physical and of psychological well-being. Their disruption is a potent factor in ill-health and disease. It also seems likely that human relationships play a central role in the proper development, maintenance, and usual regulation of bodily systems; this assertion stems from the study of young animals in which premature separation affects every bodily system and places them at risk for a variety of diseases (p65).

Reviewing the relevant literature he continues:-

Real or threatened separation and bereavement have been cited as one specific factor contributing to the onset of a variety of diseases [in adults] - anorexia nervosa and bulimia, autoimmune diseases, bronchial asthma, malignancies, diabetes mellitus, peptic, duodenal and gastric ulcer, leukemia, Grave's disease, essential hypertension, congestive cardiac failure, myocardial infarction, abdominal pain, ulcerative and granulomatous colitis, tuberculosis, the complications of pregnancy, postpartum depression, and most psychiatric illnesses (p75).

There is comparatively little published material on the social and psychological effects of the separation of Aboriginal children from their families and from their cultural environment. Gilbert (1977) Edwards (1982) Miller (1985) and Read (n.d.) provide some poignant

personal accounts of the removal of children and of institutional life in the Board's Homes.¹⁴ Rejection of Aboriginality, withdrawal, alcoholism, mental illness, and the subsequent abandonment of their own children by women who were institutionalised as girls, are some of the psychosocial legacies of these events. Eastwell (1985) has noted the high incidence of depression in Aboriginal women whose children had been removed from them.

A number of overseas studies have looked at the effects of separation and loss on health. An English study by Schmale (1958) found a high incidence of real or threatened loss immediately prior to hospital admission in a group of patients, and an even higher incidence of real or threatened loss during the first sixteen years of life in the same group. He identified a constellation of psychosocial variables associated with loss which he defined as helplessness/ hopelessness, and which he postulated are related to biological vulnerability. His co-worker Engel (1967) later refined this model of the psychological setting of somatic disease as the 'giving up - given up' complex.

The theory and research which relates to separation and loss also needs to be applied to the premature death of adults in Aboriginal communities. There has been little attempt to assess its impact on Aboriginal communities. Moodie (1973:118) has considered the social 'wastage' of infant deaths, but in terms of family and community social fragmentation and stress, premature adult deaths must also be significant. That many of the death can be considered 'premature' is demonstrated by the fact that death rates in the thirties and forties

¹⁴ There are now also a small number of films which include accounts of these events e.g. A Lousy Little Sixpence; My Brown Skin Baby.

age groups have been reported as 'ranging up to 10 to 15 times higher than death rates in the same age groups for other Australians' (Gray 1987a:16; see also Julianne et al 1983; Thomson 1983a).

This pattern of death undoubtedly has a profound effect at both the personal and community levels. Aboriginal families and communities regularly lose their senior (and influential members) who under other social conditions might have been expected to live for another thirty or more years. This causes, amongst other things, discontinuities and disjunctions in the working out of new systems of power and authority which is taking place in urban Aboriginal communities.

Gray is the only one to have looked at some of the social consequences of high adult mortality in Aboriginal communities. He found that many of the single-parent households in his study 'are what they are because the other parent has died' (Gray 1987a:16). He has also identified parental loss as a major feature of the social disadvantage of Aboriginal children:-

The percentage of young people with both parents living decreases from 89 per cent of 11-13 year-olds to 78 per cent of 14-16 year-olds and only 60 per cent of 17-19 year-olds. Of the 78 young people aged 15-19 [in the study area], 31 per cent had lost at least one parent (p16).

Although he provides no figures for comparison he argues that the proportion of non-Aboriginal children who have lost a parent by death is:-

tiny by comparison [and that] parental death and preceding parental illness is a constant accompaniment to the process of growing up Aboriginal (p16).

Further research in Aboriginal communities is also needed to explore the possibility that the high rate of adult mortality is both cause and

effect of poor Aboriginal health. Overseas studies have shown for example, that widows have a higher mortality rate than their married counterparts. One such study is that of Kraus and Lilienfeld (1959) who analysed all deaths in the continental United States from 1949 through 1951. They found that relative mortality was lower for married people than for single people for all age groups, causes of death, sex and colour. Amongst the not-married (single, divorced and widowed), relative mortality was highest amongst the widowed and the excess mortality in the widowed compared to the married was highest in the younger age groups. Thus, there is some evidence to suggest that not only does widowhood increase the risk of death but the disruption to usual life expectations caused by the premature loss of a partner may have severe health consequences. To what extent might early adult deaths in Aboriginal communities be a cause of further early adult deaths? Significantly, Gray (1987a:21) has found that Aboriginal children who have lost their fathers 'are also much more likely to have lost their mothers' [emphasis added]. Aborigines are very aware of their high death rate; as one man said to me 'all our people are dyin'. The seemingly too frequent funerals are solemn occasions involving very large numbers of people from both local and more distant areas. Loss is keenly felt throughout both the kin group and the community as a whole.

(c) unemployment.

It is my impression from the time spent in Kempsey that the psychosocial impact, as opposed to the economic impact of unemployment in Aboriginal communities has been vastly underrated. Weiner's (1985:61) statement that 'forced unemployment uncovers the vital role of work'¹⁵ in the lives

¹⁵ I am interpreting work as meaningful labour, not simply as employment or wage labour.

of human beings' is probably no less true for Aborigines than for any other group. Langton (1981:19) writes:-

The anomie and signs of marginality that have been observed in poor, urban Aboriginal populations may be responses to ... [among other things] ... the diminution of particular male roles where Aboriginal men are forced into menial employment positions, or worse into unemployment ...

Reid (1979:8) also describes the 'body blow' to Aboriginal culture and society associated with the loss of meaningful labour.

Unemployment, in capitalist economies, is associated with increases in depression (Windschuttle 1979; Brenner 1985; Weiner 1985), suicide (Windschuttle 1979; Moser et al 1984; Brenner 1985), alcohol and tobacco use (Weiner 1985), marital breakdown (Windschuttle 1979), mortality (Moser et al 1984) and rates of physical disease (Windschuttle 1979; Weiner 1985). Increases in first admissions to New York mental hospitals throughout this century, associated with declining employment rates, hold true for both sexes, all marital status categories, and thirty four ethnic groups (Brenner 1985). Unemployment has also been found to affect the health of the wives of unemployed men (Windschuttle 1979; Moser et al 1984; Weiner 1985) and their children (Windschuttle 1979).

In considering the possible significance of these findings for Aboriginal communities, it is necessary to consider the ways in which Aborigines differ from the economic mainstream of capitalist societies. Much of the literature focuses on loss - of income, of status, of friends, of meaningful activity and so forth (Brenner 1985; Weiner 1985). Changes in blood pressure, serum uric acid and serum cholesterol were recorded in men who lost (or were about to lose) their jobs (Kasl et al 1968) and models of psychosocial adaptation to unemployment focus

on unemployment as undesirable change (Windschuttle 1979).

In Aboriginal communities such as Kempsey however, unemployment has been the usual state for the majority of working-age adults throughout their lives. It constitutes economic disadvantage vis-a-vis the dominant society, but not vis-a-vis the minority group, and it is much less likely to be associated with loss of employment. Loss of social integration, identified as a critical outcome of unemployment (Weiner 1985), may be less relevant in Aboriginal communities. Thus while unemployment perpetuates Aboriginal exclusion from the social mainstream and constitutes an element in discrimination and alienation, it may be positively integrative in the context of the minority social group. Indeed, conflict associated with employment, particularly in relation to pressures to share may, in part, account for the distress frequently observed in working Aborigines (see chapter three).

The psychosocial meaning of unemployment to Aborigines remains to be investigated, as do the meaning of concepts of work and leisure.

However, productive activity is the mainstay of daily life in all societies and there is no reason to suppose that it is any different for Aborigines. The popular view is that Aborigines are not only incapable of work but that they do not wish to work, are lazy and unreliable. It may well be that some Aboriginal unemployment is voluntary, but it has evolved from a life experience of extremely low job security, low expectations, low wages and wage inequity, and menial and often dirty labour (see chapter two). The Aboriginal Kempsey experience of labour has often not been a positive one. Thus the socially integrative aspects of unemployment for Aborigines may provide a basis for the rejection of insecure, poorly paid, menial (and often meaningless?)

labour, particularly since the welfare system provides the group with internal income equity. Nevertheless, it would appear that satisfying work conditions, appropriate to Aboriginal values and expectations, are necessary for sustained social reform for Aborigines.

(d) alienation and inequity.

It is a 'robust and replicable' (Mirowsky and Ross 1986:23) finding of sociological research that there are:-

four basic social patterns of distress ...; (a) The higher one's social status the lower one's distress; (b) women are more distressed than men; (c) married persons are less distressed than unmarried persons, and; (d) the greater the number of undesirable events in one's life the greater one's distress.

In attempting to account for the observed social patterning three major themes have been identified, including alienation and inequity (Mirowsky and Ross 1986). While it clearly remains to be demonstrated that the patterns of social distress described above are cross-culturally 'robust',¹⁶ these concepts suggest other possible sources of stress in Aboriginal communities.

(i) **Alienation:** Seaman's (1959) classic definition of alienation is in terms of powerlessness, self-estrangement, isolation, meaninglessness and normlessness. Mirowsky and Ross (1986) review the relevant literature, some of it cross-cultural, on related concepts which have been developed from Seaman's original ideas; they are control, commitment, support, meaning and normality.

✓ Lack of control or powerlessness has been identified as probably the

¹⁶ What little data there are suggest that observed sex differences in distress hold true for Aborigines (Nurcombe 1970; Sculthorpe 1980).

most important psychosocial variable impinging on social distress (Mirowsky and Ross 1986). It refers to people who believe they have little influence over what happens to them, that there is no way they can solve their problems, that life is a matter of chance.

Powerlessness is learned through social interaction and personal experiences which demonstrate that personal choices and efforts are unlikely to affect the outcome of situations.

It is an historical and contemporary fact that Aborigines have had very limited control over their own lives (see for example Howard 1982; Miller 1985). Indeed, powerlessness sums up the Aboriginal experience under the AWB (see for example Rowley 1978; Goodall 1982) and to a lesser extent pertains to the transition to desegregation and the contemporary reality. Thus:-

the fundamental changes which [have] occurred since the advent of Europeans can be summarised as a loss of control and autonomy ... by Aboriginal individuals and communities (Reid 1979:9).

Aboriginal 'stress-related' disease has been attributed in part to 'a perception that social and personal crises are beyond one's ability to change or control' (Parliament of the Commonwealth of Australia 1979:26). Poor health has been recognised as a product of 'poverty and powerlessness ... related to dispossession and discrimination' Thomson (1984b:946). Rowley (1978:114) writes of Aborigines in settled Australia:-

people may ... reach a situation so degrading that they reject the notion that any common action may improve their lot. Hopelessness breeds cynicism and cynicism looks like apathy to those [who are] ignorant of the real history.

In Kempsey I was impressed by people's fatalistic approach to problems and difficulties, a response which has been identified as a product of a

sense of powerlessness (Mirowsky and Ross 1986). Nurcombe (1970:90) describes 'fatalism, helplessness, dependence and inferiority' as outcomes of socialisation in fringe-dwelling environments, and alienation is surely depicted in Briscoe's (1974) description of apathy and disorder amongst Aborigines in Redfern. Reay (1949:113) quotes one of her informants as saying, 'Our life is wasted. There's no hope for us now'.

The concept of commitment refers to ideas like freedom, self-expression, involvement and identification, while support has to do with the perceived warmth and intensity of an individual's social contacts. Meaning and normality refer to the cognitive order of the social world; role ambiguities, and disruptions to the normal sequence of social events result in alienation and distress (Mirowsky and Ross 1986). It seems to me that all of these concepts are highly relevant to both the historical and contemporary situation of Aborigines. Dispossession, marginalisation, containment, and forced 'assimilation' resulted in disorganisation and disintegration of every aspect of Aboriginal social life; ritual life and traditional structures of power and authority, marriage rules and the roles of men and women, the socialisation of children, control of resources and the nature of production and labour, and social relations all underwent drastic change. While the most dramatic changes may have occurred after the initial contact with white society, there is ample evidence that adjustment and change have been part of the continuing experience of Aborigines in settled Australia to the present day. The removal of children and the consequent disruption in socialisation, the inclusion then exclusion of Aborigines from the labour market, the comparatively recent loss (within living memory for some adults) of ritual life and language, and the breakdown in marriage

rules, are just a few examples of recent changes.

Negative stereotypes based on race challenged (and continue to challenge) the identity of self and society, responses to which include radical assertion or rejection of Aboriginality, or self-effacement in an attempt to 'assimilate' (see also Wilson 1970). Furthermore, lack of involvement or fulfillment in the wider economy has created 'structural inconsistency' (Mirowsky and Ross 1986:27), in that Aborigines are frequently denied the 'resources and opportunities' to attain the 'goals, purposes and interests' defined for them by that society.

A number of studies attest to the significance to health of social change. One of these is the study (cited above) of differential myocardial infarction rates observed in neighbouring towns in the U.S. which could not be explained by the prevalence of coronary risk factors (Stout et al 1964) or other social and demographic factors (Bruhn et al 1966). Subsequent research indicated that the low heart disease town (Roseto) was a homogeneous ethnic enclave with an entirely Italian population, 95% of which were from Roseto in Southern Italy. They had maintained a staunchly traditional patriarchal culture which placed great emphasis on family solidarity and the mutual support of kin. Religious beliefs and rituals were retained and handed down to second and third generation American Rosetans. Furthermore, hostility from neighbouring towns, which were comprised of immigrants of mixed European decent, had tended to foster internal cohesion in Roseto, smoothing over family rivalries and conflicts (Bianco 1974).

In the neighbouring town of Bangor the picture was strikingly different. Ethnically diverse, the community was divided by historical rivalries

between the Germans, English, Welsh and Italians. Few traditional customs were maintained, a variety of religions were practiced and civic organisations had come and gone from lack of support. Males in Bangor had a rate of myocardial infarction twice that of Rosetan males (Stout et al 1964).

The evidence suggested that the retention of a cohesive social system had conferred a health advantaged on the Rosetans but it was felt that the early signs of social breakdown, already visible in Roseto, might herald a change in the rate of heart disease in the succeeding years. In order to test this hypothesis the community was followed over a ten year period and according to Wolf (1976, cited in Henry and Stephens 1977) the results indicated that the expected change in the rate of myocardial infarction had indeed begun, as younger Rosetans were drawn into the mainstream of American social life and the ways of their parents lost cogency (see Bianco 1974 for elders' anxieties and complaints including their loss of discipline and authority and about American schools).

Scotch (1963) compared the blood pressures of Zulu who moved to an urban environment with that of Zulu who remained in their rural villages. There was a significant association between blood pressure and age, sex and obesity in both the town and the village. However having a large number of children, living in an extended family, and husband having a low income were not associated with hypertension amongst women in the rural setting, but were significantly associated with high blood pressure amongst women in the town. Sorcery fears increased in women in the town and were also associated with high blood pressure. On the basis of his results Scotch (1963) argued that it was the social context

in which sociocultural factors were imbedded which determined their stressfulness. He argued further that in some instances the retention of traditional practices in a new social setting may increase stress because it prevents adaptation to the new social order.

Rapid social change which accompanies urban expansion into rural environments has also been found to increase the incidence of coronary heart disease in the challenged rural communities. Concluding a study of urban expansion in the United States Tyroler and Cassel (1964:167) postulate that:-

rapid culture change is likely to have deleterious health consequences when it leads to the development of incongruities between the culture of the population at risk and the demands and expectations of the new social order.

Marmot and Syme (1976) followed up their earlier research which had identified a coronary heart disease gradient in Japanese men which was lowest in Japan, intermediate in Hawaii and highest in the United States. This gradient Matsumoto (1970) and others had hypothesised could be explained in terms of the high degree of social integration of Japanese culture which provided social mechanisms for reducing the stresses attendant upon living in a highly industrialised and urbanised society. Marmot and Syme therefore looked at the level of retention of Japanese culture¹⁷ in Japanese men living in California and found that after controlling for other factors (e.g. diet and cigarette smoking) level of acculturation best accounted for the gradient in coronary heart disease which was highest in the most acculturated and lowest in the most traditional (one fifth the rate of the most acculturated group)

¹⁷ A detailed analysis of three acculturation indices was used relating to 1) culture of upbringing, 2) cultural assimilation and 3) social assimilation (Marmot and Syme 1976).

(Marmot and Syme 1976). They argue that:-

this study supported the suggestion that a stable society whose members enjoy the support of their fellows in close knit groups¹⁸ may protect against the forms of social stress that may lead to [coronary heart disease] (Marmot and Syme 1976:245).

There can be little doubt that alienation, as it has been defined here, may be relevant to Kempsey people's, as well other Aborigines' experiences in contemporary Australia.

(ii) **Equity:** Another postulated link between distress and its observed social patterning is the concept of equity.

Injustice, unfairness and inequity ... [are] deeply related to emotions ... [and produce] guilt, anger, anxiety and depression (Mirowsky and Ross 1986:42-43).

There can be no question but that Aborigines feel a sense of injustice both from past and present confrontations with whites (see for example Horner 1974; Perkins 1975; Gilbert 1977; Kamien 1978; Walker 1981; Read 1983; Miller 1985).

Equity has also been found to relate to social distress reflected in crime rates, where perceived relative deprivation affects lawlessness in socially disadvantaged groups (Windschuttle 1979). As already noted, Aborigines have very high rates of imprisonment.

In New South Wales, between 1973 and 1976, Aborigines were over-represented in prisons at seventeen to twenty-two times the rate of non-Aborigines (Langton 1988:201).

While Langton argues that to a considerable extent high Aboriginal rates of imprisonment reflect discrimination in definitions of criminal behaviour and the exercise of the judicial system they also reflect that fact that there is a very high crime rate amongst Aborigines.

¹⁸ Matsumoto (1970) has shown that for Japanese men these are primarily work-place based.

(e) stigmatization and 'assimilation'.

Stigmatization has had an extremely negative effect on the self/cultural image of Aborigines. Numerous published and anecdotal accounts of low self-esteem, an outcome of the incorporation of stigma into images of self and culture, attest to its importance to Aboriginal mental health (see for example Gilbert 1977; Dagmar 1978; Miller 1985). Gilbert (1977:2) writes:-

White people's devaluation of Aboriginal life, religion, culture and personality caused the thinking about self and race that I believe is the key to modern Aboriginal thinking.

The ones with some spirit left hate, but a lot of them don't even hate. They're apathetic, they just accept it because they believe they're inferior (p14).

In chapters two and three I also discussed Aboriginal preoccupations with hygiene and domestic cleanliness which have resulted from decades of a 'dirty blackfella' stereotype. Suffice it to say that the effects of stigmatization on the health of Aborigines have not been adequately explored.

A further source of stress, which for some people may be quite extreme is the social cost of 'assimilating' into white society. The popular term 'coconut' ('black on the outside but white on the inside') is used by Aborigines to describe those who are seen to have adopted white values and expectations at the expense of their Aboriginality. As noted in chapter three, Aborigines who are employed in secure high income jobs appear to be particularly susceptible to this kind of stress (see also Rowley 1978). Wilson (1970:93) argues that Aborigines who have broken kin ties in order to be accepted into the white community express more 'latent aggression towards the white community' (see also Dagmar 1978). In Bourke, Aborigines were aware that even those who conformed were not

accepted into white society (Kamien 1978). The stress of assimilation, and the ambiguities engendered by being a black participant in the dominant society, have barely been considered in Australia.

Illich (1976:7) argues that:-

the health of a population depends on the way in which political actions condition the milieu and create those circumstances that favour self-reliance, autonomy, and dignity for all, particularly the weaker.

I have raised some issues which I believe are critical elements of the 'milieu' of Aborigines in settled Australia which relate to health.

What is the evidence for high levels of stress in Aboriginal communities? Harrison (1980:56) identifies four main ways in which stress can be measured. The first, 'in terms of its effects on mortality/longevity' has been considered above and, indirectly, in earlier chapters which discuss the very high mortality rates of Aborigines in settled Australia. The second and third ways Harrison identifies, namely 'in terms of its effects on morbidity, including mental morbidity,' and 'in terms of its effects on well-being and day-to-day functioning,'¹⁹ will now be considered.

Other indicators of stress in Aboriginal communities

There is relatively little information relating to mental ill-health in Aboriginal communities. Much of the work that has been done once again focuses on communities in remote Australia, and all such research is hampered by issues arising from questions regarding the cross-cultural

¹⁹ Harrison's (1980:56) fourth way of measuring stress is in terms of its effects on 'the physiology and endocrinology of people actually experiencing the stress at the time of investigation'. As he notes this method is less frequently applied in 'field situations' and I know of no such studies in urban Aboriginal communities.

integrity of diagnostic categories (Cawte 1969; Moodie 1973; Thomson 1984a).²⁰

(a) psychological distress.

While it is recognised that 'Aboriginals suffer from feelings of worthlessness, apathy and hopelessness ...[and from] spiritual depletion'(Parliament of the Commonwealth of Australia 1979:55; see also Nurcombe 1970) there have been few studies of psychosocial distress in Aboriginal communities in settled Australia. Nathan (1980) reports on a survey of the client population of the Aboriginal Medical Service in Melbourne. As might be expected, comparatively high rates of self-reported symptoms were found. Of the client population 45% had trouble sleeping (compared to 27% in a comparable Australian sample²¹), 69% suffered from nervousness, worry, irritability (37%), 58% felt depressed (22%), 26% reported trouble with family relationships (7%), 12% had problems at school (2%), and 23% complained of physical consequences of alcohol intake (not given). In addition, very high rates of various physical symptoms, two to three times those of the general population, were reported (Nathan 1980). They included coughs, chest pain, dizziness, shortness of breath, digestive complaints, joint aches and pains, tiredness, overweight and underweight, and skin rashes.

Eckerman et al (1984) found similarly high rates of self-reported physical and mental morbidity in their study of Aboriginal rural and urban-resettlement families in New South Wales and Queensland. They compared their results with those of Kamien (1975), Lickiss (1971), and

²⁰ The most frequently used research tool has been the Modified Cornell Medical Index Protocol. Eckerman et al (1984) have also used Schwarzweller and Brown's Personal Adjustment Scale.

²¹ Reproduced by Nathan (1980) from Keame 1979.

Mitchell (1978). Their summary table has been reproduced in Table 8.1. Note the very high levels of chest pain, headaches, morning fatigue, xenophobia, inadequacy, continual worry, depression, resentment of orders and irritability. Over fifteen percent of the people studied reported having a wish for death!

A review of health status was also undertaken in Tasmania where there was no Aboriginal Medical Service. Sculthorpe (1985) reports that 40% of adults felt anger and resentment towards others, 23% said worrying continually got them down, 23% reported insomnia, 26% suffered from frequent severe headaches, and 22% stated that they usually get up in the morning feeling tired and exhausted. Twenty-two percent said they were often irritated and annoyed, 16% said strange people and places made them afraid and 17% reported that they usually feel unhappy and depressed. Although most of these categories are not directly comparable, Sculthorpe's findings suggest lower rates of distress in the Tasmanian population. Thus, 47% of Nathan's sample complained of severe headache, compared to only 26% in Sculthorpe's group. It may well be that sociocultural pressures for Aborigines in Tasmania are less severe than in Melbourne since it appears from Sculthorpe's rather sketchy description of the client population that the majority live relatively isolated from whites, and that this is reflected in lower rates of mental and physical disorders. The Tasmanian figures also do not appear to be particularly high compared to non-Aboriginal populations elsewhere. Estimates of 'mental ill-health' in different populations, manifested by:-

worry, tension, irritability, depression or anxiety ... vary from 10 percent to 25 percent of the population, depending on the criteria used and on the assessment of the severity of any accompanying social disability (Wing 1976:305).

Table 8.1. Percentage of 'yes' responses in several studies amongst Aboriginal communities, using the Modified Cornell Medical Index Protocol (Source: Eckerman et al 1984:49).

	K~	L*	Mitchell		Eckerman et al			
			(a)	(b)	(c)	(d)	(e)	(f)
<u>Somatic</u>								
chest pain	33	40	21	36	18	44	39	29
belching	28	20	14	27	27	25	39	33
constipation	6	25	11	9	9	9	8	4
stiffness	15	15	25	36	41	25	21	17
skin sensitivity	4	5	18	27	18	41	21	33
headaches	38	50	43	36	27	25	28	12
<u>Exhaustion</u>								
morning fatigue	29	35	39	55	36	19	36	33
<u>Other</u>								
hypochondria	16	10	21	9	32	34	24	29
insomnia	11	25	25	9	41	37	33	21
<u>Anxiety</u>								
xenophobia	33	20	18	9	36	25	36	42
inadequacy	22	40	21	36	45	34	56	46
continual worry	14	20	32	36	32	56	33	46
shyness	21	5	18	27	18	31	50	50
shakiness	21	0	31	18	27	22	33	25
cold sweating	13	25	14	9	9	9	14	4
<u>Depression</u>								
depression	26	25	18	55	32	31	24	29
wish for death	19	15	18	18	23	16	7	12
<u>Paranoid-irritability</u>								
resentment of orders	58	65	50	55	50	62	58	37
frequent irritability	44	15	55	44	36	41	40	25

~ From Kamien (1975) - Bourke, NSW.

* From Lickiss (1971) - inner-city Sydney, NSW.

Mitchell (1978) - (a) pre-migration to the city
(b) post-migration

Eckerman et al (1983) - (urban resettlement scheme)
(c) rural town, NSW.
(d) urban resettlers

(e) rural town, Queensland.
(f) urban resettlers

(b) psychiatric illness.

Opinion's vary as to the relative prevalence of psychiatric illness in Aboriginal communities. The fact that city Aborigines were found by Cawte (1965, cited in Moodie 1973) to be under-represented in mental health service statistics may tell us more about Aboriginal attitudes to mental illness and to white health facilities than about the prevalence of clinical psychiatric illness. Recent information arising from enquiries into Aboriginal deaths in police custody tends to suggest that Aboriginal people with symptoms of mental distress do not seek white assistance and often have their mental symptoms categorised as physical symptoms.

Coolican (1974:130) claimed after 25 years of general practice in a rural town in New South Wales that Aborigines 'all suffer from a mild form of chronic depression, though this is not a basis for complaint.' Nurcombe (1970) regards depression as 'rife', especially amongst women (see also Lickiss 1971). Psychiatric disease amongst Aborigines in Bourke in 1972 was found by Kamien (1978) to affect 32% of the population over 15 years of age. According to Eastwell (1985:63), symptoms such as anxiety, depression and hypochondriasis are probably more common among urban Aborigines than in the general population ' but Aborigines less often present for treatment and are under-diagnosed as a result of 'communication difficulties'. Thus while others have argued that the prevalence of mental disorders may be no more widespread in Aboriginal communities than in the population as a whole (e.g Thomson 1984b), the above data tend to refute this.²²

²² A wave of suicides by Aborigines in police custody is currently the subject of a Royal Commission. It is thought to reflect, amongst other things, very high levels of mental distress in Aboriginal communities. There is little useful data available on suicide rates outside police custody in Aboriginal communities.

Gault et al (1970) found the prevalence of psychoneurotic disorders in Aboriginal adolescents in Melbourne to be no greater than in a similar non-Aboriginal population. However, they found significantly more psychosocial maladjustment²³ in the Aboriginal adolescents, which correlated with father's employment, and with crime, delinquency, and overt conflict in the adolescents' family. According to Wing (1976) social deviance is a manifestation of mental suffering, and notwithstanding the vexed issue of the cross-cultural validity of social norms and definitions of deviance, these findings suggest that the Aboriginal adolescents exhibit a higher level of mental disorder than their non-Aboriginal counterparts. Similar high levels of behaviour disorders in Aboriginal children have been reported by Kamien (1978).

(c) alcohol abuse.

Perhaps the most unequivocal indicator of high levels of social distress in Aboriginal communities is alcohol abuse, recognised by both the white and black communities as a major social problem (The Parliament of the Commonwealth of Australia 1979, and see Chapter 5). Explanations of Aboriginal drinking have frequently focused on the importance of reciprocity in the affirmation of social relations, in which alcohol is used in exchange (e.g. Sansom 1986, Albrecht 1974, Kamien 1975, Collmann 1979). However, while reciprocity is clearly a factor in Aboriginal drinking habits - when, where and with whom people drink - it does not, of itself, explain the prevalence of alcohol abuse. There is no inevitable connection between the sharing of a resource and its

²³ Gault et al (1970) describe two forms of "psychosocial maladjustment" - "delinquency and anti-social behaviour", defined as behaviour at variance with the law, irrespective of whether it resulted in legal intervention; and "social maladjustment" as failure to adjust to social norms.

overconsumption.

How then can overconsumption of alcohol be explained? Two not unrelated alternative themes emerge from the literature. The first is the widely held view that alcohol abuse is the result of social breakdown (Albrecht 1974; Kamien 1975; The Parliament of the Commonwealth of Australia 1979; Hunt 1981; Holding 1985), providing the only outlet for 'frustration, aggression, rage and a general feeling of dissatisfaction' (Kamien 1975:294) and for 'boredom, social dysfunctioning and loss of identity' (Albrecht 1974:39). One of Kamien's (1975:296) informants began drinking when he moved to Bourke:-

from the frustration of being a black man, through not being able to go into a pub, of being looked down upon because I was black, of being afraid to go into white people's clubs²⁴ and white peoples homes.

From the other perspective, drinking is seen as an adaptive response to a set of social conditions which allows drinkers to fulfil certain social needs²⁵ which in the context of their social reality cannot be met in any other way. Thus we find references to alcohol as a status symbol (Reay 1945; Albrecht 1974), as providing an opportunity to excel and leading to a sense of equality with whites (Bain 1974), and as a way to get rid of shame and act out a sense of personal power (Collmann

²⁴ In many rural Australian towns the RSL (Returned Services League) Club constitutes the focus of public social life. The Club is the favoured venue for visiting entertainers, community social functions and regular social events such as 'housie'. Membership is not restricted to Service people, and can be acquired by nomination by a member. The exclusion of Aborigines from RSL Clubs effectively excluded them from the mainstream of public social life in any town.

²⁵ Ellis and Newman (1971) identify a set of social needs which, they argue, low-income black youth in Chicago share with their black and white middle-class counterparts. They are positive self-image, personal dignity, ego enhancement and a sense of belonging and achievement; needs which Ellis and Newman show are met through the elaboration of complex social roles involving gang-membership.

1979). Drunkenness has been seen as 'a symbol of defiance [of] an unjust law'²⁶ (Reay 1945:301).

Viewed in the wider context, [drinking] is perhaps the only means whereby a minority which has been terrorised in the past, and which remains disunited and politically impotent, can defy the white majority (Beckett 1964:46).

Of course, Aborigines are not unique in their heavy-drinking response to rapid social change, political impotence and social disadvantage. The massive social disruption associated with urbanisation at the outset of the Industrial Revolution in England resulted in widespread alcohol abuse. Amongst North American Indians alcohol abuse is implicated in deaths and illnesses from many causes including accidents, suicide, homicide, diabetes, congenital anomalies, pneumonia, heart disease and cancer and Indian deaths from liver disease and cirrhosis exceed the U.S. all races rate by 4.2 times (U.S. Congress 1986).

Victims of catastrophic events are also subject to increased incidence of alcohol and substance abuse (Weiner 1985). If one accepts the view that to a large extent the structural relationship between Aborigines and the dominant culture elicits this response, it becomes apparent why the problem has 'not yielded to simplistic solutions such as prohibition, prosecution, education and forced separation from alcohol' (Kamien 1975:291). Alcohol counselling, health education and police fines are paltry defence against inequity and alienation.

(d) other substance abuse.

There are very few data available regarding the abuse of other substances in urban Aboriginal communities. Eckerman et al (1984) found

²⁶ The law prohibiting the sale of alcohol to Aborigines.

that 62% of men and 65% of women smoked tobacco.²⁷ Overuse of caffeine (in excess of 1000 mg per day) affected 27% of men and 47% of women. Anecdotal evidence suggests that heavy and widespread use of caffeine, tobacco, marijuana (and other mind-altering drugs), anti-depressants and tranquilisers, and sedatives is common in Aboriginal communities.

(e) diabetes and obesity.

Cross-cultural comparisons of Type 2 diabetes prevalence indicate that genetic factors are important in the aetiology of this disease.

Extremely high prevalence rates are found in Pima Indians (35%), Nauruans (34.4%) and Australian Aborigines (11%) while Alaskan Inuit (1.9%) Indonesians (1.5%) and New Zealand Caucasians (2.8%) have very low rates (Zimmet 1982). However, little is known of the genetic basis of Type 2 diabetes (Zimmet 1982; Australian Diabetes Foundation 1986) or of the environmental factors which trigger it, although:-

rural-urban and migration studies indicate that change toward a 'Westernised' lifestyle is associated with a dramatic increase in the prevalence rates of Type 2 diabetes (Zimmet 1982:399; see also Trowell 1981).

An association between obesity and diabetes has been demonstrated epidemiologically (Keen 1975; Mann 1982) and the two tend to arise in populations around the same time (Trowell 1975) but a causal relation between the two has not been demonstrated (Davidson et al 1979).

Furthermore there is no clear evidence of a diabetogenic effect of specific dietary factors such as sugar intake (West and Kalbfleisch 1971; Prior and Tasman-Jones 1981; Mann 1982).

If a genetic propensity towards Type 2 diabetes is 'released' by environmental factors it seems possible that stress is one of those

²⁷ For tobacco, substance abuse is defined by WHO as any usage (Eckerman et al 1984).

factors. A significant difference in glucose tolerance related to rural versus urban residence has been linked to 'diet, physical activity and stress, acting independently of adiposity' (Taylor and Zimmet 1981:367). Furthermore, the Australian Diabetes Foundation (1986:1) lists stress as one of the factors associated with this disease. Gibson and Johansen (1979) show that those areas of Sydney with the highest death rates from diabetes also have the highest death rates from peptic ulcer and cirrhosis of the liver and a high index of social disadvantage. Writes Zimmet (1982:408):-

the possibility that stress may be a diabetogenic factor cannot be ignored and [it] is perhaps one of a number of factors which, in varying degrees of magnitude, have a role in causing high diabetes prevalence.

It might therefore be postulated that some of the observed ethnic differences in diabetes prevalence have to do with differences in cultural responses to sociocultural challenge. Has the profound adaptational stress of Australian Aborigines increased their susceptibility to this disease? O'Dea (1982, 1983) reports that a return to a 'traditional' lifestyle for ten Aboriginal men and women, for a seven week period, resulted in improvement in various physiological variables associated with diabetes. Although she identifies diet, activity and weight loss as the critical factors, it seems equally plausible that the psychosocial effects of being removed from camp life, and of meaningful (subsistence) labour, also had a contributory ameliorating effect on diabetic physiology in these subjects.

There is also a strong association between obesity and (non-insulin dependent) diabetes (e.g West and Kalbfleisch 1971; Trowell 1975; Zimmet 1982). That, and the association between increased insulin secretion

and stress, raise questions about the role of psychosocial factors in the aetiology of both obesity and diabetes. There is little doubt that obesity amongst Aborigines is a post-colonisation phenomenon - early accounts confirm the lean physique of the indigenous population (Abbie 1957, Coyne and Darnton-Hill 1979, Walker 1982). Obesity has also been associated with social and economic change in other indigenous populations such as Native Americans (West 1981), Inuit (Schaefer 1981), Maoris (Prior and Tasman-Jones 1981) and other Polynesian populations (Taylor and Zimmet 1981). However, the exact mechanism by which urbanisation increases the prevalence of obesity is poorly understood. Dietary changes, (more saturated fat and refined carbohydrate), reduced activity levels and genetic factors are probably all important. However, the possibility that stress is also implicated in the aetiology of obesity clearly cannot be ruled out.

(f) infectious diseases.

As noted above, it is a central tenet of stress theory that psychosocial factors not only cause pathological physiological and anatomic changes, but they also make people more susceptible to environmental pathogens, including infective and parasitic organisms. Graham (1988:154) states for example that:-

there is growing evidence from a number of prospective and longitudinal studies that stress increases susceptibility to acute respiratory infections.

Therefore, the observed high morbidity and mortality from infectious diseases and parasitic infestations in Aboriginal communities does not stand beyond the explanatory capabilities of stress theory. Could the continuing high rate of intestinal worm infestations in Kempsey have more to do with reduced resistance due to stress than to housing and sanitary conditions and could the continuing high presentation rates for

respiratory diseases in all Aboriginal communities also be stress-related?

Conclusion

In spite of the fact that psychosocial variables have been recognised as underlying factors in poor Aboriginal health they have received little critical attention in their own right. Indeed, they have usually been viewed as operating primarily through intermediary variables such as poor diet. However, in view of the findings of the dietary study it appears to be more constructive to consider psychosocial factors as also having a more direct impact on health.

In attempting to account for the connection between psychological and physical health I have reviewed some of the expanding body of literature on the role of psychosocial stress in human health. This appears to provide a more cogent explanation for many aspects of the continuing poor health of Aborigines in settled Australia. It takes cognizance of the importance of psychosocial factors in the totality of environmental factors which impinge on health. It considers the role of stress both as a specific disease agent and as a factor which increases susceptibility to other disease agents and it provides what appear to be likely explanations for the observed social distribution of disease. While the discussion of sources and possible indicators of high levels of stress in Aboriginal communities has not been exhaustive but I believe it provides strong evidence of the need to consider stress as a central factor in Aboriginal health.

CHAPTER NINE

SOME POLICY AND RESEARCH IMPLICATIONS

Diet, alcohol and other 'lifestyle' factors are currently emphasised as the key factors responsible for poor Aboriginal health. Such an explanation clearly cannot be rejected purely on the basis of a single dietary survey, particularly one that was unable to quantify alcohol consumption in any way. Furthermore, the recorded diet of Aborigines in Kempsey was not always optimal according to current Australian dietary standards and there is evidence of high rates of nutrition-related conditions such as diabetes and obesity. Heavy alcohol consumption is a widely-recognised health and social problem in the community. These factors clearly play a role in aetiology of the diseases responsible for high morbidity and mortality in this (and other) Aboriginal communities.

Nevertheless, there appear to be grounds for questioning the extent to which 'lifestyle' factors explain poor Aboriginal health. What appears to be underestimated is the importance of psychosocial factors as components of the totality of environmental factors which impinge on health. Indeed, the latter have received negligible critical attention, even though it is becoming increasingly apparent that the contemporary focus on 'lifestyle' factors cannot account for the continuing poor health of Aborigines in settled Australia.

Aborigines have been subjected to a period of rapid and drastic sociocultural change. To some extent this rapid pace of change is part of the life experience of Aboriginal adults alive today. Furthermore, in the contemporary period, the stresses of modern industrial life are

compounded for Aborigines by discrimination and exclusion from full participation in the wider society.

The causes of tension and social disruption in Kempsey are many and varied. Political factions compete for bureaucratic recognition and control of land and resources. The effects of almost total economic dependence on the State are exacerbated by high levels of anxiety about the vagaries of the welfare system and the power of petty officials. Complex reciprocity networks buffer individuals and families against the periodic hardship caused by funeral expenses, court fines, car repair bills and appliance breakdowns. Racial slights, hostile scrutiny and social rejection pervade many interactions with the white community. Poor school performance, absenteeism, alcohol and drug abuse, unemployment and boredom comprise the social reality for the majority of the youth. Fines, court appearances and imprisonment are relatively commonplace domestic stresses while drinking, interpersonal violence, accident and injury are visible if not widespread features of daily life. Sudden deaths, with their associated mourning, are a regular occurrence. Indeed, people appear to be caught up in never-ending cycles of negative situations and events. All of this is compounded by, and has meaning in the context of, a lifetime of hardship, perceived injustice, loss and powerlessness.

If these are important factors in Aboriginal health, then it becomes clearer why considerable spending on housing and special health services has failed to have a greater impact on the health gap between Aborigines and the rest of the Australian population. Even though improved housing has almost certainly helped to lower morbidity and mortality from infectious diseases, it seems that the health services can provide

treatment for only part of the problem.

There appears to be mounting support for the view that sociocultural factors may have a greater impact on morbidity and mortality than does the availability of health services (see for example Brenner 1977; Navarro 1977; Powles 1978; Doyal 1981). Thus special health services might be viewed as one of the less effective measures for long-term improvement in Aboriginal health. Reid (1979:11) writes:-

If there is to be any substantial and permanent improvement in Aboriginal health over the next decade, it will only be marginally as a result of better medical facilities designed to combat overt ill health. Such an improvement will require fundamental changes in the [underlying] causes of ill health.

The 'health care experiment'¹ amongst the Navajo (McDermott et al 1972) demonstrates quite dramatically the limitations of technological health care in a context of sociocultural disadvantage, adding support to the premise of Powles (1978) and others (see above) that more medicine alone is not sufficient to produce better health.

Nor is health promotion and health education likely to bring about any rapid improvement in Aboriginal health. Contemporary health promotion programs are lifestyle-based. They emphasise individual responsibility for health, largely ignoring the social, economic and physical environment over which the individual often has little or no control.

The suggestion that individuals are to blame for their own unhealthy lifestyle means that moral exhortations to be healthier as well as self-care and self-help are stressed as important future trends in health care (Doyal 1981:35).

This approach is largely symptom-oriented, antidotal and ineffective (Blewett 1984). Indeed, education appears to have had little effect on

¹ This involved the delivery of comprehensive primary health care to a Navajo group for six years, after which time there was found to be little real improvement in many of the community's health problems.

diet and the prevalence of other risk factors in non-Aboriginal communities (Powles 1978; Jackson 1985). Not only does it seem largely ineffective, but the importance of different 'lifestyle' factors on health is far from clear, so that even moderately good rates of compliance with, for example, coronary heart disease risk factor reduction program, may result in only marginal reduction in morbidity and mortality (see for example Jackson 1985). Such an approach is therefore likely to have little effect on the health of Aborigines (see also Sykes 1977; Thomson 1984a), or on structurally disadvantaged minorities anywhere, since their health problems may have as much to do with a wide range of social and economic factors not approachable through education.

While I hesitate to suggest the need for further health research in Aboriginal communities, since many Aborigines in the health field and indeed many 'subjects' in Aboriginal communities are weary of research, there does appear to be a need for closer empirical examination of psychosocial factors. For example, as far as I am aware, no 'life-event' research of the type developed by Holmes and Rahe (1967) has been carried out anywhere in Aboriginal Australia. Their studies suggest that the cognitive significance of 43 stressful life events,² empirically observed to cluster at the time of disease onset in a large number of patients, may have cross-class/cultural validity (Masuda and Holmes 1967). It may therefore be a useful method of measuring the levels and importance of negative life events amongst Aborigines. I also see a need for more empirical study of Aboriginal perceptions of the stresses which appear to be such a dominant feature of their past

² Not all events are negative, but all required some 'adaptive or coping behaviour' on the part of the individual (Holmes and Rahe 1967:217).

and present lives and there has been no empirical study of social support networks or 'coping ability' in Aboriginal communities.

There is also a need for much closer attention to be paid to morbidity in Aboriginal communities, particularly that which does not result in recordable events such as hospital separations or medical consultations. My impression of the Kempsey community was of very high rates of breathlessness, cough, wheeze, chest pain, palpitations, trembling hands, dizziness, joint pains, anxiety and irritability, shaking hands, ill-defined aches and pains, sleep disturbance, depression, sores and skin rashes. In many cases people did not consult anybody about these complaints.

Aboriginal health is a complex problem requiring informed policy and planning by Aborigines and whites. This will not necessarily relate only to the health sector, but also to broader issues of Aborigine's structural position in Australian society. Indeed, long-term improvement will almost certainly require comprehensive changes in the way and the extent to which Aborigines in settled Australia are integrated into the wider society.

APPENDIX

STANDARDS USED

1. Recommended dietary intakes (RDIs) of nutrients.

The standards used were those adopted by the (Commonwealth) Department of Community Services and Health.

Table X.1 Recommended dietary intakes for Australia. #

	men		women	
	age (yrs)	RDI	age (yrs)	RDI
retinol eq.	19-64	750 g	19-54 55+	750 g 750 g
thiamin	19-64	1.1mg	19-54 55+	0.8mg 0.7mg
riboflavin	25-64	1.7mg	25-54 55+	1.2mg 1.0mg
niacin eq.	19-64	18-20mg	19-54 55+	12-14mg 10-12mg
vitamin C.	19-64	40mg	19-54 55+	30mg 30mg
iron	19-64	5-7mg	19-54 55+	12-16mg 5-7mg
calcium	19-64	800mg	19-54 55+	800mg 1000mg
zinc	19-64	12-16mg	19-54 55+	12-16mg 12-16mg
magnesium	16-64	320mg	19-54 55+	270mg 270mg

Source: Department of Community Services and Health 1987

2. Overweight and obesity.

The Quetelet body mass index ($BMI = wt/ht^2$) was used to calculate relative weight and was classified according to the standards proposed by Bray (1978).

Table X.2. Body mass index (BMI) standards used.†

	men	women
underweight	< 20	< 19
normal	20-25	19-24
overweight	26-30	25-30
obese	> 30	> 30

† Source: Bray 1978.

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