# The social construction of obesity in an Australian preventive health policy

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# Except where otherwise indicated, this thesis is the original work of

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Signed: Helen Kinmonth

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#### **Abstract**

In Australia obesity is constructed by governments as a leading risk factor for major, preventable, non-communicable chronic disease. To investigate the failure of obesity policy to stop or reverse the prevalence of obesity in Australia over the last two decades calls have been made to better theorise obesity as a problem. Social constructionism is identified as a useful theoretical approach to analyse entrenched and socially complex policy problems. Based on social constructionism a Critical Social Constructionism methodology is created for use in this thesis and is based on aspects of Bacchi's critical policy analysis methodology, 'What's the problem represented to be?'. The Critical Social Constructionism methodology is a practical and effective tool to critically analyse the policy problem representation of obesity. A specific example of obesity policy, the Australian Government Measure Up campaign along with the historical and broader policy context of that campaign are analysed. This analysis is assisted by the production of a schema of obesity representations that differentiates biomedical and social representations of obesity and by interviews with experts in obesity and preventive health issues. It is widely agreed in critical literature that the biomedical paradigm which was developed in response to acute and infectious diseases constructs health problems in a reductionist and individualistic way. The first major conclusion of this thesis is that the current dominant obesity problem for policy is constructed in a biomedical model with important underexplored effects. A second major conclusion holds that changing what the problem is represented to be from a biomedical representation of obesity to a social health representation faces extraordinary barriers that make such a project both impractical and improbable. Therefore this work explores the possibility of a radical disruption of the representation of the problem as obesity in policy. Alternative, 'weightless' representations of the problem within current research, public programs and medical practice are described and proposed for consideration in future policy making aimed at more effectively reducing the rates of major, preventable, non-communicable chronic diseases in Australia.

#### **Preface**

I came to the questions of this thesis circuitously. I began a PhD in the preventive health field of obesity in 2009. I have a background in health policy and have studied health at the Masters level however I was initially interested in another area of obesity research. Being a parent I was keen to research parental strategies around food and physical activity and the sharing of these between families. I wanted to find out if and how parents supported or stymied each other's efforts on this issue. After spending a year reading and devising research questions, aims, objectives, methodologies and methods I came to an abrupt halt. I had read broadly and yet the more I read the less certain I was of obesity as a preventive health project. I took six months off and spent that time reading and thinking. Understanding that PhDs are a project in learning how to research, so the topic is not really relevant, I was too passionate about the subject and too curious not to want to ask why obesity prevention policy was failing.

In searching for new research questions that could begin to answer this question, I read very widely on obesity including biomedical, social health, psychosocial health, and critical studies research along with a diverse range of historical and current general material. I built an e-library that made sense only when looking back and understanding the search was not for the specific but to make sense of the whole at a theoretical level. The understanding I received from my main supervisor, Cathy Banwell, over this time of muddling-about was invaluable.

From all this eclectic and seemingly aimless reading I came to four main conclusions;

- the media, public, health community and government were worried about body fat at an individual and a population health level,
- there were elements of exaggeration and moralizing in obesity discourse regardless of who was producing it,
- the obesity preventive health field was highly conflicted around what the problem actually was, what caused it, and what the solutions should be, and
- the vast majority of research and policy were trying the same things over and over again as if nothing else was possible to think.

It was quite depressing to read about sixty years of obesity interventions that almost all failed in the long-term, research that kept conducting interventions in the same failed

'weight watcher' model, and policy stuck stubbornly on a single theme of educating and urging individuals around their behaviour. All the while obesity rates at the population level continued to rise. I began to feel the same frustration I had felt when part of policy development in the Commonwealth Department of Health and Ageing.

Although the policy car was mechanically sound and moving forward, those looking out the front window did not have an adequate map of the route or destination. Often it is not possible to know those things and still policy is funded, implemented and even effective, but obesity policy appeared truly lost. The descriptions by policy makers of the policy road ahead, and by policy evaluators of the road already travelled, read as a mix of spin and fanciful wishes.

I changed direction to look at analysing obesity policy without understanding that I really had an idea of theoretically analysing policy rather than analysing it in the conventional sense. The usual theories of policy analysis by Kingdon (1995,2011), Sabatier (2007) etc. left me looking for something more. I wanted to ask different questions such as, why choose this destination 'a lower population-level of obesity' if you want to get to 'lower rates of chronic disease'? Why choose this car 'obesity constructed in a biomedical model' and why this road 'social marketing' and what are the underlying assumptions and underexplored effects of these 'policy choices'?

After studying many policy analysis texts and finding nothing fitted what I wanted to do I was ready to throw the whole idea away. At that point I stumbled across yet another policy analysis book down in the basement of the Hancock Library. It was Bacchi's (1999) policy analysis approach, What's the problem represented to be? It was probably the biggest 'aha' moment of my PhD. Who would think methodology could be so exciting! The beginning of a roadmap to compare against current roadmaps and to examine and find alternative routes and destinations was suddenly available to be amended and employed. From this point on the thesis became a travel diary, a map of the obesity policy landscape and a description of alternative routes and destinations. In this way the thesis is both a journey's end and a beginning.

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#### **Abbreviations**

ABHI Australian Better Health Initiative

ACT Australian Capital Territory

AHMAC Australian Health Ministers' Advisory Council

AHMC Australian Health Ministers' Conference

AMA American Medical Association

ANPHA Australian National Preventive Health Agency

BMI Body Mass Index

CHD Coronary heart disease

COAG Council of Australian Governments

CSIRO Commonwealth Scientific and Industrial Research Organisation

CVD Cardiovascular disease

DoH Commonwealth Department of Health

DHFS Commonwealth Department of Health & Family Services (former name

of Commonwealth Department of Health)

DHSH Commonwealth Department of Human Services & Health (former name

of Commonwealth Department of Health)

DoHA Commonwealth Department of Health & Ageing (former name of

Commonwealth Department of Health)

DT2 Diabetes type two

FCTC Framework Convention on Tobacco Control

GP General Practitioner

HAES Health at Every Size

HiAP Health in All Policies

MHO Metabolically healthy obesity

NCD Non-communicable chronic disease

NCDS National Chronic Disease Strategy

NGO Non-government organisation

NHMRC National Health and Medical Research Council

NPHP National Public Health Partnership

NPHT National Preventative Health Taskforce

NSW State of New South Wales

PA Physical Activity

PPC Plain Packaging of Cigarettes

PR Public relations

QLD State of Queensland

RCT Randomised controlled trial

SA State of South Australia

SNAP Smoking, nutrition, alcohol and physical activity

SNAP-O Smoking, nutrition, alcohol, physical activity and overweight and obesity

UK United Kingdom

US United States of America

USA United States of America

VIC State of Victoria

WA State of Western Australia

WHO World Health Organisation

WPR What's the problem represented to be?



# **Chapter 1**

#### Introduction

In this thesis I aim to determine how obesity<sup>1</sup> is represented<sup>2</sup> as the major problem of Australian government preventive health policy attempts to reduce the prevalence of major chronic diseases that research also links to many other factors. I also aim to critically analyse the policy to determine if the representation of the problem as obesity is implicated in the failure of policy and to explore whether alternatives to this representation show more promise of policy success. I ask the question, why choose obesity as a main problem for policy if chronic diseases such as heart disease and diabetes type 2 (DT2) are also importantly related to proximal factors such as food, stress management and physical activity, and to distal factors such as the social determinants of health and environment? Such questions are important where policy has failed over an extend period of time (in Australia more than two decades) and where policy around other risk factors such as tobacco has succeeded, albeit in a limited way, to reduce the prevalence of major chronic diseases such as heart disease and lung cancer.

To achieve these aims I have set four main objectives. The first is to undertake a case study of a specific Australian, obesity prevention policy, the Measure Up campaign (2008-2013). My second objective is to undertake interviews with experts in the health, industry, government and NGO fields to explore their understandings of what the problem is represented to be within this campaign and in the health field and to use these findings to aid my analyses. The third objective is to use the theoretical foundation of social constructionism to develop a methodological approach that is useful for a critical and comprehensive analysis of policy that includes an exploration of the historical context, the construction of the problem within different levels of policy development, and alternative representations of the problem. The fourth objective is to explore and suggest alternative representations of the problem for policy.

<sup>&</sup>lt;sup>1</sup> Obesity is acknowledged here as a word or concept that is in common use in health research and policy but is also considered by many as a derogatory term or as having derogatory connotations. It is unfortunately necessary to use this term in the thesis and as such the term is critically analysed in sections 5.4 and 7.4.

<sup>&</sup>lt;sup>2</sup> The terms construction and representation in this thesis both mean the discourse and the effects of that discourse usually around a socially complex issue. For example a construction/representation of an issue creates subjects who have certain characteristics, puts limits on what can be thought of that issue and creates effects that can be important and underexplored.

The social construction of obesity in an Australian preventive health policy

There are thousands of years of diverse Western social constructions of body shape and size with themes of health and illness, morality and aesthetics (Stearns 2002, p.5-6). In more recent history, in Western countries, body fat began to be more popularly represented as problematic around the turn of the 20<sup>th</sup> century. This problematising of body fat and big bodies was more formally medicalised in 1948 when obesity was defined as a disease by the World Health Organisation (WHO) and later as a risk factor for chronic disease. In the 1980s obesity came to the attention of researchers as the prevalence began to rise in developed countries and in the 1990s in developing countries even as under-nutrition continued to be a major global health problem<sup>3</sup> (World Health Organisation 2000, p.8-10; Gortmaker et al 2011). The first national obesity strategy in the world is claimed as produced by the Australian government in 1997 (National Health & Medical Research Council 1997, p.195).

In the late 1990s an instrument to standardize estimates of body fat between countries was produced for the World Health Organisation (WHO) and the Body Mass Index (BMI) has been in general use as a technical and clinical tool since then (James 2008). Obesity was described as an epidemic by the U.S. Surgeon General in 2000 (Novak & Brownell 2012). Data from '200 countries between 1980 and 2008 suggest steadily increasing obesity prevalence in every region of the world' (Gortmaker et al 2011, p.839). The prevalence of obesity in Australian adults in 2011-12 was estimated to be 27.2 per cent up from 24.8 per cent in 2007-08 with 62.7 per cent of adults either overweight or obese up from 61.1 per cent in 2007-08 (Australian Bureau of Statistics 2011b; Coalition of Australian Governments Reform Council 2014, p.15,33). The growth of such language, concepts and statistics since the 1990s shows that obesity as a health research and policy concept is a recent medicalisation and governmentalisation of body fat, shape and size (James 2008; Lupton 1994a).

In the health and health policy fields obesity has been predominantly represented as a problem in the biomedical model (see Appendix 4.1 for a fuller description of the biomedical paradigm). Over time the biomedical model of disease has proved successful in the prevention and recovery from infectious diseases like the outbreak of

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<sup>&</sup>lt;sup>3</sup>In this thesis readers are asked to remember the problem of obesity should always be understood as a social construction rather than a fixed problem in the world. Carol Bacchi, a social constructionism theorist and researcher uses quotation marks around the word problem throughout her work to signal this. Rather, this thesis relies on the reader's ability to understand which problems are being analysed as social constructions.

The social construction of obesity in an Australian preventive health policy plague in Sydney around the turn of the 20<sup>th</sup> century, or the more recent successful reduction in the prevalence of flu in known high-risk population groups through annual influenza immunisation. But this model has proved far less useful in the project of preventing or significantly reducing the prevalence of chronic diseases in the early 21<sup>st</sup> century (Australian Institute of Health & Welfare 2010, p.6; 2011, p.41). Some researchers have drawn attention to the use of the biomedical model to construct obesity as a problem for public policy (Carter et al 2011, p.469; Thomas et al 2010a, p.47) and to the use of any representation of obesity as an important problem for policy (Bacon and Aphramor 2011, p.9,13). Calls have been made for a paradigm shift away from the biomedical and towards a social model of health and disease (Friel 2009, Baum 2008b) (see Appendix 4.1and 4.2 for a fuller description of the social model of health).

In 2008 in response to rising obesity rates and policy failures the Australian government increased funding for obesity prevention policy initiatives and research including the funding of this thesis. This thesis seeks to better theorise obesity by starting at the very beginning of policy development that is by analysing the problem itself. A main research question is why, how and to what effect is obesity represented as a policy problem and a major target of Australian government preventive health<sup>4</sup> policy. This is an important question asked within a critical frame but unusually is set within an even larger health frame. The larger health frame is visible in the minimal critique within the thesis of government authority and legitimacy in working to reduce the incidence of non-communicable chronic diseases, such as cardiovascular disease (CVD) and DT2 in the Australian population.

To answer such a question a deep, critical analysis is required. Such an analysis requires an element of radical doubt in the sense suggested by the Zen maxim 'great doubt, great enlightenment; small doubt, small enlightenment; no doubt, no enlightenment' (Shengyan 2009, p.89). Radical doubt is at the basis of social constructionism and the best example of this is the work of the  $20^{th}$  century philosopher, Michel Foucault. Towards the end of his life Foucault described his work to Paul Rabinow (1984, p389) by suggesting, '...it is a question of a movement of critical analysis in which one tries to see how the different solutions to a problem have been constructed; but also how these different solutions result from a specific form of

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<sup>&</sup>lt;sup>4</sup> Preventive health, in this thesis, is the term used to describe primary, secondary and tertiary preventive health and so includes health promotion.

The social construction of obesity in an Australian preventive health policy problemization'. Rather than beginning with the problem Foucault begins his analyses of madness, sexuality, the history of the clinic etc. by understanding the problems and solutions as socially and epistemologically contingent. Where policy is so clearly failing over a long period of time, radical doubt should necessarily be included in the range of policy analyses and research approaches.

Chapter two outlines and justifies the theoretical approach and methodology. As a theoretical approach Critical Social Constructionism offers a sufficient level of epistemological and critical doubt by requiring that knowledge, no matter how interesting is never presumed to be disinterested, and knowledge no matter how essential or universal it seems is always presumed to be contingent. Bacchi's (2009) methodology for policy analysis called, What's is the problem represented to be? (WPR) is modified and used as the foundation for CSC. The WPR aims to 'dig deeply into the meaning-creation involved in public policy' (ibid, p.269) and offers clearly and carefully structured critical analysis tools including six questions where the examination of power and knowledge is central (see Box 2.5 in chapter two).

Where the CSC differs from the WPR an explanation and justification is set out. The CSC approach is broader than the WPR approach as it includes a critical examination of representations in a single policy but also representations in the historical context of that policy. The CSC approach is also narrower than the WPR as it only includes the theory of social constructionism as this is set out by Hacking (1999) and Elder-Vass (2012) and not the other WPR theoretical foundations of poststructuralism, feminist body theory and governmentality studies. Reflexivity is a requirement of the CSC approach as it is of the WPR approach and is included in a discussion of my values and those inherent in the subject matter, theoretical approach and methodology of this thesis. Later in the thesis the proposed alternative policy is also analysed for underlying assumptions and effects. Other differences along with strengths and weakness of the CSC approach developed in the thesis are examined in chapter two.

In chapter three I set out the methods used for the analysis that are based on some of those suggested by the WPR approach including analysing a single instance of policy. Methods used in the analysis of the historical policy context are discussed. This includes how and why this context goes beyond the bureaucracy to the fuller social

The social construction of obesity in an Australian preventive health policy context in which policy is made including academia, non-government organisations (NGOs), industry, media and marketing, and the public.

Interviews are conducted with experts in obesity and related fields and are used as additional, anonymous expert discourse. That is they are not regarded as material that can yield qualitative patterns but as academic material obtained from a primary source and as open to analysis in the same way as secondary sources such as published research or opinion. Interview methods including selection of interviewees and interview and analysis techniques are discussed. A full list of participants is listed in Appendix 3.1. These methods were not sufficient to meet the aims of the thesis and one of the objectives set out earlier alludes to this. After understanding the diversity of representations of obesity in the broader policy context, to aid my analysis, I needed to find a schema that simplified this diversity or to produce one.

In chapter four I examine and analyse obesity framing literature from 2005 to 2013 for the ways in which representations of obesity are modelled or simplified. Research that outlines obesity frames of 'claimants', 'problems' and 'blame' is examined (Saguy & Riley 2005; Saguy 2013; Jenkin, Signal & Thomson 2011; Gard & Wright 2005). Frames and framing can be thought of as general concepts that more specific representations of a problem are produced within so that several frames can be used for one representation. For example, Saguy and Riley (2005, p.869) suggest fat acceptance groups use a body diversity frame, anti-obesity groups use a weight as risky behaviour frame yet both sometimes use an obesity-as-illness frame. Framing in the literature did not meet the needs of a critical social constructionism policy analysis but became the foundation of a new schema of obesity representations.

I analyse the two main paradigms, biomedical and social, in which obesity representations are constructed by the health field. This analysis along with literature on the framing of obesity is used to create my own schema to simplify the disparate and diverse obesity representations that appear in academic research as this is one of the main sources of knowledge-for-policy in policy making. Within this schema I set out four main categories that roughly map onto the academic discipline groups, biomedical, social health, psychosocial health and critical studies. Such a schema has limitations and these are discussed but overall the schema has proved invaluable to the analyses and

The social construction of obesity in an Australian preventive health policy the CSC methodology encourages the production of such a schema where policy representations are socially complex and diverse.

In chapter five the broader policy context of obesity is examined using the schema developed in chapter four. An historical analysis of early 20<sup>th</sup> century obesity representations in Australia is followed by a history of stigma and social disapproval around weight in the health field<sup>5</sup>. I examine the rise in psychosocial and critical studies research detailing the iatrogenic effects of fat stigma<sup>6</sup> and the current negative body culture in Australia. Also analysed is the increasing use of shame and fear around body shape and size by preventive health experts and policy makers. As it is important part of the current policy context I analyse international and national representations of obesity.

An analysis of chronic disease as single risk factors and single diseases in policy documents, reports and research in Australia exposes early representations of the problem as important policy context. Within this analysis I offer examples of the two dominant and often competing biomedical representations of obesity- one produced by clinicians and the other by population health researchers. The important difference between the biomedical constructions of obesity and social health constructions becomes clear and leads into the analysis of what obesity is represented to be in the Measure Up campaign. I conclude this chapter with a look at alternative representations of body shape and size produced in the health field and by the general public.

In chapter six a case study of the Australian government, obesity prevention, social marketing campaign, Measure Up (2008 to 2013) is presented (Measure Up 2013a). This case study examines representations of the policy problem in three levels of policy development, strategic, intermediate and policy output. These three levels are important to a CSC analyse where a complex policy problem has a rich social and historical context and important political, commercial and health field influences and implications.

Chapter six also sets out more of the historical policy context of the Measure Up campaign and follows the line of biomedical representations of obesity across two

<sup>&</sup>lt;sup>5</sup> Health field is defined as inclusive of the medical field in this thesis.

<sup>&</sup>lt;sup>6</sup> Stigma is defined as inclusive of bias and discrimination in this thesis.

The social construction of obesity in an Australian preventive health policy decades of policy making. At the strategic level early government documentation and interventions from the 1970s are examined such as the *National Chronic Disease Strategy* (2006) (NCDS) (National Health Priority Action Council 2006) and the publicly funded, social marketing campaign Life: Be in it (2014). This is followed by a description and images of the Measure Up campaign including a critical examination of the objectives of the campaign. The influence of historical policy representations of the problem on the strategic level of policy making for the Measure Up campaign is examined as is the lack of influence of social health representations at this level.

Following this, formative and evaluation reports of the Measure Up campaign are used to analyse 'lifestyle' as the main concept in the intermediate level of problem representation. Lifestyle is examined in the light of work such as that of Cockerham (2007) who explores this as a social and individualistic concept. The move from the strategic problem construction as chronic disease and biomedical obesity to the intermediate level policy problem as lifestyle and individual behaviour reveals similar assumptions at all levels including individualism, rational choice theory, and the evidence-based policy constraints. This move also reveals similar effects such as these policy representations being the easy path politically and the least concerning for interested industries such as weight loss and junk food.

In chapter seven I examine the policy-output level of the Measure Up campaign including images and text and the materials produced for the public and interested groups. Within the campaign I analyse the medicalisation of weight and the dominant biomedical representation of the problem. Alternative representations and research findings mainly from non-biomedical discipline groups are also analysed. Some of the effects of the biomedical model of obesity are examined around individualistic solutions and outcomes, the predictive risk value of weight, the exclusion of other vulnerable populations, negative psychosocial outcomes, and the absence of the social context in constructing the problem.

The policy output of the Measure Up campaign is highly visual as are the bigger bodies that are central to the policy problem. To assist the policy output analysis the visual, the body and their intersection are discussed in depth along with the growth in the last forty years of technological development of the visual that drives a harsh, persistent, powerful and pervasive body culture in Australia. The Measure Up campaign is

The social construction of obesity in an Australian preventive health policy analysed for underexplored ethical values and moral effects especially coercion and stigma. The new move in the preventive health field in Australia towards more stigmatising social marketing around bigger bodies is also examined. The policy output analysis reveals the assumptions and effects of a biomedical representation of obesity in a preventive health policy. A comparison with tobacco policy highlights some of the findings of this analysis.

In chapter eight I undertake a comparison of what the problem is represented to be in obesity and tobacco policy. An analysis of some of the literature that compares these problems shows the frustration of social health researchers working in a policy arena dominated by biomedical models. I examine some of the reasons this has been such an enduring issue. I then compare obesity and tobacco as problem representations within the Measure Up campaign and the plain packaging of cigarettes initiative (PPC) as Australian government preventive health policies.

The major findings from this comparison are as follows. As a problem for policy, for around four decades tobacco has been constructed in the social health model but obesity as a problem for policy has been constructed in the biomedical model with very different underlying assumptions and underexplored effects. Tobacco as a substance is extrinsic or outside the body, smoking is a less visible action and the dominant construction (produced and accepted by the public, government and the health sector) is of tobacco as a dangerous substance with a secondary construction that focusses on the individual as morally weak or corrupt. The stigmatizing of smokers is still an effect of policies such as the plain packaging of cigarettes but this a much lesser effect than the stigma generated by the Measure Up campaign. For these reasons it is concluded that a social health construction of obesity, in the manner of tobacco representations would be both impractical and improbable.

Rather than obesity constructed in a biomedical or a social health model I argue for a radical disruption of the construction of the problem as obesity. Alternative or 'weightless' representations of the problem within current research, public programs and medical practice are described. These policies and practices do not construct the problem around body shape and size but practice body positive health within a wholistic or social health frame and focus on other risk factors either singly or together, such as food, physical activity and chronic stress management. I suggest an alternative

The social construction of obesity in an Australian preventive health policy weightless representation of the problem and program for the primary health care setting. These are proposed for consideration in future research and policy-making aimed at more effectively reducing the prevalence of preventable non-communicable chronic disease in Australia.

# **Chapter 2**

# Social constructionism and policy analysis

#### 2.1 Introduction

This chapter sets out the theoretical foundation and methodology used in this thesis and how these are sufficient to meet the aims and objectives set out in chapter one. I have chosen social constructionism as the theoretical foundation of this work and a form of social constructionism that I am calling critical social constructionism as a sufficient methodology to analyse power, knowledge and their relationship in policy problem representations. The work of Hacking (1999) and Elder-Vass (2012) among others are used to describe and support this theoretical foundation and methodology. Bacchi's (2009) critical policy analysis approach, What's the problem represented to be? (WPR) is also drawn upon as it is informed, in part, by social constructionism.

Social constructionism allows and promotes the use of radical doubt to question the ways in which a range of issues are put forward as fixed problems, that are entrenched, enduring and expensive. This CSC approach is especially relevant to inquire into how preventive health problems are conceptualised given their complex social contexts. Marilyn Wann (2009, p.x) in discussing the field of fat studies discusses the need for radical doubt where little doubt exists:

Whenever members of a society have recourse to only one opinion on a basic human experience, that is precisely the discourse and the experience that should attract intellectual curiosity.

The problem of obesity in Australian government policy appears to be a closed concept. It appears in historical policy documents as it appears in current policy documents as a medical problem, a health system problem and a problem for individuals. A critical analysis of this 'one opinion on a basic human experience', that is, bigger body shape and size, is the broad aim of this thesis.

It needs to be acknowledged here that the radical doubt used to analyse obesity does not extend, in this thesis, to the government project of preventive health at a population level. This under-explored acceptance of the larger health frame may be seen as a failure by critical health theorists and as sensible by public health policy analysts. It may be neither but it is necessitated by the word and analytic constraints of a PhD.

#### 2.2 Why social constructionism?

The philosopher, Ian Hacking (1999, p.3,6), among others (Burr 2003), suggests the 'science wars' or 'culture wars' in intellectual life are a profound disagreement between hard scientists as proponents of explanatory tools and social scientists as proponents of interpretive tools, such as social constructionism. The fall-out from this dispute has damaged the standing of social constructionism that was strong in the 1990s as an epistemological approach to the analysis and critique of natural and social science. Physicists in the United States of America (USA) and life scientists in Britain have been the most outspoken natural/hard scientists critiquing social constructionism. This may be because as Hacking (1999, p.66-67) suggests a lot of the social constructionists do not know enough about the science they are researching and appear to use social constructionism as a vehicle to carry their hostility to the sciences.

Hacking (ibid, p.5-6) states that many have attempted to define social constructionism with limited success and he has an alternative proposal, 'don't ask the meaning, ask what's the point?' and argues that the point is 'consciousness-raising'. Hacking (ibid, p.6-12) goes on to give a useful description of social constructionism (see Box 2.1).

Box 2.1: Ian Hacking: Claims of social constructionism in research

Social construction work is critical of the status quo. Social constructionists about *X* tend to hold that:

- (0) In the present state of affairs, X is taken for granted; X appears to be inevitable.
- (1) X need not have existed, or need not be at all as it is. X, or X as it is at present, is not determined by the nature of things; it is not inevitable.

Very often (researchers) go further, and urge that:

- (2) X is quite bad as it is.
- (3) We would be much better off if *X* were done away with or at least radically transformed.

Source: Hacking (1999, p.6-12)

Hacking (ibid, p.7,12) suggests too many studies slip from (0) and (1) to (2) and (3) without justification and warns researchers:

One may realize that something, which seems inevitable in the present state of things, was not inevitable, and yet is not thereby a bad thing. But most people

The social construction of obesity in an Australian preventive health policy who use the social construction idea enthusiastically want to criticize, change, or destroy some X that they dislike in the established order of things.

A prime example of this slippery slope, Hacking (ibid, p.7) suggests, has marked some feminist social construction research where the revelation that 'gender, gender attributes, and gender relations' are constructed rather than determined by biology quickly slips into an unfounded critique and solutions around abolition or radical social transformation.

As an example of the use of social constructionism, Hacking (ibid, p.22,125) suggests it would be vacuous to use this approach to analyse the construction of 'digging' in the sense of digging a ditch as the point of social constructionism is to understand the contingency on social context of physical or metaphysical things such as objects or ideas. If the idea of digging was socially complex with moral or health effects then rather than being a vacuous exercise it would be a moral imperative for social thinkers to interrogate.

Another problem with the use of a social constructionism approach is categorical error. Hacking (ibid, p.21,22) classifies those things which have been subject to a social constructionism approach in research/theses into objects, ideas, and what he calls elevator words, like truth (see Box 2.2). These are useful to review in light of the work of this thesis on the social construction of the policy problem of obesity. Hacking (ibid, p.27) states that, 'one of the reasons that social construction theses are so hard to nail down is that, in the phrase 'the social construction of X' the X may implicitly refer to entities of different types, and the social construction may in part involve interaction between entities of the different types.' This fluid switching between objects and ideas, or 'multi-levelled reference to X', is plentiful in theses according to Hacking (ibid, p.28) and can be problematic.

However this mixing is not necessarily a fatal flaw of research as Hacking (ibid) suggests 'one great interest of gender studies is less how any one of these types of entity was constructed than how the constructions intertwine and interact, how people who have certain 'essential' gender traits are the product of certain gendering institutions, language, practices, and how this determines their experiences of self' (ibid). As per Box 2.2 the constructions of obesity intertwine and interact in a similar manner between the categories of objects and ideas.

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Box 2.2: Ian Hacking: Three types of things said to be socially constructed

	Definition	Examples/Characteristics
Objects	Items 'in the world' in a	People(children), states (childhood),
	commonsensical, not fancy,	conditions (health, autism, body fat
	meaning of that phrase.	proportion*), practices (hiking), actions
		(throwing a ball), behaviour (generous,
		fidgety), classes (middle), experiences
		(falling in love), relations (gender),
		material objects (rocks), substances (
		sulphur), unobservables (genes),
		fundamental particles (quarks)
Ideas	Ideas, conceptions, concepts,	Idea of the woman refugee, idea of
	beliefs, attitudes to, theories.	gender relations, idea of obesity as a
		problem for public policy*
Elevator	Facts, truth, reality and	Objective, ideological, factual, real
words	knowledge – words used to say	
	something about the world, or	
	about what we say or think	
	about the world.	
	Used in philosophical discussion	
	at different level to words of	
	objects or ideas.	
	Often circularly defined and	
	have often undergone	
	substantial mutations of sense	
	and value.	

Source: Hacking (1999, p.21-22)\* Italicised text added by the author

The schema of obesity constructions presented in the next chapter is partly based on Hacking's idea of difference in the construction of objects and ideas. The biomedical construction of body fat as a biological object is the social construction of an object, whereas the social construction of obesity as a policy problem is the social construction of an idea. Body fat exists on human bodies regardless of the social world. Exploring the differences between categories of constructions and analysing the intertwining and interacting of constructions is necessary to the aims of this thesis in problematising the public policy problem of obesity.

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The importance of a social constructionism approach to the study of body size is visible in the work of two behavioural researchers. Sugovic and Witt (2013) experimented with actual body size, perceived body size and perceived space and found the greater the actual body size of their subjects the greater the visual estimate, or perceived slant of a hill. They (ibid) suggest this is something that other works show also occurs if subjects carry a backpack, are unfit, or are elderly. In other words, 'the perceived hill slant is influenced by one's ability to walk up a hill'.

The authors wanted to test whether this relationship was influenced by actual ability or beliefs about ability. They found the association did not hold between perceived body size and the perceived slant of a hill. Therefore people are aware of how much of a burden it will be for them to walk up a hill whether or not they construct their body size in accordance with biomedical weight categories, or ignore or resist those categories in preference for other meaningful constructions (see Olds *et al* 2013). This work illustrates the sociocultural complexity of any social construction of body size. It appears that the science of obesity is similar to that of gender in that these 'problems' reveal a profound conflict that begins at the epistemological level with essentialism versus social constructionism.

#### 2.3 Social constructionism versus essentialism

The interest in using a social constructionism approach in the social sciences or moral sciences, as Hacking calls them, is not to refuse the referent reality but to refute, unmask, rebel, or revolt against the scientific claims of the essential and disinterested nature of that reality (Hacking 1999, p.19). Hacking (ibid) argues for both a referent reality (in the case of obesity – the physical substance and physiological function of body fat - molecules, cells, metabolism, and biological disease mechanisms), and a more obviously constructed reality (BMI measurements, the gathering and use of population health statistics, psychosocial concepts, moral judgements, political ideas and understandings). A major problem immediately arises. On what basis can it be decided that something is referent reality (essential or inevitable, or having an 'essence') or a constructed reality (being contingent on social context)?

Hacking (ibid, p.16-17) suggests no researcher calls themselves an 'essentialist' but that essentialism implicitly promotes the idea that something is inevitable or has an essence that is separate from the social universe and stays the same across time, place, and

The social construction of obesity in an Australian preventive health policy culture. An example of this can be found in the work on race by Lawrence Hirschfeld (1996) and Phillipe Rushton (1995) (cited in Hacking 1999, p.17) who claim human biological differences are more important than they have been given credit for and argue for innate dispositions and objective categories of distinctive classes of people according to biological characteristics. Such essentialism makes biological differences attributed to race the essential drivers of human social difference.

Research using a social constructionism approach directly opposes this view and suggests social factors drive human social difference (see Le Besco 2011). The biological differences exist but it is their interpretation or how they are made meaningful that is of paramount importance. This is not anti-essentialism but non-essentialism in that the referent reality of biological differences are not disputed, such as the lower levels of melanin produced in the skin of early Europeans and higher levels in early Africans, but are irrelevant to the important social and cultural differences between human groups (see Hacking 2005, p.105).

Hacking (ibid) suggests the use of statistics that are significant, meaningful or useful does not make that object 'essential'. Using the example of BMI, Hacking (ibid, emphasis in original, author's brackets) states;

A body mass index (BMI) over 31 (sic -30+) is a statistically useful indicator of the risk of type 2 diabetes, and is therefore useful in epidemiology and preventive medicine... Classes that are statistically significant, meaningful, or useful are **not** thereby real Kinds (essential). There is no reason to believe that there are a great many independent and uniform differences that distinguish obese persons from those whose BMI is in the recommended range of 18 to 25.

So although, 'BMI is a useful quick indicator of potential health problems' according to Hacking (ibid, p.108) that makes BMI statistically significant but does not mean it is statistically meaningful. Body shape and size may be essential but BMI, like obesity as a policy problem, is socially constructed and as a troubled and contested idea requires critical social analysis.

# 2.4 Dividing the sciences – Natural/hard science versus social/moral science

Hacking (ibid, p.108) splits sciences into natural and moral, with natural sciences studying what he calls indifferent kinds and moral sciences studying interactive kinds. Admitting to a fuzzy boundary, Hacking (ibid, p.59) also separates out constructionism applied to the natural sciences from social constructionism applied to the 'moral sciences' or social and human sciences. The natural and moral sciences for Hacking (ibid) are made fundamentally different by the focus of study for the moral sciences being potential moral agents, 'people' who unlike quarks, rocks, or even animals, are 'self-conscious', 'capable of self-knowledge' and of holding values, such as autonomy. Although this appears to oppose Foucault and Bacchi's idea of the subject as constituted through discourse, it is accepted into a critical social constructionism approach that includes the subject as causal along with the constituting power of discourse (see discussion of Elder-Vass (2012) and intentionality below).

The principle difference for Hacking (ibid, p.108) is between 'indifferent and interactive 'kinds' where 'kinds' refers to the classification of things. Quarks are indifferent (or natural) kinds 'in the sense that calling a quark a quark makes no difference to the quark' as they exist 'independently of any human rules or interventions' (ibid, p.30). On the other hand calling a person - a woman, black, schizophrenic, homosexual, or obese does make a difference to that person and as such these are interactive kinds (ibid, p.104,105). Hacking (ibid, p.31) argues against the idea that natural sciences and social constructionism can be reconciled and states 'I do not want peace between constructionist and scientist. I want a better understanding of how they disagree, and why, perhaps, the twain shall never meet'.

This split is particularly important to the work of theorising the gap between different social constructions of obesity. The task of this thesis is not to refuse the connection between obesity and chronic disease, the levels and trends in chronic disease in the Australian population, or academic or government attention to this problem but to interrogate, unmask, expose and possibly rebel against what the problem is represented to be. Preventive health issues of obesity straddle both sciences, natural and moral and are both objects and ideas. This complexity lends itself to a critical social constructionism approach.

#### 2.5 Critical Social Constructionism

Critics of the social constructionism approach have suggested that promoting social constructions or representations as central and equally valid makes it impossible to discriminate between constructions and so truth becomes relative leading to morally-and politically-empty relativism. This problem is most prominent in one form of social constructionism that Burr (2003, p.22) calls micro social constructionism and Schwandt (2003, p.308) calls strong social constructionism. Countering this is another approach called macro social constructionism (Burr 2003, p.22) or weak social constructionism (Schwandt 2003, p.308). This latter approach makes constructions central theoretical entities and reifies power relations and so reality is constructed by structural interests from the top down and agency, the concept that individuals also initiate change, is threatened (ibid). Burr (2003, p.22) suggests both criticisms, relativism and lack of agency, are valid but not crippling and that either sub-theory can be worked with and can even work together to create richer policy analyses than are available through other approaches.

A critical social constructionism (CSC) approach works to avoid both relativism and lack of agency. Using critique as a central tenet the approach used in this thesis avoids relativism by linking political and social interests to the pre-suppositions, assumptions and outcomes of different constructions of a policy problem representation. Elder-Vass (2012, p.16) suggests this possibility in a paper that uses some principles of critical realism to create a 'realist social constructionism'. A lack of agency is avoided by expanding the analysis of the construction of the problem to include not only alternatives created to oppose dominant constructions but creative, contextualised constructions, for example, the construction of big bodies by poor single mothers as positive and nurturing (see Warin et al 2008).

Finally constructivism and constructionism are not regarded as dichotomous in the CSC approach. Constructivism centres individuals as the creators of meaning and denies the social aspect of meaning construction. Rather than separating these epistemologies it is argued here that social constructionism, in this thesis, regards meaning as being constructed both socially and individually through discourse. As Elder-Vass (2012, p20) argues only a form of social constructionism that can include the agentic subject can 'offer a coherent approach to developing critical theory'. The influence of the

The social construction of obesity in an Australian preventive health policy social does not eliminate free will or autonomy but overlays these to create a more complex understanding of the way in which humans make and are influenced to make their world meaningful. Most theories of knowledge, for example, critical realism, that are applied to real world situations, such as policy, attempt to create a balance in this way (ibid p.10).

Elder-Vass (ibid) suggests, 'critical realists argue that all events are caused by multiple interacting causal powers (Bhaskar, 1975) including for example the powers of individual persons and the powers that we attribute to social structures (Archer, 1995)'. It is argued here that the constitutive power Foucault attributes to knowledge can be included in this understanding. As is argued in this chapter, Elder-Vass (2012, p.12) sets out as importantly different, 'moderate forms of social constructionism that are compatible with realism and more radical forms that are neither compatible with realism nor causally plausible'.

Further, Elder-Vass (ibid p.13) argues for a meaningful compatibility between the work of Foucault and that of critical realists. Using the work of Foucault around discourse and his unspoken suggestion of causality, Elder-Vass (ibid) seeks to produce a theory that recognises discourse has a causal power, but also that subjects and other social structures have causal powers of their own...' Following from this I argue that both intentionality and non-intentionality are inherent in all policy analyses whether they are recognised or denied by policy analysts. Therefore the acceptance of intentionality and non-intentionality that is ignorance or unawareness, on the part of both those producing policy and those subject to policy are not denied but accepted by the CSC methodology and intentionality is legitimately included in the policy analyses in this thesis. This open acceptance and analysis of intentionality and non-intentionality distinguishes the CSC approach from the WPR approach.

#### 2.6 Critical social construction of obesity

WPR is in the business of 'de-stabilizing identified problem representations' (Bacchi 2009, p.44). With regard to obesity, the social sciences through various disciplines express contingency and difference as cultural, moral, social, or phenomenological whereas biomedical research rarely express them at all. Bridging that gap from health science to social science is achieved in part by acknowledging the importance of both

The social construction of obesity in an Australian preventive health policy the referent reality of obesity along with the importance of the social construction of obesity. Unusually for policy analysis, the CSC and the WPR encourages the use of a cross-cultural approach to expose these differences (see Box 2.3).

Slenderness or thinness in many parts of the world is perceived as, or represents, weakness, poverty, or disease and conversely big bodies represent strength, health or wealth. This latter construction of body size was popular in Australia and Europe up to the early to mid-20th century and is currently popular among some Australian men who associate a big body with masculinity (O'Kane, Craig & Sutherland 2008, p.70). When growing up as a thin child, in 1960s rural Australia, older women in my community would tell my mother that I needed a bit more 'condition' meaning I needed to be fatter to be considered healthy. Fat children were considered greedy but not unhealthy. Such constructions are contextual in the sense of being about physical health in an environment of food scarcity and infectious disease, or about being in a community where the older members live with the memory of such conditions.

Box 2.3: A cross-cultural window on the socially constructed nature of obesity

In early 2012 when Barbara Pamphilon from the University of Canberra returned for the second phase of her training and research work with women agricultural leaders in Papua New Guinea the women welcomed her back by gently feeling the flesh on her upper arms and saying in happy tones, 'You have got fat, you have got fat!' as if that was a really positive thing and a source of delight. Even with a researcher's understanding of cultural differences Barbara reports her feelings went strongly the other way. (B Pamphilon 2012, pers. comm., 3 April).

Conditions of food scarcity, poverty, and infectious disease such as HIV/AIDS remain relatively prevalent in Papua New Guinea. Although this construction of obesity may have other sources and rationalities than the economic or health context this positive construction of obesity shows how oddly a negative obesity construction such as the representation of obesity within the Australian government's social marketing campaign, Measure Up, would sit with many citizens of Australia's closest neighbour. The biological referent reality of body fat proportion remains the same but the difference in cultural meaning is laid bare. In contemplating these constructions of obesity it is possible to ask which construction will best fit in a future of global food and energy insecurity. This question was raised in a literature review for the seminal British

The social construction of obesity in an Australian preventive health policy Foresight project, Tackling Obesities (Foresight 2006). See also Brewis et al (2011, p.274) in discussing the absence of fat-stigmatising beliefs in Tanzania where obesity rates are not rising rapidly and 'hunger remains a daily challenge for many'.

#### 2.7 Reflexivity

There is a catch 22 to finding a methodology that perfectly suits your research questions. Does the chosen methodological approach reflect the frames and values held by the researcher? I think the answer is nearly always yes. An epistemological and critical investigation of a socially complex problem is usually carried out by those who value thinking outside the dominant knowledge paradigm. I have deliberately chosen not to research obesity using a biomedical frame, 'that involves a detached, neutral, "objective' researcher' and that 'renders the researcher 'invisible in the research process' (Warin & Gunson 2013, p.1687). My positioning on obesity in this research is a reflection of my own values and ideology influenced by exposure to minority and resistance values, concepts and ideas, such as social cohesion, social equity and social justice. Generally these could be called social democratic assumptions or principles and they stand in opposition to many of the current dominant neo-liberal principles such as individualism, economism and consumerism (Eckersley 2001, p.57).

As a researcher of obesity my own body should not remain invisible but exposed in a similar way to those of the fat activist and feminist researchers who have, 'used their own bodies as reflexive tools to unpack the discursive framings and subjectivities of fatness' (Warin & Gunson 2013, p1686). I am not and have rarely been biomedically categorised as overweight so I have suffered less (but not none) of the bias, stigma and discrimination directed at those with bodies deemed to be not ideal. My exposure to the harsh body culture in Australia has two lived effects, fear and privilege. My fear is described well by Bacon's (2010, p313) writing on the harm weight bias does to thinner people,

As long as it is more difficult to live in a fat body, everyone fears becoming fat.

The internalization of the belief that thinner is better drives the body anxiety that most people-fat or thin-experience.'

The privilege of being a researcher has allowed me to examine this fear as a social construction and so to resist it and to live better with it rather than eliminate it.

The social construction of obesity in an Australian preventive health policy Weighed against this fear is the thin privilege I have benefited from which has taken more forms that I have identified or understood in my life. Bacon (2010, p.312) suggests,

Thin privilege is as strong as it is because weight bias is so pervasive...Fatter people face discrimination in employment (including lower wages), barriers in education, biased attitudes and lower quality of care from health professionals, stereotypes in the media, stigma in interpersonal relationships, and, overall, are judged negatively and treated with less respect.

In thinking retrospectively about my life I can understand the places and events that were opportunities for weight bias against others and so were the same places where my own thin privilege was probably experienced.

In accepting that my life has been to some extent shaped by thin privilege I also accept Bacon's (2010, p312) call to action,

Until our society fundamentally changes, we can't completely escape or renounce the various privileges we have, whether it's based on our size, skin color, socioeconomic status, education, or other attributes. We're taught to recognize oppression as individual acts of meanness, not as a system (often invisible) conferring advantages... Whether or not you have actively chosen your privilege, if you are committed to fairness and social justice, I challenge you to be accountable for it; unearned privilege comes with responsibility'.

The tension between biomedical constructions of obesity and psychosocial health and critical constructions of obesity is not only a theoretical subject of this thesis but is my own lived experience.

Although it is not possible to produce a value-neutral thesis even within the biomedical paradigm, the aim of this work is to produce a thesis that is much more than just a promotion or reflection of my values. I have struggled with this use of a methodology that fits so well with my own experiences, frames and values and have attempted not to remove these but to analyse and expose them wherever needed (Rice & Ezzy 1999, p.213). Where I have made these visible in the thesis I have strengthened it and where I, as the researcher, and my values are under explored I have weakened it.

My values are visible in the chosen methodology. The CSC approach situates and analyses obesity within a critical studies frame that assumes 'discourse is socially

The social construction of obesity in an Australian preventive health policy constitutive as well as socially shaped' (Fairclough, Mulderrig & Wodak 2011, p358), that power relations can be examined within a discourse analysis, and that the four claims set out by Hacking in Box 2.1 can be accepted for obesity through such an analysis. Conceptually discourse is carrying a heavy load as it is assumed to be the driving force in shaping subjectivities, representations, key concepts, along with discursive frames such as biomedical and social health. Other theoretical models discount this power of discourse and assume power relations are visible in hierarchies, social relationships and in the distribution of wealth. I argue, in keeping with my values and ideas but also supported by bodies of substantial research, that the power within knowledge is the more important focus of study where there is such long-term failure in public policy and a growing body of research into the iatrogenic effects of that policy.

As Bacchi (quoted in Goodwin 2012, p30) has suggested for Foucault, 'reflexivity requires a conscious interrogation of taken-for-granted presuppositions and beliefs and that this should occur not in one place within a work but right throughout the work'. To this end I have discussed the weaknesses within a social construction approach, within a CSC approach and some of the conceptual problems with the schema of obesity representations created. In addition throughout the thesis where relevant I have discussed the presuppositions and assumptions that are generated by the analysis itself. Assumptions and effects of the alternative policy proposal put forward in this thesis are explored at the end of that proposal in chapter eight.

#### 2.8 Methodology

The use of social constructionism in policy analysis began in earnest in the late 1980s with research that critically analysed the ways in which, 'public policymakers typically socially construct target populations in positive and negative terms and distribute benefits and burdens so as to reflect and perpetuate these constructions' (Ingram, Schneider & DeLeon 2007, p.93). Such analyses target difficult policy that sometimes '...fails in its nominal purposes, fails to solve important public problems, perpetuates injustices, fails to support democratic institutions, and produces an unequal citizenship' (ibid).

The CSC approach follows the WPR approach in challenging, not the way in which policy sets out to solve problems but how the problem is constructed or represented

The social construction of obesity in an Australian preventive health policy within policy and research in the first place. Developed by Bacchi since 1997, WPR has been used in critiquing the construction of policy problems within diverse areas including gender equity, health, education, media and research policy, welfare, and unemployment (Bacchi 2009). The current, dominant, public policy frame is problem-centric and produces, and is produced by, neo-liberal ideological principles with the policy problem seen as a reaction to a 'fixed and identifiable' problem (ibid, p.1). Thus rational policy making, evidence-based models and the concept of the rational, self-interested individual are seen as central to good policy making. The WPR suggests, 'rather than reacting to 'problems', governments are active in the creation (or production) of policy 'problems'' (ibid) and further holds that what appears rational, self-interested or evidence-based is contingent on the frame used.

In the WPR approach there are three main propositions (ibid, p.25-46):

- We are governed through problematisations;
- We need to study problematisations (through analysing the problem representations they contain) rather than 'problems'; and
- We need to problematise (interrogate) the problematisations on offer through scrutinising the premises and effects of the problem representations they contain.

This thesis includes a fourth and fifth proposition using the CSC approach outlined above:

- We need to explore the historical and current political context of policy problem representations in order to understand more thoroughly how current problems are constructed; and,
- We need to critically analyse the effects of current problem representations and propose alternative constructions to be considered by future policy makers.

#### 2.8.1 Proposition 1: We are governed through problematisations

This first proposition is about power including how we are governed or ruled and about knowledge including how problems are constructed by discourse and used as 'truth'. Most policy analyses explore and evaluate the content, process, output or interests inherent in the development of policy around an identified problem (Fischer 2003, p1) and use for example, an institutional rational choice approach that promotes, 'some form of causal inference...universalism, and empirical social science that will produce falsifiable hypotheses (Levi 1997, p20.) or an advocacy coalition approach that focuses

The social construction of obesity in an Australian preventive health policy analysis on policy communities and networks and, 'emphasises the significance of relationships within policy sectors for understanding how policy decision-making functions (Fischer 2003, p.95; also see Sabatier 2007, p.4,5; Wanna 2009 for similar policy analysis approaches).

The WPR and the CSC approaches begin with a different objective and in a different place as each seeks to explore the way in which the problem has been constructed or problematised by government to identify 'how rule takes place (and) how we are governed' (Bacchi 2009, p.263). A significant difference of the CSC approach is that government is accepted as broader than just the state and includes civil society influences such as the role of experts. In this way the governing rule extends out to include 'an inventive, strategic, technical and artful set of 'assemblages' fashioned from diverse elements' (Dean and Hindress 1998 quoted in Bacchi ibid, p.25). This means that how rule takes place can be quite difficult to discern.

This broader understanding of government or governing rule is based on Foucault's notion of governmentality (Bacchi 2009, p.26). Lemke (2001, p.201) suggests the idea of governmentality challenges neo-liberal dichotomies of government and society, and subjectivity and power and states '... government refers to a continuum, which extends from political government right through to forms of self-regulation, namely 'technologies of the self 'as Foucault calls them' (ibid). The notion of governmentality acknowledges that governing is productive power (ibid). By this reasoning policy failure is no longer the problem child of the state alone but responsibility is spread through many more areas, acknowledging that it takes a community to raise a policy.

Preventive health policy especially around socially complex health problems such as obesity is also founded on 'knowledges through which rule takes place' and so by academic experts, non-government organisations, commercial interests, and the beliefs and perceptions of the general public, indeed 'the full panoply...of groups which influence the shape of governing knowledges...' (Bacchi 2009, p.26). This 'production of truth' is recognised as multi-sourced, ambiguous, conflicting and challenging but also as either supported or silenced by power relations (ibid, p.43). Bacchi (ibid, p.26) quotes Foucault (1991, p.79) in stating, '(M)y problem is to see how men(sic) govern (themselves and others) by the production of truth'. To this end a WPR approach examines, 'the influence of experts and professionals on and through these knowledges,

The social construction of obesity in an Australian preventive health policy rather than examining their direct role as participants in political processes (for example as members of lobby groups)' (ibid, p.26). The CSC approach goes further to suggest that what experts have to say about a policy is just as legitimate a source of discourse for analysis and so interviewing interested experts around a policy is useful.

According to Foucault (1991 cited in Bacchi 2009, p.28), in modern states, a triangle of rule is formed by the exercise of three forms of power, governmentality, sovereignty, and discipline (see Box 2.4).

### Box 2.4: Michel Foucault: Triangle of rule of modern states

Governmentality – a particular type of rule that emerged in the late eighteenth century and focused on and operates at the level of population – uses social and economic policy to ensure security and order.

Sovereignty – a mentality where the problem is to perpetuate rule over a territory and its subjects – uses law, violence, and pageantry.

*Discipline*- targets individual bodies to produce useful, calculable subjects – uses surveillance and normalisation.

Source: Bacchi (2009, p.26-27)

Foucault's approach to the study of the relationship between power and knowledge is used in the CSC methodology to understand the way in which policy problems are produced and productive of a type of governing and to expose the discursive, subjectification and lived effects of such problem constructions (see Bacchi 2009, p69-71). From the mid-19<sup>th</sup> century, Foucault suggests, a new form of power rose to dominance- governmentality, which included the use of biopower or the construction of a population body (through population research especially statistics) that required governing (see Box 2.4). Discipline, another form of power, constructed the individual as autonomous, central to social problems, and lacking in knowledge, skill or will-power, and so also in need of governing.

These forms of power/knowledge work together at the societal (governmentality) and the individual (discipline) level. As these forms of power became dominant consumption, around tobacco, alcohol, other drugs and food became a moral problem around the autonomous individual, and a population health problem for governments (Stearns 2002, p.56; Guthman & DuPuis 2006, p.442; Bacchi 2009, p.83). An example

The social construction of obesity in an Australian preventive health policy of both surveillance and normalisation was the rise of temperance organisations such as the YMCA in the mid to late 19<sup>th</sup> century that began to both guide individuals and to generate social disapproval of immoral or undisciplined individual behaviour (Stearns 2002, p.59).

# 2.8.2 Proposition 2: We need to study problematisations rather than 'problems' Most policy analyses study the troubling condition or problem for policy as fixed. Bacchi (ibid, p.32) separates such usual policy analysis into two positivist approaches-comprehensive rationalism being 'policies as technical 'fixes' to readily identifiable problems' and political rationalism that 'stresses the many and competing voices involved in defining policy 'problems' and deciding policy directions'. The third approach, social constructionism 'emphasises the role of socio-political processes on

shaping forms of knowledge' (ibid, p.33).

Discourses within a WPR approach are defined by Bacchi (ibid, p.35) as, 'socially produced forms of knowledge that set limits upon what it is possible to think, write and speak about a given social object or practice'. Like Foucault's (1972, 1982, 2001 [1961]) work on the human sciences and professions the WPR approach is interested in contesting and analysing 'discourses (or truth claims)' and opening these 'knowledges' up to 'critical scrutiny by identifying their underlying conceptual logic' (ibid).

Discourses are available in the documents of policy strategy, development and initiatives such as the *National Chronic Disease Strategy* (National Health Priority Action Council 2006), the Measure Up campaign TV ads, or the website text setting out tips on how to prepare food and make time for exercising. Analysing these documents as part of a dominant obesity prevention discourse does not imply that this discourse is unified or static but that they are part of a scientifically based, politically supported, body of truth claims.

The political and scientific support for such knowledge does not preclude other representations existing as 'subjugated knowledges' (Foucault 1980 quoted in Bacchi 2009, p.35). Bacchi (ibid, emphasis in original) suggests Foucault (1980) identified two forms of subjugated knowledges;

'Erudite knowledges encompass dissenting opinions and theories that are not widely recognised, while 'indigenous knowledges' consist of local beliefs and

The social construction of obesity in an Australian preventive health policy understandings, and 'unqualified, even directly disqualified knowledges' such as those of the psychiatric patient...'

Obesity prevention discourse includes, dissenting, erudite discourses- social health, psychosocial health, and critical studies discourses that are not a current part of obesity policy problem development. It also includes indigenous discourses (such as those of the fat acceptance movement) which are, resisting, rejecting, altering and absorbing the dominant discourse by, for example, discussing the damaging effects of scientific claims that link body shape and size with disease (Lockie 2012). These discourses and the representations produced by them are vital elements of any CSC analysis.

## 2.8.3 Proposition 3: We need to scrutinise the premises and effects

A CSC approach uses the WPR approach that identifies and assesses three effects from problem representations that are interconnected and overlapping (Bacchi 2009, p.40):

- discursive effects the limits imposed on what can be said or thought;
- subjectification effects how subjects are constituted within problem representations; and
- lived effects the material impact of problem representations on bodies and lives.

The discursive enterprise of representing a problem within preventive health policy has immediate effects such as creating or reinforcing that particular representation as a truth and so more real, essential, and important than other representations of the problem. The WPR urges the policy analyst to look to other excluded or unexplored representations of the problem, to explore the way that presuppositions and assumptions within the dominant representation limit what can be said to be the truth and the effect of this constraining silence. The discursive effects of representations produced by obesity preventive health social marketing campaigns such as Measure Up and related obesity prevention research are important elements of this critical policy analysis. These are discussed in terms of the use of the biomedical model to shape the representation but also to shape policy development and the hierarchy of evidence used to accept or reject research that becomes knowledge for policy.

The identification of target groups is essential in policy development to ensure public money flows to those who will benefit most, for whom the funding was intended and to

The social construction of obesity in an Australian preventive health policy allow for targeted evaluation of policy outcomes as required by the current models of good policy. The construction of subjects as targets and non-targets of policy is often under-imagined and so underexplored in traditional policy development, evaluation, and analysis. These effects can include 'stigmatising some, exonerating others, and keeping change within limits' (Bacchi 2009, p.42). However within a WPR approach the dominance of one discourse is not understood as determining 'forms of subjectivity, but eliciting them' (Dean 1999 cited in Bacchi 2009, p.42) so that agency is visible in the WPR approach in the strategies and practices of subjects. This means indigenous discourse is recognised as part of the 'strategies and practices initiated from below (that) are themselves constitutive rather than merely resistant or reactive' (Petersen 2003 cited in Bacchi 2009, p.42).

An example of this active, 'from-below' indigenous subjectivity can be found within the stories of participants in an Australian Fat Images Library (Gurrieri & Brown 2012). The on-line library was created to allow media access to positive images of overweight people and as a counter to the usual images of headless, semi-naked fat bodies that often accompany obesity media stories (see Pause 2013). Participants actively constitute themselves through contributing photographs of themselves going about their everyday lives as ordinary people...riding bikes, holding hands, dancing, and swimming.

In the blog that followed one article about the Fat Image Library, participants in the library were outnumbered by other contributors who were overwhelmingly and sometimes scathingly negative (Gurrieri & Brown 2012). Within this forum a contributor to the Fat Image Library, Francis Lockie (2012, emphasis in original) suggested scientific reports rarely openly stigmatise fat people but are used by others to do just that:

People tell fat people they're going to get sick and die all the time. People use the excuses of "HEALTH!" AND "SCIENCE!" to treat fat people appallingly.

Contributors to the library represent themselves as overtly resistant to both the dominant health discourse around body shape and size and to the openly stigmatising discourse produced by bloggers but also represent themselves in positive, creative and self-affirming ways. The CSC methodology expands on the subjectification effect described in the WPR methodology to investigate how subjects are constituted in the broader history of policy including in current social context such as the media and in expert interviews and earlier policy documents.

Lived effects within the WPR approach include the ways in which discourse such as policy representations of target groups are affected by non-discursive factors. Bacchi (ibid, p.43) suggests that a problem with discourse analysis is a lack of recognition of the effects of discourse on the day-to-day lives of subjects and 'how non-discursive factors interact with discourse'. As a counter-balance the WPR approach identifies and analyses the 'lived effects' or 'material impact of problem representations on bodies and lives' (ibid, p.40). Subjects are shaped by discourse and shape discourse but are affected by real consequences such as the embodiment of stigmatising representations (ibid, p.43). Sutin and Terracciano's (2013) research on the long term (four years) physical effects associated with weight discrimination is one example of lived effects being researched in the preventive health field.

### 2.8.4 The WPR framework

Practical application of the WPR method outlined above is set out by Bacchi (2009, p.2-19) in a framework of six essential and interrelated questions to be asked of a specific policy instance (see Box 2.5).

#### Box 2.5: Bacchi: Framework of WPR, six main questions

What's the 'problem' represented to be in a specific policy?

What presuppositions or assumptions underlie this representation of the 'problem'?

How has this representation of the 'problem' come about?

What is left unproblematic in this problem representation? Where are the silences? Can the 'problem' be thought about differently?

What effects are produced by this representation of the problem?

How/where is this representation of the 'problem' produced, disseminated and defended? How could it be questioned, disrupted and replaced?

Source: Bacchi (2009, p.2-19)

In addition, the WPR and the CSC requires that researchers apply these questions to any policy proposal of their own as this 'may contain deep-seated cultural assumptions' (ibid, p.x).

# 2.8.5 Proposition 4: We need to explore the historical and current political context of policy problems

The social construction of obesity in an Australian preventive health policy

Colebatch (2006 cited in Bacchi 2009, p.32) suggests social constructionism approaches to policy analysis are mainly of academic interest but Bacchi (ibid) disputes this stating; while there is no declared interest in producing more effective policy, the conviction that how 'problems' are represented matters – that some people are harmed and that some benefit from particular problem representations – means that a WPR approach offers valuable insights into the processes of governing.

As discussed earlier in this chapter the dividing of social constructionism theses by Hacking into two studies, those that examine and those that are critical, is relevant here. Studies that just propose that X appears to be inevitable and determine X is not inevitable and need not have existed at all or need not be as it is, can use Bacchi's methodology.

The CSC methodology takes a further step to analyse if X is quite bad as it is and if we would be much better off if X were done away with or radically transformed. This critique is affected through comparison of the dominant with alternative representations and importantly through critical comparison of their assumptions and effects. Such a critique cannot be bounded by the analysis of the discourse or lived effects of a single current policy. Rather the historical representations of the problem as these appear in the broader socio-political context form a large part of the context of that single policy and must be included. Unlike the WPR which expressly analyses the social construction of the problem within one policy, this thesis extends the analysis to this broader historical context.

# 2.8.6 Proposition 5: We need to critically analyse the effects of all problem representations including proposing alternative representations

The express aim of this thesis is to critically examine the social construction of obesity within a single government policy and to determine if this representation of the problem is bad, that is either iatrogenic, socially damaging or both. In making these determinations the way is open to propose alternative constructions of the problem. These alternative constructions are, like the initial analysis, bounded by a specific area or frame of analysis that is a specific area of preventive health policy and are subject to the same CSC methodology and reflexive questions of that methodology. Analysis of the broader government project to improve the health of the population remains outside the scope of this thesis.

## 2.10 Conclusion

This chapter describes, explains and justifies the theoretical approach and methodology used in this thesis. Social constructionism is not the only approach that could be used to analysis the failure of obesity policy but is one theoretical approach that encourages the use of radical doubt. Where policy has such a history of failure radical doubt should always be considered by policy analysts. CSC and a qualified WPR approach are powerful critical tools that may not be necessary to the research aims of the thesis but are certainly sufficient. Three propositions from the WPR methodology are examined along with an additional two propositions from a CSC approach. The methodology allows for a breadth and depth of analysis by including historical and current contexts that are not usually a part of traditional policy analysis, nor part of a usual WPR analysis. The methods used are examined in the next two chapters.

# **Chapter 3**

# **Methods**

#### 3.1 Introduction

Methods used in this thesis to assist the critical analysis of the representation of obesity in preventive health policy include;

- selection of mainstream historical and current material productive of obesity representations,
- a single case study of a current and important obesity prevention policy the
   Measure Up campaign (2008-2013),
- twenty-two expert interviews, and
- the production of a schema of academic discipline-based representations of obesity.

Most of these methods, chosen to facilitate a CSC approach to policy analysis, differ from methods used in a WPR approach. Justification of three of these methods is set out below. The next chapter sets out the schema of representations and the justification for that.

# 3.2 Selection of material for policy analysis

Selection of historical and current material for analysis of a broad and deep policy context is necessarily eclectic and subjective but these are both strengths and flaws. That another researcher may use different texts to challenge my analysis and conclusions could be a sign of the strength of the critical studies field but could also indicate a flaw in methods that shows I have not chosen material that adequately reflects the dominant and minority representations in this field. Given that the selection of text is already interpretive in reflecting my particular thoughts and concerns, I have read extensively across a range of discourses and material sources on obesity.

To ensure the material used meets the criteria of being either important or typical, I reanalysed the research and sources of historians who had already analysed obesity and the primary source material related to it while taking into account and at times analysing the difference in methodological approaches between their work and mine. Adding to this I used original sources that are obviously central such as early medical texts and The social construction of obesity in an Australian preventive health policy national government policy documents on the prevention of chronic disease and obesity. The intention was never to provide a comprehensive history of the representations of obesity but to explore how the diverse and dynamic historical social construction of this issue helps to produce what the problem is represented to be in the specific policy example. The intention was also to expose radical re-representation and social change as interdependent and ever-possible conditions of social life.

Material used to analyse the broader policy context such as how General Practitioners (GPs) produce and resist dominant biomedical representations of obesity includes academic research, government reports, early policy development material, and internet material of individual representations of the problem of obesity. In order to represent the dominant and minority representations in the case study I have used a wide spread of sources including; policy strategy such as government reports and documents, policy developers such as the Department of Health website, policy-output such as the Measure Up campaign materials, alternative health research from social health, psychosocial health and critical health studies, and indigenous/resistance sources such as on-line blog comments. Passages of material appear verbatim throughout the analysis following the style of Bacchi (2009) and the WPR approach.

# 3.3 Single case study approach

Case studies have several characteristics that are important to this thesis. Such studies are well suited to discourse analysis as these allow in-depth analyses that are capable of challenging dominant knowledge paradigms and ideologies (Rice & Ezzy 1999, p.211-212). Yin's (2014, p.16) definition of a case study would seem to suggest this method as particularly suited to preventive health social marketing issues as it is 'an empirical inquiry that investigates a contemporary phenomenon (the "case"), in depth and within its real-world context – especially when the boundaries between phenomenon and context may not be clearly evident'. In a case study the object of study is bounded that is clearly delimited both temporally and spatially for example, a nation state, or historical event (Willis 2013). This thesis modifies the WPR method that encourages the use of a single instance of policy and encourages the blurring and expanding of temporal and spatial boundaries of the policy context. This pushes to the limit Yin's (2014, p.16) description of, 'in-depth and within its real-world context' by embedding the case study in historical and broad policy contexts.

Flyvbjerg's (2006, p.220) defence of the single case study refers to; the importance of context dependent knowledge, generalizability even from one study, the legitimate use of such studies to generate and test hypotheses, no greater bias toward verification than is found in other methods of inquiry, and that it is often not desirable to summarise or generalise case studies but to read them as narratives. His (ibid, p.242) defence concludes with an insight from Kuhn that social science is strengthened by a greater number of good case studies as these provide the foundation of exemplars which are essential to an effective discipline. For Flyvbjerg (ibid), 'good social science is problem driven and not methodology driven in the sense that it employs those methods that for a given problematic, best help answer the research questions at hand'. Using Flyvbjerg's defence, this thesis is suited to a case study method that within a CSC approach can build a rich, contextualised picture of policy.

Methodological rigour is seen as one of the major problems of case studies where these are suggested as, 'a synonym for freeform research where anything goes' (Maoz 2002 quoted in Willis 2013). The strongest answer to such critique is that Bacchi (1999, 2009) has developed the WPR methodology into a well-used and reputable approach to policy analysis and the CSC approach used in this thesis is based on the WPR. The CSC researcher responds to specific questions that can be asked of any policy problem and in addition they must support any claim made around the social construction of the problem, assumptions and effects with reliable, secondary research sources. Researcher subjectivity although refuted by Flyvbjerg (2006) is perhaps the most important methodological problem in the thesis overall and was discussed in the previous chapter.

Generalizability is important to the case study only in the sense that it contains the most mainstream or publicly-communicated problem constructions. It is suggested that the case study chosen has a policy problem construction that is representative of the obesity policy field. Obesity prevention policy has an emphasis on social marketing around behavioural/normative measures as such it is represented by the Measure Up campaign (social marketing) and was central Australian government preventive health policy from 2008 to 2013. Conclusions from the analysis are 'generalizable' not in a quantitative sense but in the sense of being about a pervasive problem construction.

# 3.4 In-depth, expert interviews

The in-depth and semi-structured interviews aimed to gain expert opinion to aid in the analysis of the representation of obesity. More specifically the interviews explored the different knowledge, views, and opinions of interviewees according to their different fields especially around what the problem was represented to be. Also explored were; the preventive health strategic goals and directions under which the campaign was developed, the drivers in the development of the campaign, how different interests were represented, what evidence was used, what presupposition and assumptions underline this representation of the problem, what effects flow from the representation of the problem within this campaign, how the preventive health field of obesity compares to that of tobacco, and what were the future directions in the obesity prevention field.

Originally these interviews were intended to be thematically analysed across four main expert groups, policy, academic, industry and other (including NGOs). Two barriers forced a re-think on these categories. I couldn't persuade anyone from the tobacco industry to speak with me and was refused an interview with anyone from the Department of Health and Ageing on the Measure Up campaign. Also I found that interviewees often straddled more than one group. Rather than a thematic or categorical approach I used the interviews as discourse that could be analysed in the same way as the secondary material (such as government websites) but as unpublished discussion around the sensitive topic of critiquing government programs and policies and the work of other experts. Overall the interviews were less useful than the secondary sources such as formal policy documents and policy output and probably contributed most to my own understanding of the biomedical and social paradigm split in the thinking of experts in the obesity field.

Candidates for interview were included from a broad policy context including academic disciplines, policy makers, advocates, non-government organisations, industry, and other stakeholder organisations. The aim was to interview participants who were most important to the campaigns that is, closest to the strategy and policy development of the campaign, most prominent in the public health field and in the production of research, and from stakeholder organisations. Candidates were identified for inclusion in this consultation through a range of methods including:

• identifying active spokespersons on these campaigns through media analysis;

- identifying academics publishing on these campaigns through literature search;
- analysis of submissions to the National Preventive Health Taskforce around obesity and tobacco;
- request to the relevant government department re: public servants who had worked or were working on the Measure Up campaign; and
- by identifying participants suggested by experts in interview.

Interviews were conducted by myself, face-to-face, were of 37 to 89 minutes duration, and were digitally recorded and transcribed verbatim. The first approach to interviewees was often a phone call to their support staff followed by a formal letter of request. Semi-structured, in-depth interviews were used to ensure responses were richer in that interviewees were able to follow lines or themes they chose (Bacchi 1999, p.31). Although a table of interview questions was drafted many of the interviewees did not have direct input into obesity or tobacco policy and so the flow of interviews saw content range widely across the broader policy context. Such interviews differ fundamentally from quantitative surveys or questionnaires, or structured interviews that actively seek facts that 'are valid and reliable' and are independent of the research setting, by promoting neutrality and consistency through no prompting, no improvisation, no elaboration (Silverman 2006, p.110). With this relaxed structure and the longer length of interview I found that some of the most interesting and insightful dialogue was delivered in the second half of interviews.

In-depth personal interviews run a risk of interview bias, especially around sensitive topics such as obesity. This is recognised by the Australian Bureau of Statistics (2008, p.23);

There may also be an awareness on the part of respondents about the social desirability of their responses.

An opposite power dynamic was at work within these interviews where the interviewee was an expert and the interviewer a student. Rather than inducing a bias response it is suggested that; the level of expertise and professional status of the interviewees, the place of interview- most often in the personal office of the interviewee, the content of questions that were about their field of expertise rather than on personal matters, and the promise of anonymity of any quotes used, were useful to elicit unbiased responses.

The social construction of obesity in an Australian preventive health policy Ethical clearance for the expert interviews was sought on 10 May 2011 from the Australian National University Human Research Ethics Committee and was granted through expedited ethical review by that body on 18 May 2011. All follow up/annual reports on progress were made on time including the final report closing off ethical clearance for this research on 31 March 2013. A sheet on ethical information regarding this research and the interviews was given as a hard copy to each interviewee at interview. Confidentiality of the participants has been maintained by attributing quotes within the work to an unidentified interviewee number. A transcript of the interview was offered to all interviewees with two requests being received and those transcripts sent out by mail. A list of all participants including their name, title and organisation appears in Appendix 3.1 with the exception of public servants who are anonymous with only the government department listed.

#### 3.5 Conclusion

The analyses within this thesis are mainly of a theoretical nature that means studying old things (policy, government reports, and media articles) and deriving new understandings. In this chapter I have supported the methods used and described the processes involved in using these methods. In the selection of material used in the analyses I have sought out material that was representative of the field or from sources likely to construct obesity in the most influential, dominant and alternative ways. The use of a single case study is suggested as suited to a policy analysis that requires an indepth exploration of the social construction of a socially complex policy problem and Flyvberg's (2006) defence of the single case study is invoked.

The expert interviews are considered to be a part of the broader context of the Measure Up campaign in the same way, media articles, marketing and industry material and public representations of obesity are relevant. The interviews are therefore analysed as part of obesity discourse by experts rather than as replicable research that can reveal patterns of data or information. A schema of obesity representations constructed within health research is produced in the next chapter to simplify what is a complex, diverse and conflicted area of health. The schema and justification for that schema are part of the methods but are presented in the next chapter.

# **Chapter 4**

# Framing obesity representations

#### 4.1 Introduction

To simplify the broad policy context the first part of this chapter sets out a general framework of the sources of representations of obesity that are relevant to preventive health policy. This includes four categories, academia, government, industry/NGOs and the public. Within one of these sources, academia, are four discipline groups that are suggested as producing four different obesity representation categories, biomedical health, social health, psychosocial health and critical studies. The term public health is not used in this thesis as it suffers from multiple definitions that render it too ambiguous to be useful (Petersen & Lupton 1996, p.3, 4; Jorm, Gruszin & Churches 2009). It could be considered that public health as a body of knowledge represents the problem of obesity within social health, biomedical health, and in some psychosocial health research.

Evidence of a rise in academic and media representations of obesity from the early 2000s is presented. This rise saw an increase, in the mid-2000s, in literature framing obesity representations. Work by Saguy and Riley (2005), Gard and Wright (2005), Jenkin, Signal & Thomson (2011) and Saguy (2013) broadly represent the framing literature and are analysed and assessed for fitness for use in the policy analyses in this thesis. In the second part of this chapter a clearer and more relevant schema of obesity representations is created based on the academic representations suggested above, biomedical, social health, psychosocial health and critical studies, and also based on Saguy's (ibid) and Saguy and Riley's (2005) problem frames of obesity. The schema is a simpler and clearer way to present the diversity of representations relevant to recent obesity prevention policy making by the Australian government. Each of the four categories of the schema are described and some examples given. No clear boundary between categories is suggested.

# 4.2 Sources of obesity representations relevant to health policy

The CSC methodology broadens the WPR approach so that all representations are relevant to the development of policy and to the analysis of policy. In my wide and eclectic reading of academic and non-academic material that constructed the problem as

The social construction of obesity in an Australian preventive health policy obesity, I found it useful to frame this material according to main sources (see Table 4.1). These four sources are academia, government, industry/NGOs and the public and are further divided into sub-sources but only academic sources are split according to substantial differences in what the problem is represented to be and underlying assumptions and underexplored effects. The work of Townend (2009, p.171) in detailing 'different understandings of obesity evident in academic literature' influenced the academic categories suggested in Table 4.1.

Table 4.1: Schema of sources of obesity representations relevant to preventive health policy in Australia

Academia	Government	Industry/NGOs	Public
Biomedical	Clinical guidelines and	News media	Individuals
health	research		
Social health	Websites/reports/brochures   Marketing & other		Gender groups
		media	
Psychosocial	Policy – research funding	Commercial	Other
health	policy, policy strategy and	industries*:	demographic
	initiatives -interventions,	Weight-loss, food,	groups
	social marketing	transport, health	
		insurance	
		Private research	
		companies, such	
		as Gfk	
		bluemoon**	
Critical studies	NGOs fully funded by govt	NGOs funded in	Social/cultural
	and jointly with	part by	groups
	independent sources e.g.	commercial	
	Obesity Policy Coalition	interests e.g.	
		Obesity Australia	

Source: Author and Townend (2009)

There are two main reasons for concentrating on academic representations. It is this literature that researches, reflects and critiques almost all (academic and non-academic) representations of obesity so it provides a good overview of representations of obesity

<sup>\*</sup> Including industry representative bodies such as the Australian Food and Grocery Council

<sup>\*\*</sup> Conducted the formative report and the first evaluation report for the obesity prevention Measure Up campaign used in a case study of obesity policy (see chapter six)

The social construction of obesity in an Australian preventive health policy in the broader social context including resistant, indigenous representations. Also academic research is often the source of policy evidence or knowledge-for-policy and so is important to policy analysis.

# 4.3 Analysis of the framing of obesity representations

There is an extensive history of critical studies literature on the framing of health, health promotion, disease, risk, illness, medicine (Beck 1992; Bunton, Burrows & Nettleton 2003; Lupton 1992, 1994a, 1994b, 1995, 2003), with problem representations in health policy around the prevention of chronic disease (Krieger 1994; Baum 2007) and around specific chronic diseases such as arthritis (Callahan & Pincus 1997) and HIV/AIDS (Wolffers 2000). However literature on obesity framing has a shorter history.

According to Gard and Wright (2005, p.2) a crescendo of obesity representations in the media and scientific literature was reached around the mid-2000s and stimulated researchers to begin interpretive analyses of diverse and competing obesity frames. This is supported by the rise in mainstream media mentions of obesity in the USA from around 60 in 1980, 500 in 1990, 1,000 in 1995, 3,000 in 2000, and 7,000 in 2003 (Saguy & Riley 2005, p.876) and in academic publications with obesity in the title rising dramatically from the late 1990s to 2005 (Saguy & Almeling 2008, p.56). Barry et al (2009, p.11,12) cite research showing the proportion of Americans who believed overweight was an important health issue jumped from a low of two to three percent at the beginning of the decade to 67 per cent by the mid-2000s.

In the USA Kersh and Morone (2005, p.842) suggest the rise in media articles discussing obesity-related public policy in the early 2000s was 'astonishingly swift' and linked this to the first official report on obesity, *The Surgeon General's call to action to prevent and decrease overweight and obesity* (United States Department of Health & Human Services 2001). In later work Kersh (2009, p.297) outlined the movement of obesity from a new matter in the early 2000s that attracted a diverse and sometimes conflicting range of opinions and advocacy towards an 'issue regime or policy regime' that, in 2009, was still being formed. According to Kersh (ibid) three features of issue regimes are;

 swirling debates narrowing into a few primary frames, or basic descriptions of the issue that diffuse across jurisdictions,

- the emergence of a relatively small group of stakeholders and public officials
   who dominate media coverage and legislative debates, and
- legislative responses shrinking from dozens of options to a select handful. By analysing the media coverage Kersh (ibid) established that coverage on obesity expanded rapidly 'between 2000 and 2004 as the political salience of obesity spread' but after that the 'network has consolidated (and) coverage of the 'players' involved has

narrowed'.

The first systematic study of obesity frames is claimed as conducted in 2005 by Saguy and Riley (2005, p.871) and published as the journal article, Weighing Both Sides: Morality, Mortality and Framing Contests over Obesity. Also published in this year was a book by Australian academics Gard and Wright (2005) entitled, *The Obesity* Epidemic: Science, Morality and Ideology. Using distinct frameworks one centring on 'claimants' and the other on 'problem' frames these two studies made seminal contributions to research around analysis of the social construction of obesity. An upswing in other critical studies and psychosocial studies added to earlier research with analytic themes of; the validity of scientific evidence around body fat, weight, disease and risk, subjectification in policy and research, the construction of obesity as a public health epidemic and the ethical implications of that, weight control discourse and eating disorders, weight discrimination, the framing of obesity in the media, and the political interests and moral values underlying representations of obesity (Bordo 2003; Lawrence 2004; Aphramor 2005; Rich & Evans 2005; Monaghan 2005; Campos et al 2006; Guthman & DuPuis 2006; Andreyeva, Puhl & Brownell 2008; Lupton 2013; Saguy 2013).

The 2005 work of Saguy and Riley, and Gard and Wright had a broader aim than critiquing elements or sub-frames of representations, and gave a structure to the many and conflicting representations of obesity. Saguy and Riley (2005, p.871-2) suggest understanding competing frames and 'credibility struggles' is important as obesity becomes a more important target of health policy and because, for this issue, 'medical frames compete with political rights frames'. The analysis of obesity frames came at a time within the policy studies field of a shift in policy analysis research from a heavy focus on rational policy models to include more interpretive theory as used in the critical studies field (Bacchi 1999, 2009; Monaghan 2005, p.303; Aphramor 2005,

The social construction of obesity in an Australian preventive health policy p.320). Signs of this change within the policy studies field continue to slowly emerge. Gleeson, Legge and O'Neill (2009, p.15) in an analysis of policy capacity literature across several countries including Australia, conclude that in an increasingly complex health policy environment the concept of policy capacity should be broadened to include more than the technical, rational aspects of policy making and should more strongly emphasise relational aspects including stronger attention to the interface between policy-makers and 'the wider society'.

Saguy and Riley (2005) identify four primary 'claimants' as engaged in 'framing contests over the nature and consequences of excess body weight'- anti-obesity researchers, anti-obesity activists, fat acceptance researchers, and fat acceptance activists (ibid, p.869). Four competing frames are also examined; 'fatness as body diversity, obesity as risky behaviour, and obesity as a disease' along with 'obesity as epidemic' (ibid, p.881-2). Within these frames they find two scientifically contentious areas important to the claims; 'whether fatness is a mostly immutable characteristic, such as height, or a product of bad lifestyle' and 'whether high weight is a health risk, a genetic or biological defect, or harmless'. This 'claimant' frame is used in analyses where the political interests or conflicting values are a major focus (see Jenkin, Signal & Thomson 2011).

Anti-obesity researchers (who include obesity prevention researchers), according to Saguy and Riley (2005, p.875), are research scientists trained in disciplines such as 'epidemiology, psychology, nutrition, neuroscience', who emphasis the 'dire' health consequences of overweight and obesity, and argue for public attention and funding including, 'investment in obesity research, public policy initiatives, and personal responsibility for maintaining healthy body weight'. According to Saguy and Riley (ibid) anti-obesity research bloomed in the mid-1990s preceding the boom in media interest in obesity. They suggest (ibid) such research is conducted by researchers who dominate obesity expert positions within government, are employed and supported by several major professional organisations such as the International Association for the Study of Obesity, and have several dedicated academic journals. A defining feature of anti-obesity researchers according to Saguy and Riley (ibid, p.876) is that they conduct primary research. Anti-obesity activists are those committed to the framing of the problem as obesity in research conducted by anti-obesity researchers but who do not do

The social construction of obesity in an Australian preventive health policy primary research, and who publish anti-obesity secondary research in books such as Greg Critser's (2003) *Fat Land* (cited in Saguy & Riley 2005, p.877).

The emphasis by Saguy and Riley (2005) on the conducting of primary or secondary research exposes an important fault line running through obesity research. Research conducted within the biomedical paradigm almost always presumes the production of research as neutral, technical, and rational and so as productive of objective knowledge. Social paradigm research is usually less certain of the objective nature of the knowledge produced, and social research methodologies sit below those of biomedical methodologies in the hierarchy of evidence used by most 'natural' (using Hacking's definition) science researchers and by policy-makers using an evidence-based policy model. Bacchi (2009, p.253) points out that the evidence-based policy model represents a particular method of governing that acts to produce policy 'as neutral, technical, and separate from politics'. Such a method of governing constructs scientific experts such as clinicians and biomedical health researchers, and political leaders as those most relevant to policy-making. This disenfranchises other groups who are productive of less-identifiably objective research such as social health and psychosocial health researchers and interested groups such as NGOs (Mair 2011, p.29-30).

This silencing of alternative representations was reflected in the interviews I conducted in which biomedical academic experts spoke of being consulted by policy-makers in the production of both the Measure Up campaign and the secondary part of that campaign, Swap it: Don't stop it, but social health researchers spoke of not being consulted (Interview 103, 102, and 113). One researcher with more of a social health focus (Interview 103) spoke of evidence-based policy as illusory:

Most of the programs that have been implemented by government, and I mean state and federal government, have not been evidence-based, in fact they have quite often been at odds with the best available evidence. And so to me that is a lot about governments being seen...being needed to be seen to take action within their electoral cycle and so it's activity rather than action. And I think that has been particularly the case in relation to issues relevant to obesity.

This division between biomedical and social paradigms and health research and the relevance of this to policy-making is discussed in more depth in part two of this chapter.

Fat acceptance researchers such as Campos et al (2006) and researchers using the Health at Every Size (HAES) approach have concentrated on analysing and rejecting the claims by anti-obesity researchers of the links between risk, disease and obesity and frame the problem as one of poor science (Saguy & Riley 2005, p.879). Such researchers, according to Saguy and Riley (ibid) often do secondary rather than primary analysis and 'see themselves as having a mission to spread an alternative message about weight and health, not only through scientific publications, but through the mass media as well'. These researchers are suggested as less influential that anti-obesity researchers and more diverse in their framing of the problem including linking exercise rather than weight to health and arguing Body Mass Index (BMI) category error (ibid, p.880). HAES researchers Linda Bacon and colleagues are exceptions within this category as they have conducted primary research on weight and health interventions that are within the fat acceptance frame set out by Saguy and Riley (2005) (Bacon et al 2005). Not only is this research primary but it fits into the top level of a biomedical hierarchy of evidence being conducted as a randomised control trial.

Saguy and Riley (ibid, p.880) suggest a lot of fat acceptance research followed on from work of fat activism that has a history dating back to radical feminist work in the 1960s and 70s (also Bordo 2003, p.17). Fat acceptance advocates are small in number, usually not trained in science or medicine, use fat acceptance research to support their work and mainly concentrate on the moral implications of making obesity the health problem (Saguy & Riley 2005). They also concentrate on the health outcomes that follow that framing including the poor social, psychosocial and lived effects of fat stigma and discrimination (see Stark 2014, p.15).

Work by Saguy and Riley (2005, p.871) centres around two main representations of obesity – as a medical problem and as a political problem, and finds obesity framing is contested, 'upon underlying moral assumptions about fat individuals and their behaviors'. The anti-obesity researcher category as described by Saguy and Riley (ibid) is a narrow view of obesity research in the medical and health field as it only describes biomedical paradigm research. Social health researchers such as those investigating the link between obesity and poverty or time pressure do not appear as claimants in this analysis and neither do psychosocial researchers such as those investigating links between obesity and depression, anxiety, or body dissatisfaction. The alternative representations of obesity may be absent from Saguy and Riley's (ibid) work because

The social construction of obesity in an Australian preventive health policy they are much less visible and were less prevalent around 2005. For example, social health research has grown stronger and more prevalent since the mid-2000s but remains marginal in policy development.

Several of the main assumptions of the anti-obesity researcher category correlate with social health researcher assumptions (see Appendix 4.2). These include the acceptance of health as a central frame, the importance of the link between risk and obesity, and the need for further public investment in the problem. However social health researchers do not usually advocate a strong focus on personal responsibility for maintaining healthy weight but construct the problem around social values and models, such as social responsibility and the stewardship model of government (see Friel 2009, p.i- iii). Put forward by the WHO (2000, p.117) in The World Health Report 2000, this model broadens the basis of state authority from mainly economic efficiency to include social responsibility, from individualism to community values, and from control of citizens to the development of trust (Saltman & Ferroussier-Davis 2000, p.734,735). In Australia, support for very different modes of governing from the entrenched economic rationalist model that is supported by neo-liberal values is politically risky and is usually an inappropriate role for bureaucratic policy-makers. These are suggested as additional reasons why policy-makers may consult with biomedical experts rather than social health or psychosocial health experts on social matters such as obesity prevention social marketing.

Jenkin, Signal, and Thomson (2011), in analysing submissions to a New Zealand parliamentary inquiry into obesity and DT2 in 2006-07 also use a 'claimant' framework and explore the underlying interests of two conflicting frames constructed by industry and public health (see Table 4.2). This small, specific study (ibid, p.1023) highlights how the 'key interest groups' of public health and industry 'attempted to influence government policy' through public submissions to the inquiry. They (ibid) find industry promotes education as the key solution and constructs obesity as resulting from poor lifestyle choices and as attributable to a lack of physical fitness rather than other problems such as the overconsumption of food. The researchers (ibid) find public health promotes government intervention as the key solution and constructs obesity as a normal response to an obesogenic environment and so as mainly attributable to the consumption of poor food and social inequalities. The public health framing of obesity

The social construction of obesity in an Australian preventive health policy analysed in the study by Jenkin, Signal and Thomson (2011) would be categorised as a social health representation of the problem in this thesis.

Table 4.2: The 'Claimant' frame: Two examples of obesity framing from 2005 to 2011

Researchers	Claimants	Main frames	Values & interests
			stressed
Saguy & Riley	Anti-obesity	Obesity as a health	Personal responsibility
(2005)	researchers	risk/disease/epidemic	for health
	Anti-obesity	As above	As above
	advocates		
	Fat acceptance	Fatness as body	Social and individual
	researchers	diversity	consequences of a
			public focus on weight
		Fatness as mostly	
		immutable	
		Fatness as a health	
		risk/disease that is not	
		well established	
	Fat acceptance	Fatness as a rights	Rights of individuals
	advocates	issue	around bias, stigma and
			discrimination
			latrogenic effects of
			emphasis on weight in
			research, policy, popular
Jenkin,	Industry	Personal responsibility	culture Individualism: ignorance
Signal, and	industry	around physical activity	of causes and solutions
Thomson		around physical activity	by individuals
(2011)			by iliuiviuuais
(2011)	Public health	Obesogenic	Systemic/social causes
	i ubiic nealtii	environment -mainly	and solutions to health
		around food	problem: social inequity
			Problem: Social inequity

Source: Saguy & Riley (2005), Jenkin, Signal & Thomson (2011) & author

In focussing on claimants and the frames and interests of claimants an opportunity is lost in the work of Jenkin, Signal & Thomson (2011) to explore why the inquiry chose obesity or diabetes type 2 as the 'problems' for government. Given the inquiry was also focused on non-communicable chronic disease these researchers could have shed new light on why and how the public health framing of the problem took the shape it did and the consequences of that on the construction of the problem. The linking of an uncontroversially-categorised disease, such as DT2, with a controversially-categorised disease such as obesity raises the question, why not link diabetes type 2 with other directly related problems that are relevant to even more of the population, such as food and physical activity, to a matrix of risk factors for a systemic approach to health, or to more distal factors such as social inequity? Within the submissions both industry and public health linked the problem to food and physical activity but only as sub-problems of obesity.

In Australia, some biomedical and social health researchers have expressed frustration at the government emphasis, funding and policy attention on the individualistic construction of obesity (see Bonfiglioli et al 2007). Obesity as the dominant problem also forces preventive health researchers and advocates to focus less on other risk factors they consider more important and more amenable to social/systemic solutions such as physical activity and food (see Bauman et al 2003). Alternative public health frames such as those that represent the problem as single risk factors such as food or as structural such as social inequity carry other assumptions and generate other underexplored effects that also need to be analysed and understood (see Coveney 2008 for a social constructionism analysis of food, pleasure and the body in Australia). A focus on all problem constructions, dominant and alternative, allows a deeper theoretical analysis than an analysis based on 'claimant' categorisations of obesity frames.

Using a 'problem' frame Gard and Wright (2005) identify science and particularly the biomedical model framing of overweight and obesity as a dominant, problematic, narrowly focused and underexplored frame. Their work questions both the validity of the science around obesity and around the construction of the obesity 'epidemic' and uses feminist critical studies and sociological analysis to question the underlying assumptions and the underexplored effects especially of the policies generated (ibid, p.15). The central concern of their work is that the essentialism of scientific knowledge

The social construction of obesity in an Australian preventive health policy around obesity has hidden political and social consequences. One important effect is the protection that natural science as a trusted knowledge source brings such as the appearance of inevitability, validity, and political neutrality (Hacking 1999; Navarro 1986, p.162-163).

Such effects are brought to light by the study of alternative ways of framing 'bodies, weight and health' (Gard & Wright 2005, p.15). Most importantly, Gard and Wright (ibid, p.13) illustrate through their study of media and science writing on obesity that the dominant scientific frame merges with popular ideas about obesity to 'produce the public face of the 'obesity epidemic''. In concluding they suggest the science does not 'ameliorate social stigma' and may even entrench and inflame that problem (ibid, p.14). As Dixon and Broom (2007, p.179) suggest such debates, 'raise an important question about whether obesity represents a 'crisis for public health' or a 'public health crisis'.

In later work Saguy (2013, p.15) develops the idea of both problem frames and blame frames (see Table 4.3). She (ibid, p.6) identifies three problem frames that use 'health' as the central frame; medical, immorality, and public health crisis and identifies the 'medical' frame as dominant in research and policy. Also identified are three 'no-problem' frames, HAES, Beauty and Fat Rights frames with only the HAES frame using 'health' as a central frame. The HAES construction of the problem decentres weight and 'promotes clinical practice which does not emphasise body size as a proxy for health' (ibid). This construction remains individualistic as it centres on individuals as clients or patients but the problem is constructed as socially complex and extrinsic to (meaning physically outside of) the body, being around food, physical activity, psychological health, chronic stress management etc., rather than a physical attribute of the person or patient.

Saguy (ibid, p.15) identifies three competing blame frames; personal responsibility (personal lifestyle), sociocultural (food industry, urban planning, poverty), and biological (genetics, other biological factors). She suggests (ibid) representing the problem as 'obesity as a medical/public health crisis' is necessary to constructing the aetiology of the problem according to one of these blame frames and doing this narrows the possible solutions (ibid, p.10). In this way 'debates serve to reinforce the *problem* frame of fatness as a medical issue and public health crisis' (ibid, p.6, emphasis in original).

Table 4.3: The 'Problem' frame: Obesity framing by Gard & Wright 2005 and Saguy 2013

Researchers	Problem	Blame frames used	Values & interests
	Frames of	with problem frames	stressed
	obesity		
Gard & Wright	Scientific frame		Questionable validity of
(2005)	- obesity		science framing of
	epidemic		obesity
			Interested nature of
			science
	Popular frame		Body fat as a moral
			issue
	Public frame		A mixing of science and
			moral frames
	Feminist frame		Body weight/fatness as
			social and cultural issues
	Sociological		Science interests in
	frame		'ideological space' of
			obesity epidemic
			Assumptions and effects
			of the dominant framing
			of obesity by science
Saguy (2013)	Medical problem	Personal responsibility	Individualism around
		blame frame	personal lifestyle
	Immorality	Sociocultural blame	Social/systemic level:
	problem	frame	food industry, urban
			planning, poverty
	Public Health	Biological blame frame	Biology: genetics,
	crisis		metabolic and other
			biological factors
	Health at every		
	size		
	Beauty Frame		
	Fat Rights		
	Frame	12) % Andrew	

Source: Gard & Wright (2005), Saguy (2013) & Author

The social construction of obesity in an Australian preventive health policy Saguy's (2013, p.17) project is '...to reveal that debates over obesity-related health risks are part of larger framing contests over the meaning of fat bodies'. Like other critical theorists Saguy (ibid, p.15-16) suggests;

...even if there are some health risks associated with higher body mass, this does not – in itself- tell us why public concerns about obesity have reached such a fever pitch, why blame and responsibility are discussed in the specific ways they are, and what the social implications of all this talk are.

Frames are separated in Saguy's (ibid) work along the issues of the contested nature of knowledge especially knowledge produced in the biomedical versus social paradigm and the productive power of discourse to covertly support socio-political values and interests. As such the characteristics of knowledge produced in biomedical and social paradigms are important to framing literature and are especially relevant to an analysis of obesity representations. These paradigms are explored in detail below as part of the task of finding or creating a schema of obesity representations that will allow a simpler but coherent analysis of obesity policy according to the requirements of a CSC policy analysis approach.

# 4.4 Two competing theoretical paradigms-biomedical and social

Bacchi (2009, p.128, 130) identifies the social and biomedical as two competing theoretical paradigms and suggests preventive approaches to health cross-cut these paradigms. Features of the biomedical and social paradigms that are relevant to representations of obesity are summarised in Appendix 4.1. The biomedical paradigm has two main representations of obesity that have much in common but also important differences. Biomedical/expert representations are usually produced in more medical or clinical research and practice, and biomedical/population representations in population health and epidemiological research.

Mair (2011, p.27) describes a similar split in the biomedical science of tobacco research to be around the move in epidemiology from '...examination of the causes of disease to an examination of the causes of the 'risk behaviours' implicated in disease...' with the use of the same models and underexplored assumptions (emphasis in original). Thus, 'the standard model is simply taken for granted as the only way of doing research of this kind. Indeed, it has actively worked to exclude other ways of thinking about the

The social construction of obesity in an Australian preventive health policy problems being addressed' (ibid). The differences between biomedical/expert, biomedical/population and social representations of obesity are detailed further in a table in Appendix 4.1.

The characteristics of the biomedical and social health paradigms are especially important to this thesis as it uses an overall health frame by uncritically accepting the government objective of reducing and preventing non-communicable chronic disease at a population health level. Within this health frame a political or critical frame is used to analyse what the problem is represented to be in obesity policy. Setting out these paradigm characteristics and differences is also useful for the creation of a schema of obesity representations.

# 4.5 A schema of obesity representations

As obesity is constructed as the policy problem and it is academia that policy-makers look to for 'evidence' or more accurately to find research they will transform into 'knowledge-for-policy' (Gibson 2003, p.12) a schema of academic obesity representations is created to aid the analysis. The schema adapts the framing literature reviewed above and divides the academic representations into products of either the biomedical or social paradigms although the crossing of paradigm boundaries is recognised. The diversity of what the problem is represented to be within academic research may not lend itself to exclusive categories but representations differ enough in both assumptions and effects to be usefully categorised. The schema relies heavily on the ideas of Saguy's (2013) problem frame to produce four main academic research representations of obesity, biomedical health, social health, psychosocial health and critical studies.

The earlier work of Saguy and Riley (2005) is also relevant. One of the schema categories- biomedical, maps onto Saguy and Riley's (ibid) 'anti-obesity researcher' and 'anti-obesity advocate' categories. The schema is also created to include the alternative 'primary research' groups that is, social health and psychosocial health representations in the policy analysis. The fourth schema category is critical studies representations and includes Saguy and Riley's (ibid) fat acceptance claimant and research groups and Saguy's (2013) categories of HAES, Beauty frames and Fat Rights frames. The critical studies category is a broader category than is found in the framing

The social construction of obesity in an Australian preventive health policy literature and includes research that represents the problem within a political frame, and at times within both a health and political frame. This thesis is suggested as included in the critical studies category.

Some similar concepts and assumptions cut across these representation categories. Health is regarded as biological and behavioural either predominantly or secondarily by biomedical, social and psychosocial health representations. Obesity as a biological problem of body fat proportion is the centrepiece of biomedical representations but also makes up one small part of psychosocial and social health representations. Important cross-over of concepts, assumptions and representations across categories occurs as detailed in Appendix 4.1.

The schema produced in this thesis allows a clearer and more cohesive interrogation of both dominant and alternative instances of what the problem is represented to be in a specific policy, such as the Measure Up campaign and in the broader analysis of the history of obesity representations. Schema categories are summarised along with assumptions and effects in a table in Appendix 4.2 and each of the categories is analysed and supported below and in the chapters to come.

# 4.6 Biomedical health representations

Research conducted in the biomedical paradigm and according to those models has a long history of being tried, tested and improved on over the 65 or so years since the first use of the randomised controlled trial (RCT). Research produced in the biomedical model has been used to alleviate the suffering and avert the early deaths of millions of Australians. Developments in research methodology have included, the development of RCTs as the gold standard of research, the growth in status of observational studies from the 1960s, the development of evidence-based medicine in the 1990s, the acceptance of clinical epidemiology and biostatistics as an integral part of clinical medicine, and the acceptance of meta-analysis of both RCTs and later observational studies (Concato, Shah & Horwitz 2000; Spitzer 1996, p.706, 708).

Problems have been raised about the suitability of biomedical methodologies, including epidemiology, to public health problems and in particular to investigations at the individual level, the lack of study around the interplay between individuals, groups and

The social construction of obesity in an Australian preventive health policy environments, and the inability to place history and society as centrally as the individual in the search for causes (Schwartz, Susser & Susser 1999, p.26-29). Nevertheless the pursuit of science (in the biomedical paradigm) is valued by the general public, and scientists are the most trusted source of accurate scientific information (Searle 2014, p.40,75). Chapman et al (2014) suggest the media is highly influential in shaping this public image and trust in science.

It is this reductionist, biomedical paradigm that underpins the dominant bodies of health and obesity related research in universities and private research organisations, attracts the vast majority of research funding (National Health & Medical Research Council 2014) and holds a high status in public policy-making and the media (Saguy & Almeling 2008, p.60). Biomedical representations of obesity in research medicalise body fat, weight, shape and size by constructing risk categories according to body shape measurements, and weight and height algorithms (Prospective Studies Collaboration 2009). These categories include the BMI that was created by biomedical researchers seeking to consistently measure both malnutrition and body fat proportions in populations, that is between countries (James 2008, p.S122). Biomedical representations of obesity (from this point forward called biomedical obesity) include obesity as a disease and a population health crisis (ibid, World Health Organisation 2000; Saguy & Almeling 2008, p.59).

Generally accepted biomedical research findings around obesity are: For the body;

- a) A certain proportion of body fat (a certain body composition) is considered to be physiologically normal, not a risk for certain diseases and as one defining aspect of health (World Health Organisation 2006 & 2015; James 2008). A recent example of this come from WHO Global Burden of Disease (2013) data where, in a risk factor table, 'no exposure to the risk factor' of 'High body-mass index' for a population is described as a, 'uniform distribution between 21 and 23 (BMI)'. This means for the WHO overweight and even some of the 'normal' BMI range (18.5 to 24.9 BMI) are included as raising the 'risk exposure level' (WHO 2013)
- b) Excess body fat is a biological consequence of energy imbalance, where more energy is consumed than is used and the excess is stored as body fat. Genetics, disease, and drugs are less often implicated in the accumulation of excess body

- The social construction of obesity in an Australian preventive health policy fat than food and physical activity (National Preventive Health Taskforce 2009b, p.60; Butland et al 2007, p.8). This is challenged by recent studies in epigenetics (Lustig 2011; Gluckman et al 2011).
- c) From the 'normal' BMI range, higher estimated proportions of body fat, at the population level, increase all-cause mortality risk in a mostly linear relationship up to very high BMI (Prospective Studies Collaboration 2009, p.1087).
- d) Although the overall level of mortality may differ, this relationship holds for all ages, both genders, and genetic/ethnic variations across the world population (ibid; World Health Organisation 2000, p.4).
- e) Obesity is both a risk factor for chronic diseases such as breast cancer and DT2 and a disease (Allison et al 2008; Butland et al 2007, p.32).

# For populations;

- a) In the three decades since the early 1980s developed-country populations have seen increased proportions of individuals with excess body fat and average amount of excess body fat in a fairly consistent and 'alarming' way (Gortmaker et al 2011).
- b) Developing countries have more individuals (numbers of people) with excess body fat than developed countries but a smaller proportion of their population with excess body fat however this proportion is increasing rapidly (Hu 2011; Prentice 2006).
- c) Body composition in populations is mainly measured cheaply, effectively, and in a non-invasive way using the proxy of an algorithm of body dimensions (height, shape) and body weight including Body Mass Index (BMI), waist circumference, and waist to hip ratio (World Health Organisation 2000, p.8-10; Butland et al 2007, p.150).

#### At the clinical level;

- a) BMI and waist circumference are accepted as clinically relevant in estimating individual body composition (body fat proportion) and risk for chronic disease (National Health & Medical Research Council 2013a, p.24-26).
- b) Overweight BMI 25 to 29.9 and obese BMI 30+ have been and continue to be conflated (Strawbridge, Wallhagen & Shema 2000).
  In the early history of the BMI, categories were constructed only as a guide to the use of more accurate risk assessment measures, such as insulin resistance

The social construction of obesity in an Australian preventive health policy (Reaven 2005). As an example, in the 2003 National Health and Medical Research Council (NHMRC) document, *Overweight and Obesity in Adults- A Guide for General Practitioners* GPs are guided to determine if the patient is overweight or obese (BMI  $\geq$  25) and *then* assess other biometric risk indicators such as blood chemistry and blood pressure before risk for chronic disease can be determined as high or low for that patient (National Health & Medical Research Council 2003, p.2; Butland et al 2007, p.68).

c) BMI categories, waist circumference and waist to hip ratios used to categorise patients as 'diseased' or 'at risk' are contradicted by stated successful outcomes of 'more than 5% weight loss' (National Health & Medical Research Council 2003, p.2). Where patients successfully lose 5per cent of starting weight, this is stated as a successful clinical outcome but contradicting this patients who remain in the same BMI or waist circumference category will continue to be categorised as 'diseased' or 'at risk'.

The problem constructed in research and policy as biomedical obesity presupposes biomedical expert leadership is required in policy development. An example of this is the heavily biomedical expert presence in the NGO, Obesity Australia an organisation with a specific aim of influencing obesity policy in Australia (Obesity Australia 2012a). Biomedical obesity as a research, practice and policy problem assumes the individual as the unit of analysis and individual behaviour as the proximal and most important cause and solution to excess weight (Saguy & Almeling 2008, p.58). For best efficiency and effectiveness it is assumed solutions to biomedical obesity should be based on minimal government regulation of industry and economism that is the promotion of economic facts over social facts (Saltman & Ferrousier-Davis 2000, p.736).

The biomedical/expert representation of obesity swings between individuals having a central role in causation and other biological or therapeutic causes such as genes or drugs. Therefore the individual and the health expert are sometimes both assumed to be central to solutions. An example of literature that constructs obesity in this way is a 2012 article in *The Sydney Morning Herald* by Paul Zimmet, Director of Baker IDI Heart and Diabetes Institute (Zimmet 2012). The representation of obesity is as an economically expensive epidemic and a war with individual behaviour driven by biology and major genetic or epigenetic causes.

Parents are ignorant, unskilled and floundering in a rapidly changing world. The blaming of the individual is seen as unreasonable in this light. It is suggested that the 'culture of blame' perpetuated by the media needs to be stopped, government needs to act strongly and engage the food industries because 'unlike smoking, we cannot live without eating' so such engagement is essential to successful solutions (ibid). No evidence or reasoning is provided to support this statement that directly contradicts the experience of tobacco control in Australia (Chapman 2007) and constructs food as essential whereas there are many foods humans can live without and research constructs as disease-promoting or ultra-processed (Moodie et al 2013, p.670). Obese individuals are represented in this construction as almost helpless victims of biology and of cultural change they cannot keep up with, along with media moralising which 'invites...governments to put the responsibility on individuals...' (Zimmit 2012; also Gluckman et al 2011).

This is a classic biomedical/expert representation that constructs obesity as predominantly about biology and about expert intervention being mainly clinical solutions. 'Action needs to start before birth (with pregnant mothers) and rely on the new science of epigenetics...appropriate advice and education, intervention during pregnancy, and even before, can reverse this escalating epidemic' with an inclusive nod to the 'obesogenic' environment as amenable to change through dialogue with industry (Zimmet 2012). Social health and psychosocial representations of health and obesity are almost absent as are critical studies representations of obesity along with important political, economic, social and cultural assumptions and effects, such as the link between obesity as a biomedical concept, stigma and poor health behaviours. Puzzlement and concern are expressed by biomedical obesity experts that the biomedical construction of obesity has not been promptly or fully accepted by the general public or by policy makers (ibid) yet no psychosocial research or critical studies research on that matter is referred to.

Gluckman et al (2011, p.2) in a biomedical paper suggest an important reason for the failure of obesity policy is the weakness of the state's role in obesity initiatives (a social health assumption) but goes on to suggest, 'the perception of the state's role in battling the obesity epidemic would be very different if the biological basis of obesity was understood by policy-makers'. For these researchers the failure is in the 'translation' of science into policy. The social context appears in this paper as a troublesome concept

The social construction of obesity in an Australian preventive health policy that can and should be navigated around or ignored. The division between biomedical and social health constructions of obesity among researchers is made clear in the work of Wickins-Drazilova and Williams (2010, p.626) who detail a similar set of individualistic (biomedical) assumptions by European 'scientists' working on childhood obesity interventions and contrast these with the social/systemic (social health) assumptions of some 'public health specialists' working on the same interventions.

Biomedical theories and methods, such as multiple causation and multivariate analysis are described by Kreiger (1994 cited in Bell, McNaughton & Salmon 2011, p.3) as reliant on 'biomedical individualism'. If obesity is constructed as a widespread, risky, expensive, and self-induced disease, like an infectious disease such as HIV/AIDS, then questions of individual blame and responsibility are more readily accepted without critical review. As a biomedical expert asked during interview for this thesis, 'why are you comparing smoking and obesity policy? It would be more relevant to compare obesity and HIV/AIDS' (Interview 102). In the sense that, viruses, mosquitoes, bats and birds are identified as important (and dangerous) links or threads in a web of causation of infectious diseases, individual bodies and individual behaviour (eating or sexual activity) are identified as central to causation and so central to solutions within this representation of obesity.

The necessary task of critically analysing the problem representation is not possible from within the reductionist biomedical paradigm. Gluckman et al (2011, p.1) provides an example of this by suggesting in one paragraph that 'it is crucial that we apply lessons from the failure of wealthy countries to curb obesity and not extend ineffective strategies to the developing world' and in the next, '(f)or societies that view obesity as a sign of health, wealth, and prestige, the promotion of weight loss as an aspiration will be difficult to achieve'. The failure of developed countries, where the thin ideal has been a pervasive body norm for around 50 years, to translate health policies promoting 'weight loss as an aspiration' into actual weight loss would suggest this *is* an 'ineffective strategy'. As such it can only remain as an 'aspiration' where there is no radical questioning of what the problem is represented to be and what the underexplored assumptions and effects of that representation may be.

Brewis et al (2011, p.270) as psychosocial researchers have a different representation of the problem and have studied the spread of United States (US) representations The social construction of obesity in an Australian preventive health policy (biomedical) of fat including 'very slim ideals (and) a highly medicalised and globalised model of obesity that emphasizes its status as a sickness and thus the need for medical treatment'. In studying the spread across 10 countries and states including into traditionally fat-positive societies these researchers state;

Results suggest a profound global diffusion of negative ideas about obesity. Given the moral attributions embedded in these now shared ideas about fat bodies, a globalization of body norms and fat stigma, not just of obesity itself, appears to be well under way, and it has the potential to proliferate associated prejudice and suffering.

What would be seen as a positive-to-biological-health change by Gluckman et al (2011) is considered a negative, global, psychosocial change by Brewis et al (2011).

Tesh (1988, p.154), in speaking of discourses, suggests that political meanings are acquired by causal statements and both shape and limit the prevention policies a society develops. In offering a path ahead Gluckman et al (2011, p.3) suggest a raft of strategies around food and physical activity to prevent 'obesity-associated diseases'. A life-course approach is suggested and a 'translational agenda' where every solution offered is around the educating and urging of individuals as mothers and preschool- and school-aged children. Mothers are subjectified here as individuals central to the causes and solutions of a 'preventable' health problem that is now an 'epidemic' 'war' and 'tsunami' (see Zimmet 2011). McNaughton (2011, p.165) a critical studies researcher in analysing obesity and maternal responsibility suggests, 'where overeating and inactivity are constructed as avoidable, fat bodies are read as evidence of both preventable illness and moral failings'. The dominant biomedical representation leaves no capacity to examine or acknowledge moral and aesthetic alternative representations, assumptions and effects.

If the strategies proposed by Gluckman et al (2011) were ever implemented and effective which is highly unlikely given the decades-long, widespread failure of educate-and-urge policies, rather than preventing 'obesity-associated diseases' they would more accurately prevent non-communicable diseases related to food and physical activity in individuals regardless of their body shape and size. Obesity remains in the picture because it is uncritically represented as the most easy-and-cheap-to-measure and easy-to-see biomedical risk factor and because as a product of a biomedical model and paradigm it supports the biomedical (research, professionals, organisations) as pre-

The social construction of obesity in an Australian preventive health policy eminent in preventive health policy. In the next chapters assumptions and effects of biomedical obesity and of the biomedical model and paradigm are further examined.

### 4.7 Social health representations

Social health research represents the problem as obesity, as excess body fat, body shape and body size, and as an indicator of risk for disease but places this within a more important problem representation of distal causal factors such as the obesogenic environment (Chopra & Darnton-Hill 2004, p.1558; Swinburn & Egger 2002, p.290; Swinburn, Egger & Raza 1999, p.563), social and cultural determinants of health (Dixon & Broom 2007, p.1-19), and social equity issues (Friel 2009; Commission on Social Determinants of Health 2008). Such social health representations of problems have been present in research and reports since at least 1979 when A. J. Stunkard conducted a thorough review of 'social and environmental influences on obesity' for a report on obesity prevention and management by the USA National Institutes of Health (Stunkard cited in Nestle & Jacobson 2000, p.15). In social health research health is mainly represented as it was in the 1948 constitutional documents of the WHO, 'a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity' (World Health Organisation 1948, p.100). Since 1948 suggestions to broaden the definition have been put forward that include, for example, social values (Public Health Association Australia 2012, p.7) and concepts of selfmanagement (Huber et al 2011).

Fran Baum (2009a, p.163,164) a social health researcher and advocate calls for well-funded reflective research on the social determinants of health, the use of these determinants in health promotion, and faults individual behaviour as a central assumption of policy. In doing so she (ibid) separates social health representations away from biomedical representations:

There is a beguiling simplicity in behaviouralism – poor behaviours lead to risk factors and disease so we should intervene with individuals to put a stop to those behaviours. Yet life is more complex than this. Our behaviours reflect all those factors below the waterline – including our class, our gender, where we live, the jobs we do, whether or not we are parents, whether we have robust or fragile mental health, whether we are well-connected socially and how much power and

The social construction of obesity in an Australian preventive health policy influence we have. All those factors are connected and interact. From this complexity comes health and well-being, risk factors and disease.

These claims are well-substantiated in research that began in earnest with the seminal Whitehall studies in Britain in the mid-1960s (Marmot et al 1991, p.1387). Such research influenced the growth of the new public health toward social health and away from biomedical health models (Baum 2008b). Social health issues continue to grow in political strength especially since the publication of the WHO Commission on Social Determinants of Health in 2008 but remain secondary to biomedical paradigm models and knowledge in preventive health research and policy (Baum 2010, p.36).

The narrow policy framework currently favoured by Australian governments for preventive health policy demands a rigid link between policy output and measureable outcome. This means broader representations of the problem such as social and environmental determinants cannot easily be represented as a policy problem at the operational or implementation level (Baum 2008a, p.462). Olsen et al (2009) in reviewing public submissions to the 2008 Australian House Standing Committee on Health and Ageing inquiry into obesity, *Weighing It Up: Obesity in Australia* found a balance in submissions framing the problem as individual versus social/systemic with very few submissions focusing on social inequity.

Although social health representations of obesity in policy strategy have been put forward for at least two decades in Australia (see National Health & Medical Research Council 1997, p.5) government policy remains firmly individualistic in policy approaches and entrenched in what Baum (2010, p.36) calls the 'power of the biomedical imagination'. A social health representation of obesity as a policy problem is suggested by Baum (2007, p.90) as requiring of government a change of political values away from neo-liberalism and toward social fairness and justice, an understanding of complexity and an ability 'to cope effectively with complexity'.

Governments often recognise social health research findings as central to the solution to the rising prevalence of NCDs and at the same time unusable. James (2008, p.S120) provides a social health research representation of the problem and an understanding of this dilemma (along with a representation of food and physical activity as the problem)

The social construction of obesity in an Australian preventive health policy when he suggests:

Governments now recognize the overwhelming industrial developments that guarantee an escalating epidemic but neither they nor WHO know how to engage in changing the societal framework to promote routine spontaneous physical activity and a transformation of the food system so that low energy-density food of high nutrient quality becomes the norm.

Obesity researchers suffer the same problem. Research by Banwell et al (2005, p.564) found a consensus among social health expert in identifying the main social trends causing obesity. However no consensus was found around how those trends operate and these researchers (ibid) state, '(t)his finding of expert dissensus raises questions about the role of experts in evidence-based policy-making in multi-faceted areas'.

In a submission to the Australian National Preventative Health Taskforce (NPHT) around the social determinants of obesity, alcohol and tobacco, Friel (2009, p.iii) urges a change in the conventional policy model away from biomedical and toward social health models:

A policy framework based on a social determinants approach to health and health equity through the prevention of obesity, alcohol and tobacco related harm requires three key elements:

- i) revise the policy framework to make it less individualistic and to better accommodate the value of collective and community through a stewardship model of government,
- ii) rebalance the current policy focus on targeted marginalised groups towards a focus on systems and processes and the degree to which they are socially inclusive, and
- iii) systematic consideration of the health effects (especially in relation to obesity, harmful alcohol consumption and tobacco use) of all government policy, systems and processes on all population groups.

The political stewardship rationalities inherent in this social health representation of the problem are in some defining ways diametrically opposed to the neo-liberal values and individualism that underline current preventive health policy making (Saltman & Ferroussier-Davis 2000, p.734-735). The proposed elements also challenge the bureaucratic structures that are anti-systemic in the sense of being structured to create competitive tension between portfolios rather than cooperation. These elements also

The social construction of obesity in an Australian preventive health policy indirectly financially challenge all industries (food, weight loss, transport etc.) that benefit from the individual being central to the obesity problem, causes and solutions. Implementation would require a substantial jump in government funding for preventive health, and a true separation of the bureaucratic areas of therapeutic health and preventive health...something not achieved in the short life of the Australian National Preventive Health Agency (ANPHA) (2014).

A social health representation of the problem in policy as *not* directly the prevention of non-communicable chronic diseases (NCDs) but the promotion of the broader concept of health and well-being would have to wait for a cross-department portfolio, such as the Commonwealth Department of Human Services. In 2012 policy makers from that department created a policy pilot by asking the leaders and advocates from a small, highly disadvantaged community, 'what is the best way to promote health around the reduction of non-communicable chronic diseases in your community?', and listened to the reply which was, 'educate our people for employment' (Anonymous source, Australian Public Service, personal correspondence 2012). As such this pilot program is a very close fit to the salutogenic model of health promotion described by social health researchers Antonovsky (1996) and Baum (2009a,b) that promotes the importance of social context in alleviating long-term health problems.

Such policy exemplifies a social health representation of the problem, using no single risk factor or disease but representing the problem in accordance with the social health research findings as a problem of wholistic health amenable to social/systemic policy on employment, education and income (see Baum 2009b, p.16). Such programs are rare and often depend for government attention and funding on the representation of a community or cohort as having extreme dis-function and disadvantage measured by major social indicators such as health, education, and child safety. This allows the government to differentiate the specific community from mainstream communities and allows the mainstream community to remain partitioned from and under-examined for similar policy problem representations and similar policy solutions.

In current obesity policy in Australia the representation of the problem is not predominantly as a social/systemic problem. This is despite high level, international insistence that this should be the case. Friel (2009, p.v) quotes Dr Margaret Chan,

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Director General of WHO when launching the *Commission on the Social Determinants*of Health Final Report in August 2008:

This ends the debate decisively. Health care is an important determinant of health. Life styles are important determinants of health. But it's factors in the social environment that determine access to health services and influence lifestyle choices in the first place.

The absence of social health constructions means the current biomedical construction of obesity communicated by the Australian government to the public of Australia is premised on the assumption that either the vast majority of the public already know, or they do not need to know, that most government strategic documents, expert reports, clinical guidelines, and related research concurs with Dr Margaret Chan. However social health representations do not fit or actively contradict the current policy model, political and commercial interests, and the dominant political, health, commercial, media and public representations of the problem (Bacchi 2009; Olds et al 2013).

## 4.8 Psychosocial health representations

Psychosocial health research expanded from the 1960s and 70s and representations of obesity are found in clinical and social psychology, behavioural research, sociology, medical anthropology, and consumer health research that uses weight-related psychological concepts. Some of the key psychosocial concepts are body image, body dissatisfaction and stigma. Sarah Grogan (2007, p.3,4) defines body image as, '...a person's perceptions, thoughts and feelings about his or her body' and regards it as a, 'psychological phenomenon that is significantly affected by social factors'. Body dissatisfaction is defined by Grogan (ibid, p.4) as, 'a person's negative thoughts and feelings about his or her body'. In the 1990s and 2000s psychosocial research with a specific weight focus flourished around eating disorders, weight stigma and discrimination (see Grogan 2007; Brownell 1991; Lewis & Donaghue 1999; Puhl & Brownell 2003b). Stigma is defined by Burris (2008, p.473 citing Erving Goffman) as arising, 'when an attribute creates a discreditable gap between our actual social identitywho we think we objectively are- and our 'virtual social identity'- how we are seen by others'. Stigma is expanded on further in chapters five and six.

Underpinned by a biomedical dichotomy of body and mind, psychosocial research represents the psychological as an essential, if separable, part of health. Health is a

The social construction of obesity in an Australian preventive health policy central frame and obesity is represented as a problem of body weight, shape and size and as an indicator of risk for disease, but more importantly this is placed within problem representations that hold the psychological individual, population groups and populations as central. This contradicts the assumptions of biomedical obesity where body fat, the individual and individual behaviours are central. The psychosocial health field is split over whether the negative psychosocial effects of a focus on weight by health experts and in health policy are outweighed by the positive physical health consequences of preventing or reducing excess body weight at the population level.

Some psychosocial research since the 1990s has offered careful analyses of weight stigma and suggested approaches to prevent this that include the promotion of laws to prohibit weight discrimination (Puhl & Brownell 2003a,b; Puhl & Latner 2007; Puhl & Heuer 2011). Other research shows a contested association between obesity stigma and psychological functioning (Puhl & Brownell 2006, p.1802). For decades psychosocial health and critical studies researchers have pointed to the negative mental and physical health outcomes, detrimental social effects, gender bias and positive commercial effects of policy that pursues a risk factor (obesity) that is also a highly visible, body characteristic (Bordo 1993, 2003; Guthman & Du Puis 2006; Bell, McNaughton & Salmon 2011). Within biomedical representations of obesity key psychosocial assumptions around body image and body dissatisfaction understood as produced within a complex sociocultural context are reduced to assumptions of individual pathological responses to excess body fat. Thus in policy obesity is listed as 'causing' anxiety and depression rather than such conditions being a psychosocial response to both a health field focus on body shape and size and a more general harsh, negative, body culture.

For some psychosocial researchers the representation of obesity as the problem is inevitably a representation of body shape and size as a moral and aesthetic target in a cultural milieu that promotes hypersensitivity to the body and where the body is identity-shaping as well as a site of physical and mental health (Le Besco 2011; Bacon 2010). Bell, McNaughton and Salmon (2011, p.7) suggest weight is publicly inscribed on the body like no other risk factor as it is an embodied state rather than being, for example, an embodied practice such as smoking. A comparison of obesity and tobacco in chapter eight allows a more full analysis of these issues. Size and shape stigma and discrimination is prevalent and potent (Carr & Friedman 2005; Puhl & Heuer 2009) but is less a stimulator and more a deterrent of behavioural change toward healthy

The social construction of obesity in an Australian preventive health policy behaviours (Vartanian & Shaprow 2008; Sutin & Terracciano 2013), along with being positively related to poorer psychosocial functioning, body image distress and lower levels of self-esteem (Puhl & Brownell 2006). Comparisons based on a psychosocial representation of the problem are being made with sexual, racial, and age stigma (Puhl, Andreyeva & Brownell 2008), and more research is being undertaken in Australia around public psychosocial responds to obesity policy (Thomas et al 2014a; Thomas et al 2014b; Vartanian & Smyth 2013).

There are a small number of people who practice body acceptance through supportive organisations and movements such as HAES and on-line social forums. Psychosocial research links such activity with positive mental and physical health outcomes (Bacon 2010; Dickins et al 2011). Some psychosocial representations offer solutions to reduce obesity stigma or suggest that targeting obesity is necessary for physical health and that outweighs any psychosocial problems generated by a focus on body shape and size. These representations do not clash with the biomedical model but calls within such research to ameliorate obesity stigma have been largely ignored (Puhl & King 2013, p.118). Psychosocial representations of obesity that emphasis iatrogenic psychosocial effects above physical health effects have a lot in common with social health representations. They do not fit, actively contradict, or clash with, the biomedical representation of obesity, current policy models, political and commercial interests, and the dominant political, biomedical, commercial, media and public representations of the problem (Bacchi 2009; Olds et al 2013).

### 4.9 Critical Studies representations

Critical studies research is often situated in a political rather than a health frame. This allows analysis of the production, relations and effects of power and knowledge within preventive health problem discourses and the comparison of dominant and silenced alternative representations. Foundational work in this field that is relevant to this thesis includes Michel Foucault's (for example, Foucault 1979) work on the relationship between power and knowledge, feminist research around the body and identity (Orbach 2006 [1978]), and other research that draws on a social constructionism approach, including Bacchi's (1999, 2009) work. Key concepts include; paradigm, regime of truth, discourse, discursive practices, biopower, discipline, governmentality, health, the body, the visual, identity, subjectification, resistance, culture, social norms, body fat,

The social construction of obesity in an Australian preventive health policy weight, shape and size, stigma and social disapproval. These concepts are described and analysed in this chapter and those that follow.

The focus of critical studies work is not on the referent reality that is seen by critical studies researchers as a misleading emphasis in a lot of public health work but is on the 'moral, economic and political underpinnings of contemporary public health discourses on ... fat' (Bell, McNaughton & Salmon 2011; also Monaghan, Colls & Evans 2013). Research on problem representations of weight, began in earnest in the 1980s and 90s with the rise of body studies (Bordo 1993, 2003). Feminist research around the body and body studies waned in the late 1990s and early 2000s but has revived since 2005 with the establishment of fat studies as a sub-discipline and with the rise of resistance to the dominant biomedical/population representation of obesity that is so widely disseminated in health promotion discourse (Wann 2009, p.xi; Guthman & Du Puis 2006; Monaghan, Colls & Evans 2013).

Organised resistance to the dominant biomedical representation of obesity continues to grow. For example the Health at Every Size (HAES) movement based in California rejects the idea of weight as *the* problem but continues with a central frame of health and well-being and a strong assumption of individual agency (Bacon 2010). Monaghan, Colls & Evans (2013, p.251) describe HAES as born out of the frustration of health professionals and allied health workers and suggests 'HAES clinicians refuse to set weight-loss as a necessary goal and measure of success'. The construction of the problem is moved from an embodied state (body fat) towards embodied behaviour and well-being so that HAES is suggested as committed to 'helping someone work towards sustaining healthful and pleasurable eating, realistic enjoyable activity, recognition of and resilience to size prejudice and improved psychological well-being' (Aphramor & Gringras 2011 quoted in Monaghan, Colls & Evans 2013, p.251).

The HAES construction of weight is based on research findings that weight as the problem focus is associated with less healthy behaviours around food and physical activity (Bacon et al 2005; Aphramor 2005). Central to a HAES approach is active promotion of positive body image, satisfaction and respect, while focusing on extrinsic problems such as substances and actions for example, food and physical activity (Bacon et al 2005; Provencher et al 2007; Burgard 2009, p.42). A HAES representation of the

The social construction of obesity in an Australian preventive health policy problem is used in the work of some health practitioners in Australia such as Melbourne GP, Dr Rick Kausman (2012).

In critical studies comparisons of representations have practical consequences as Saguy and Riley (2005, p.874) suggest in their study of different obesity frames '...the tensions produced by credibility struggles are not simply a natural part of the Hegelian dialectic of knowledge but may actually undermine the creation of a synthesis that combines the insights from the two competing perspectives' (ibid). That is the silencing of alternative health representations by the dominant biomedical representation of obesity is not the result of academic dialectic, or one argument/truth trumped by a better argument/truth, but is the product of the relationship of power and knowledge in the current academic context.

#### For Foucault (1980 cited in Gore 1993, p.55):

Each society has its regime of truth, its "general politics" of truth: that is, the types of discourse which it accepts and makes function as true; the mechanisms and instances which enable one to distinguish true and false statements, the means by which each is sanctioned; the techniques and procedures accorded value in the acquisition of truth; the status of those who are charged with saying what counts as true.

A central part of the current regime in liberal democracies is the scientific disciplines, their rules and practices (discursive practices). As a field, critical studies allows what Gore (1993, p.56) suggests is necessary, a consideration of all discourses as productive of power and knowledge (biomedical, social and psychosocial health, and critical studies) not only the dominant discourse.

The work of Paul Campos as a critical theorist of obesity has been particularly important in the research that has critically analysed biomedical obesity discourse. Campos and colleagues (2006, p.55) analysed obesity by studying four claims made by anti-obesity advocates and researchers 'that overweight and obesity are major contributors to mortality; that higher than average adiposity is pathological and a primary direct cause of disease; and that significant long-term weight loss is both medically beneficial and a practical goal.' In this research Campos et al (ibid, p.59) use a poor-science claim and conclude that 'the current scientific evidence should prompt health professionals and policy makers to consider whether it makes sense to treat body

The social construction of obesity in an Australian preventive health policy weight as a barometer of public health. It should also make us pause to consider how propagating the idea of an 'obesity epidemic' furthers the political and economic interests of certain groups, while doing immense damage to those whom it blames and stigmatizes'.

Gard (2011, p.63) points out that Campos, as an empirical sceptic is part of the group of researchers who are not trained in biomedical or population health but who insist the establishment of obesity as a disease, risk for disease, and epidemic is based on poor science which they have uncovered and corrected. One question by Campos et al (2006, p.55) is as important as whether or not the science has validity problems, that is, is 'significant long-term weight loss…a practical goal'. With so little evidence of long-term weight loss at the population level from interventions or social marketing campaigns Campos et al (ibid) question is important within the current evidence-based model of policy making.

Such critical studies research around the biomedical science and framing of obesity includes claims of poor science in regard to the referent reality of body fat, disease and the link between them, the deconstruction of obesity constructed as a disease and as a major population health risk factor, and the moral and political effects of constructing obesity as a population problem in a culture that is hypersensitive and hypercritical of body shape and size (Bell, McNaughton & Salmon 2011; Lupton 2013; Saguy 2013; Bordo 2003). Examples of such socio-political health research are found in the work of Le Besco (2011) around the media construction of a black American mother and son upon the legal framing of the son's weight as child abuse, as well as within Michael Gard's (2011) analysis of the 'cultural politics' of obesity research and policy that would place most critical studies researchers in the 'ideological sceptics' category.

Critical studies is a broad category that has more differences than similarities in the representation of obesity but the category is framed on several key similarities. A critical studies approach disrupts the essentialism, neutrality, and universality of knowledge-for-policy so that no one interpretation of the referent reality necessarily follows on from that reality, no research is considered politically disinterested or neutral, and all research is considered to be socially contingent (Lupton 1994a, p.15; Saguy 2013, p.4). These disruptions are applied equally to the dominant discourse as they are to alternative discourses. For example 'the new public health' has been

The social construction of obesity in an Australian preventive health policy thoroughly examined by many critical studies researchers including Petersen and Lupton (1996) and Bell, McNaughton and Salmon (2011). This thesis seeks to be a part of, and also to analyse, the critical studies category.

### 4.10 Conclusion

In seeking to analyse obesity representations within a specific example of policy and the historical and broader policy context some structure is required for the analysis to make sense of the large and disparate field of obesity representations. As a start to providing this structure, sixteen sources of obesity representations that are relevant to policy making in Australia are set out. Obesity framing literature from the mid-2000s is analysed as it was from this time that the representation of the problem as obesity rose dramatically in the media and academic literature. The important obesity frames of 'claimant', 'problem' and 'blame' are examined. A schema of representations is created as the thesis is limited and the field of obesity representations is both disparate and diverse. As a policy analysis this thesis concentrates on what the problem is represented to be in the academic literature. Representations are categorised according to four academic discipline groups, biomedical, social health, psychosocial health and critical studies. The schema is set out in table form in the Appendix 4.2 and the justification for the assumptions and effects is also set out and is detailed in this and later chapters.

## **Chapter 5**

# History of the social construction of obesity in the Australian health field

### 5.1 Introduction

Representations of obesity produced in the health field are just some among many popular representations of body fat, shape and size in Australia. As Longhurst (quoted in Evans 2006, p.260) suggests in a critical geography study of obesity 'fat and fatness cannot be decoupled from history, geography, or culture'. Larger body weight, shapes and sizes are represented by the public, the media, industry, non-government organisations and non-health authorities in a myriad of dynamic, context-relevant and often conflicting ways including stigmatised, revered as beautiful, taken to be signs of health and strength, contentedly maintained and studiously ignored (O'Kane, Craig & Sutherland 2008; Warin et al 2008; Olds et al 2013). The biomedical/expert and biomedical/population representations and alternative health field representations I analyse in this chapter are acknowledged as just several among many representations of body shape and size in Australia.

In this chapter I use medical text and research papers, national clinical guidelines, international health reports, national strategic policy documents, and media reports in a critical social constructionism analysis of what the problem as obesity was represented to be in the health field from 1900 to 2014. Each text selected is assumed to be an influential or typical representation of the problem within a specific political and historical context. Following this history I undertake an analysis of the generation of stigma as an effect of the biomedical representation of obesity. The international health organisation reports, obesity research, and government texts from the 1990s are chosen for analysis if they relate directly to what the problem is represented to be in current Australian government obesity policy. Finally I explore resistance to the dominant biomedical representations of obesity by GPs and the public. Together this chapter and the next build a picture of the historical and broader policy context relevant to the case study of the Measure Up campaign.

# 5.2 Early medical representations of obesity in Australia- 1900 to 1960s

Acknowledging the long history of obesity representations Gard and Wright (2011, p.59) suggest the 'obesity epidemic' late in the 20<sup>th</sup> century to be the 'latest instalment in an ongoing cultural and scientific dialogue about health and the body' that began over a hundred and fifty years before. The historian Peter Stearns (2002, p.iii) notes in his history of dieting in America that around the 1890's 'a turn away from plumpness' began and evolved into a crusade against fat that included 'a surprisingly strong current of disgust directed against people labelled obese' (also Rasmussen 2012, p.882). The central concern was with diet and was expressed in three ways 'shifts in fashions for women and men alike, a host of new fat-control devices, and the rise of public comment on fat' (Stearns 2002, p.13). As with any social change the first years of the 1900s were a state of flux as Bacon (2010, p.146) suggests women were, 'being sold pills, creams, and potions to help them get fatter' for aesthetic as well as health reasons. In the early 20th century, in Australia as in the United States, the public representation of the bigger body as a sign of beauty, comfortable prosperity, or even healthy condition was overlaid with growing medical, media, and market representations of excess body weight as pathological, morally corrupt, and unaesthetic (Jutel 2005). These conflicting representations would rise and fall in popularity as the century progressed.

An example of the dominant health representation of obesity from the early 1900s in Australia reveals a mix of moral judgement, aesthetics, biomedical science, and unsupported facts and conclusions. In 1903 Dr Philip E. Muskett published *The Illustrated Australian Medical Guide* in two volumes with a three and a half page entry on obesity. The representation by Muskett (1903, p.131-134) a former medical superintendent and surgeon to Sydney Hospital is remarkably similar to that of current medical and health authority representations in remedy if not in causation as the strong link to chronic disease and risk for disease is missing. Obesity according to Muskett (ibid) is around 50 per cent 'hereditary' and 50 per cent acquired. It is variably related to diet 'far and away the most important matter connected with the cure of corpulency' and exercise 'occupies a specially prominent place' as does the 'the drinking of too much alcohol' (ibid).

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Muskett (ibid) suggests being obese is physically restrictive and troublesome to those who suffer from 'uric acid gout, rheumatism, and other kindred affections', and causes many discomforts such as extreme susceptibility to colds and bronchitis, disorders of the digestion and diarrhoea, piles, varicose veins, pain in the knees and feet, excessive perspiration, chafing, and 'peculiar breathlessness'. Women, the entry suggests (ibid, p.132), are more prone to obesity than men by a ratio of ten to one. The absence of any mention by Muskett of the chronic diseases today associated with obesity such as heart disease and hypertension is both notable and understandable as at this time there was little scientific research, clinical or population-level, of the link between body fat proportion and chronic disease. Although the connection between food, alcohol and disease was not unknown with George Eliot (1999 [1861], p.31) writing sardonically in her mid-19<sup>th</sup> century novel, *Silas Marner*, 'the rich ate and drank freely, accepting gout and apoplexy as things that ran mysteriously in respectable families...'

Muskett (1903, p.134) in a suggestion prescient of today's diet-discourse cacophony states it best 'not to relay all the different systems, in vogue, for reducing weight...as it would only lead to confusion'. He then sets out some of the food that should be avoided which on the whole describes a diet of high protein, low carbohydrate (with bread and potatoes described as the 'worst sinners'), low fat and low sugar - not too dissimilar to the CSIRO Total Wellbeing Diet published in 2005, some 102 years later. Interestingly one of the criticisms of the CSIRO diet by Dr Tim Gill (Skatssoon 2005) from the Australasian Society for the Study of Obesity was that, 'there's nothing new and wonderful about it.' In another echo Muskett (1903, p.134) recommends tea or coffee be allowed only with skim milk and saccharin, reflecting modern diet prescriptions of low-fat dairy product and sugar substitutes (National Health & Medical Research Council 2013b).

Other recommended remedies include: restriction of the amount of food with a warning that the patient should not be starved; most alcohol is 'abandoned' with the exception of a small allowance of dry gin or schnapps; and massage when 'used properly and systematically...will frequently work wonders' (ibid). Muskett's description of anti-obesity drugs in 1903 quite remarkably reflects the state of play 110 years later when he states 'many have been called, but few chosen' with many modern weight loss drugs surviving only a few years on the market before being withdrawn (National Health & Medical Research Council 2013a, p.25). Finally, Muskett (1903, p.131-134)

The social construction of obesity in an Australian preventive health policy recommends dosing with crushed thyroid extracts which reflects the medical theory of that time linking obesity to endocrine disorder. He warns of the risks of this remedy and then states, 'it will sometimes reduce the weight to the extent of 30lbs (pounds), without any risk' (ibid, author's emphasis).

Laced through Muskett's description of obese individuals are moral judgements particularly aimed at women. According to Muskett (ibid) women are 'flagrant offenders as regards sufficient exercise... A large number of them never seem to leave the house from year's end to year's end'. He quotes Shakespeare's 'fat and greasy citizens' and suggests of the 'fat and ponderous' that women are more distressed than men by the condition as they feel 'keenly the detraction from...personal appearance...since stays have to be worm(sic) - in order to produce some semblance of a figure...' and for this reason losing weight is described as having a much more positive effect on women (ibid, p.132).

One hundred and ten years later De Brún et al (2013, p.8) studied discussions of weight stigma in on-line forums and reported that 'nearly every such incident...featured a man insulting a woman' and found this concurred with other studies notably Taylor's (2011 cited in De Brún 2013) work. In explanation De Brún et al (2013, p.8) cite Bourdieu's (1984) and Offer's (1998) analyses that concur with Muskett's conclusion in suggesting women having more to lose 'in terms of the marriage market' and so are 'more vulnerable to weight-based insults'. After stating obese individuals are 'surprisingly agile' and 'nor are they wanting in brain activity' Muskett goes on to suggest, 'their huge size is an oppressive burden' due to 'the amount of 'blubber' they are afflicted with' (ibid, p.132).

The language used by Muskett in 1903 reflects the on-line discussion studied by De Brún et al (2013, p.4) 110 years later 'where excess weight was described as 'grotesque', 'repulsive', 'unattractive', 'disgusting' and individuals carrying excess weight as 'slobs' or 'fatties'. Overall Muskett (1903, p.131-134) openly constructs obesity as a problem having moral, aesthetic, biological, and medical aspects. It is a biomedical/expert representation of obesity that assumes the individual is overwhelmingly responsible, morally weak, ignorant, ugly, and in need of both educating and urging and treatment by medical professionals.

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Other assumptions include that the food and activity environment is relevant only
through the will and action of the obese individual, psychosocial issues are almost
irrelevant, and medical authorities are also moral and aesthetic experts. Muskett's
representation of obesity differs in one important assumption from the biomedical/
population representation in current Australian obesity prevention policy in that
government has no place intervening in this problem. It is a problem for the individual
and the medical expert. The connection of weight to chronic disease is missing from
Muskett's representation as discussed. This link and the rising incidence rates and high

prevalence of some types of chronic disease is a vital plank in the construction of

1990s as a problem for government, health experts, and individuals.

obesity in the 1980s as a problem for public health research and advocacy and in the

Through the mid-20<sup>th</sup> century this biomedical/expert representation of obesity continued to be the dominant representation of the problem by health experts. This is an inherently stigmatising construction of the problem and this is reflected in stigma generated by health professionals across the 20<sup>th</sup> century and up to the present time (Phelan et al 2015). One example of overt stigma from a health expert (quoted by Gard and Wright 2005, p.75) comes from a 1955 journal article by P.E. Craig, a medical practitioner reporting on an Australian consecutive-cases study of 871 obese subjects:

It was further pointed out (to patients) that obesity is not only physically crippling but socially and psychologically disabling as well. No one loves a fat girl except possibly a fat boy, and together they waddle through life with a roly poly family...Those who refuse to admit the existence of unsolved conflicts...will do nothing to attack the problem directly or employ the positive substitute approach.

This is an example of the language used in a public forum by a health professional to describe and speak to obese patients. Obesity is openly represented as a moral and aesthetic problem with physical, social, and psychological consequences all of which are caused and solved by the moral resolve, education, and behaviour of the obese individual. There is no suggestion that this problem has a rich and relevant social context (a social health assumption) or that medical experts play a part in generating or rejecting fat stigma that contributes to the stated social and psychological ill-effects (psychosocial health and critical studies research assumptions).

# 5.3 Stigma generation in biomedical and social representations of obesity- 1960s to present

The frankness of these examples of health authority discourse in openly constructing obesity as a moral problem belongs to an era in which stigma was represented as essential, universal, set by religious edict or scientifically neutral rather than critically analysed as socially contingent and highly political. The work around stigma began in earnest in the 1960s with work such as Erving Goffman's (1986 [1963]), 'Stigma, Notes on the Management of Spoiled Identity'. An example of such work is a study by Maddox and Liederman (1969) of the stigmatising attitudes of a group of US physicians finding strong moral (weak-willed), aesthetic (ugly) and physically incompetent (awkward) characterisations of obese patients. As sociologists these researchers note, '...whatever the medical implications overweight may have, fatness is first and foremost a social disability' (ibid, p.214). Themes explored in this section are discussed further in the case study of the Measure Up campaign in chapter seven including stigma, the body, the visual and identity.

The early work on stigma, normalcy and deviance especially around social identity challenged conventional social research epistemologies. Bayer (2008, p.463) suggests early 20<sup>th</sup> century sociological studies '...sought to understand the root causes of deviance and assumed a correctional thrust...' In contrast critical studies examined the social construction of deviance detailing the underexplored assumptions and unacknowledged outcomes of constructing the problem as deviance (see Foucault's work, Madness and Civilization, 2001[1961]). From the 1960s, groups in liberal democracies who identified as socially oppressed worked to raise public consciousness of their oppression both in group and non-group members, for example the women's liberation movement (Bordo 2003, p.29-33).

In Australia in the 1960s and 1970s political advocacy for women's rights, Indigenous rights, migrant rights and the anti-war movement was theorised and analysed as a new area of study called identity politics. Following this research and activism came federal anti-discrimination legislation relating to race (1975), sex (1986), disability (1992) and finally age (2004) and the repealing of laws and regulations that used highly-visible, immutable body characteristics as the legal instrument to, for example underpay women doing identical work to men, sack working women in the public service once they

The social construction of obesity in an Australian preventive health policy married, remove Indigenous children from their families, and create barriers to non-white immigration. More recently the risk of fat stigma entwining with stereotypes of race, class and gender has been explored by critical studies researchers (McClure 2011 cited in Boero 2013, p.377).

In Australia the first attempts to construct stigma as a policy problem focused on the most visible and immutable characteristics - race and sex. Puhl and Brownell (2003a, p.54) in discussing weight stigma suggest such characteristics are 'important determinants of who will be stigmatized and how targets of stigma cope with their compromised state'. Work by Jutel (2005, p.113) supports this in suggesting that underpinning strong cultural beliefs about appearance are the premises that vision is the most reliable sense and that appearance acts as a moral 'mirror' reflecting the 'true' inner self. The social contingency of morality is made clearer by Reynolds and Ceranic (2007, p.1610, bracket in original) who define 'moral and ethical behavior as behavior that is subject to (or judged according to) generally accepted moral norms of behavior. Thus, moral behaviors occur within the context of larger social prescriptions'. From the 1970s to the 2000s openly stigmatising obese patients decreased in the public discourse of health professionals coinciding with the rise in discourse analysis and critical health studies around the construction of normalcy and deviance (Lupton 1992, p.149).

However covert (not recognised, hidden) and overt (systemic, publicly displayed) stigma remained a significant issue throughout this time with research continuing to find the generation of stigma across the health field (Puhl & Heuer 2009). With the rise in obesity stigma research detailing negative psychosocial effects, anti-obesity health experts began constructing the problem as a trade-off of psychosocial health for physical health. In the British Foresight project report, *Tackling Obesities*, (Butland et al 2007, p.32) such an approach is made clear:

Obesity has become stigmatised, triggering the appearance of 'fat and proud' movements in the USA, but at the same time weight has become normalised.

Still, obesity is known to lead to both chronic and severe medical problems, (that not only) adversely affect people's quality of life, but they create serious, rising financial and social burdens.

The obvious problem with this approach is that there has been no sign of any long-term, effective, sustainable progress in either reducing obesity or obesity-related chronic

The social construction of obesity in an Australian preventive health policy disease at the population level. Yet for many obesity researchers and policy-makers, non-existent physical health benefits are presumed to outweighing very real psychosocial ill-effects. The idea that a focus on obesity lays the groundwork for future social change that will lead to falling population levels of obesity must be doubted after decades of poor results. In a similar way in tobacco control research into the effects of stigma, Bayer (2008, p.468) suggests the 'utilitarian calculus that is so central to public health' is used to decide if the negative effects (stigmatizing of smokers) are outweighed by the positive effects (social disapproval of smoking and a long-term, downward trend in adult daily smoking).

An example of this 'utilitarian calculus' in the literature comes from Strawbridge, Wallhagen and Shema (2000, p.342) who critique a move by one health organisation in the USA to lower BMI cut-off points for obesity and overweight in line with the new WHO BMI guidelines developed in Britain in the late 1990s (see James 2008). According to these researchers (ibid, p.340) the new higher BMI cut-offs doubled the number of US citizens in the overweight and obese categories. These researchers found the rise in mortality and morbidity risk from the normal to the overweight range was not sufficiently high nor supported by the data enough to warrant clinical attention to overweight.

Further to this, Strawbridge, Wallhagen and Shema (ibid) suggest that 'few physical conditions, elicit such strong condemnation as does obesity. Even medical journals use terms such as 'gluttony' and 'sloth' to describe the behaviors of obese persons, thus reinforcing the belief that obesity results from a lack of self-discipline'. According to Strawbridge, Wallhagen and Shema (ibid), '(l)owering the BMI standard for overweight will thus subject millions more to such derogatory labelling, despite clear evidence that even conscientious persons have great difficulty in losing weight and maintaining a lower weight' (ibid).

Despite the recognition that weight loss is almost immutable and heavier weight is highly stigmatised these researchers (ibid) conclude, without openly stating it, that constructing the problem as obesity would be salutogenic overall, but constructing it as

<sup>&</sup>lt;sup>7</sup> The article described was by Prentice and Jebb (1995) and published in the British Medical Journal. It received six published responses by three people none of whom made any mention of the highly stigmatising moral tone of the article.

The social construction of obesity in an Australian preventive health policy overweight would be iatrogenic. Such a conclusion contradicts the evidence presented in the article. If there are no long-term, effective and practical solutions to obesity then how can the, 'strong condemnation' and stigma that flows from a biomedical construction of obesity be outweighed at all? The utilitarian calculus or 'calculative logic' that Fullagar (2003, p.49) suggests is used in the health field, '...where risks and benefits are measured, managed and insured against or for...' may be a flawed but necessary project for many preventive health problems. However it becomes unsupportable where the long-term physiological benefits are non-existent and whole bodies of relevant research such as psychosocial health and critical studies as discussed above remain outside the equation.

Since the late 1990s and early 2000s an upward trend in obesity stigma has been observed and is suggested by research as generated in part by public and medical attention to weight (Schwartz et al 2003; Lewis et al 2010; Andreyeva, Puhl & Brownell 2008; Puhl & Heuer 2009; Puhl & Brownell 2001; Campbell et al 2000). The existence of a negative body culture in Australia is visible through such research (Townend 2009; Thomas et al 2008; Thomas et al 2014a,b; Lewis et al 2011). Jutel (2005, p.122) suggests health professionals are not 'themselves immune to, or unaffected by, the social values' of the broader social context around weight, body shape and body size (see Hebl & Xu 2001, De Brún et al 2014, p.73-74). Disputes about what constitutes stigma, what constitutes social disapproval and how these relate to the health context are on-going (Bayer 2008; Burris 2008). Bayer (2008, p.471) suggests in a similar way to Strawbridge, Wallhagen and Shema (2000) that each case of stigma generated by public health should be judged on the evidence as either salutogenic or iatrogenic according to the 'utilitarian ethics that underpin the mission of public health'. Burris (2008, p.475) disagrees and argues, shame is the essential character of stigma and so any form of stigma generation by public health is unjustifiable.

Psychosocial research findings suggest the stigmatising of body shape and size can result in poorer health outcomes (Puhl & King 2013; Vartanian & Shaprow 2008; Vartanian, Pinkus & Smyth 2014; Dickens et al 2011; Sutin and Terracciano 2013), and that the chronic social stress experienced by the poor, a stigmatised social group, is associated with poorer eating habits and obesity (Moore & Cunningham 2012, p.518). Despite extensive psychosocial research findings of the iatrogenic effect of obesity stigma, biomedical model research and policy and some psychosocial research

The social construction of obesity in an Australian preventive health policy continues to assume the trade-off is worth it and that focussing on obesity, weight, body shape and body size is a necessary public health aim. A current trend in preventive health policy (Lupton 2014, p.32) and in some preventive health literature is to construct obesity stigma as a tool to make the public more aware of the problem and to stimulate behaviour change (see the LiveLighter campaign 2014a).

An example of the presumed salutogenic effects of obesity stigma comes from a 2013 article by Daniel Callahan (2013, p.38) a Senior Research Scholar and President Emeritus at The Hastings Centre (USA) a bioethics research institution. Callahan (ibid, p.34,37) suggests stigmatizing 'the obese' is the most powerful and practical tool left to public health and that in the 1980s milder efforts by public health to change individual behaviour around obesity failed and were moved away from. As an ex-smoker Callahan (ibid) recalls the 'force of being shamed and beat upon socially was as persuasive for me to stop smoking as the threats to my health. I was also helped by the fact that others around me were stopping as well. If they could do it, so could I'. The reason stigma was used as a tool by public health for successful tobacco control but not for obesity prevention Callahan (ibid) suggests was that the public health community 'generally oppose anything that looks like blaming the victim' and believes that; stigmatising health conditions is wrong, it will not work, evidence shows it does harm, and stigmatising smoking is going after a behaviour rather than 'them as persons'...'their character and selfhood' (ibid).

This is simply not good enough for Callahan (ibid, p.36) who lists decades of diverse obesity prevention policy failures and who perversely cites the fact that the obese are already stigmatised including by health care workers. Among the stigmatizing strategies offered by Callahan are 'varieties of social pressure' that could 'push the public to accept strong interventions, just as it could induce them to change the way they eat, work and exercise.' Callahan (ibid, p.39) suggests it should be possible to apply 'social pressure that does not lead to outright discrimination' something he calls 'stigmatization lite' and concedes this will be difficult to achieve but 'worth a try'. According to Herek (1988 quoted in Bayer 2008, p.469, author's brackets) in a study of HIV/AIDs prevention and stigma, it is possible to divide social disapproval away from stigma and that stigma, 'must involve an enduring condition or attribute that 'engulfs the entire identity of the person (and) does not entail social disapproval of merely one

The social construction of obesity in an Australian preventive health policy aspect of an individual...' It is clear from the following passage that Callahan's concept of 'stigmatization lite' goes beyond this concept of social disapproval.

Variants of social pressure suggested by Callahan (2013, p.39) include 'finding ways to induce people who are overweight or obese to put some uncomfortable questions to themselves'. Such questions, he suggests, may be:

If you are overweight or obese, are you pleased with the way you look?

Are you happy that your added weight has made many ordinary activities, such as walking up a long flight of stairs, harder?

Would you prefer to lessen your risk of heart disease and diabetes?

Are you aware that, once you gain a significant amount of weight, your chances of taking that weight back off and keeping it off are poor?

Are you pleased when your obese children are called 'fatty' or otherwise teased at school?

Fair or not, do you know that many people look down upon those excessively overweight or obese, often in fact discriminating against them and making fun of them or calling them lazy and lacking in self-control?

The use of these questions is compared to using 'carrots and sticks' and 'nudging' people toward behaviour change through; mild coercion and stigmatising lite (sticks), and a better looking body, making it easier to undertake ordinary activities, and lessening risk of disease (carrots) (ibid). Callahan is suggesting that individuals need some tough love on obesity. 'One way or another, the public...must be persuaded of a number of points...It will be imperative, first, to persuade them that they ought to want a good diet and exercise for themselves and for their neighbour and, second, that excessive weight and outright obesity are not socially acceptable any longer. They need to be mobilized as citizens to support a more invasive role for government' (ibid). The private sector has a role but only, 'in ways that would not financially hurt industry or alienate its customers' (ibid, p.37). Finally Callahan (ibid) suggests, '...it is hard to imagine that much progress can occur toward solutions for obesity unless we bring some form of social pressure to bear against it' with the alternative being, 'the need to change almost everything about the way we live, more or less simultaneously...'

There are five main assumptions in Callahan's construction of both subjects and the problem. The first is a neo-liberal assumption of rational beings acting in their own

The social construction of obesity in an Australian preventive health policy economic or social self-interest over and above all other reasons for acting and above all other meanings constructed around body shape and body size. Individualistic solutions centre on the 'shock of recognition' to 'awaken them (the public) to the reality of their condition' (ibid, p.40, author's brackets). The 'awakening' sought for obese individuals is Callahan's awakening as a smoker. This is despite the same important social conditions missing; the substance tobacco is external to the body where body fat is a part of the body, tobacco was highly taxed where disease-promoting food is not, the tobacco control field was united and clear on what the problem was where the obesity field is divided, messy and contradictory, and people around Callahan were quitting smoking successfully where there are no successful long-term solutions to population levels of obesity. Callahan's problem construction as predominantly around the individual being stigmatised and responding 'appropriately' and 'rationally' to that stigma is almost silent on the social, cultural, political and environmental context.

Secondly, Callahan assumes that a biomedical model of weight loss- eat less and exercise more or the energy-in versus energy-out model should be central to the representation of the policy problem for successful, long-term weight loss at a population level. This is despite there being very little evidence that this model has ever been central to successful, long-term weight loss or prevention of weight gain at a population level (Gortmaker et al 2011, p.839). With the admission that social pressure will not do anything to 'change the conditions of poverty that make so many people susceptible to obesity (or) induce the food and beverage industries to change their deleterious ways' Callahan (ibid, p.39-40) follows the usual biomedical representation of the problem in tipping his hat to social health representations then relegating them to the too-hard basket.

Thirdly, the assumption that it is possible and salutogenic to practice and promote stigmatization in the form of 'stigmatization lite' is unsupported by research as Callahan (ibid, p.39) acknowledges but is still 'worth a try'. Psychosocial research on stigmatization points in the other direction, representing fat stigma as psychologically, socially, and now physically iatrogenic with work from Sutin and Terracciano (2013) published in the same year as Callahan's article. This five year study of over 6,000 subjects found that 'weight discrimination, which is often justified because it is thought to help encourage obese individuals to lose weight, can actually have the opposite effect: it is associated with the development and maintenance of obesity' (ibid, p.3).

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Callahan's (2013) representation of obesity assumes the social context including visual and body culture as less important to health (biomedical assumptions). Social and psychosocial health research assumes the social context to be highly influential on social and psychological well-being, for example, in the construction of identity, moral values and social norms. Only within a narrow, reductionist model of health as the absence of physical disease can the extensive bodies of social health and psychosocial health on the importance of the social context be so easily dismissed.

Callahan's (ibid) fourth assumption is that constructing the policy problem as obesity is necessary to move forward on decreasing the prevalence of chronic disease. This assumption silences more radical, alternative constructions of the problem that refuse the centrality of body weight, shape and size. For example, the work of Reaven (2005) using insulin resistance rather than body weight as the central problem of the metabolic syndrome (Reaven 2005, Zavaroni et al 1994), or Bacon (2010; also Bacon & Aphramor 2014) and the Health at Every Size movement's focus on body respect rather than weight. Like most other biomedical, and some social and psychosocial health representations of the problem Callahan (2013) does not consider that the aim of obesity prevention is ultimately the prevention of chronic disease, and that other representations of the problem in both research and policy may not only be possible but less damaging and more effective (see North Karelia, Finland project described in Butland et al 2007, p.74).

Finally Callahan (2013, p.39) suggests the time has come for an 'enhanced, edgier strategy' focussing again on individual behaviour and for government to regulate, '...and on occasion to come close to mild coercion...' Although Callahan (ibid) attempts to include social/systemic solutions (government regulation) around food and physical activity in his suggested strategies his dominant representation of the problem is of a moral, aesthetic and health problem centred on the autonomous individual. This is a widespread public construction of body fat, shape and size. In an Australian example, Thomas et al (2014b, p.114) found that parents and children frame messages of obesity and weight management around, 'personal responsibility and blame attribution' and that 'these views reflect the broader social discourse...'

In their study of public attitudes to obesity in the USA, Oliver and Lee (2005, p.942) found the individualistic representation of obesity by the public is one of the strongest

The social construction of obesity in an Australian preventive health policy predictors of lower public support for government action on obesity. In Callahan's (2013) work as in other biomedical/population health research there is an underexplored contradiction in constructing a policy problem that predominantly blames and shames the individual and urges the individual to blame and shame themselves and, at the same time, seeks public support for government or industry action on that problem.

In this recent call for the use of stigma as a public health tool Callahan (ibid) is not alone (see Heymann & Goldsmith 2011). The public health turn to stigmatising discourse and practice in Australia is exemplified by the obesity prevention campaign LiveLighter (2014a; Heart Foundation QLD 2013) funded by State and Territory governments (WA 2012, QLD 2013, VIC 2014, ACT 2014) and NGOs. This campaign uses graphic images of 'toxic fat' to attempt to induce fear and shame around body shape and size (see Image 5.1 below) (LiveLighter 2014a). Lupton (2012b) has responded to this campaign suggesting that, 'like many such ads, it seeks to achieve behaviour change by evoking negative emotions. These include fear of disease and an early death, guilt, shame, embarrassment - and in cases such as this one, disgust' (ibid). She goes on to suggest it suffers from the use of an imprecise term - 'grabbable gut' as a 'marker for dangerous weight-gain', that representing internal fat as invariably toxic is simplistic, and that the campaign drives up negative body image and affects social cohesion by using campaign tactics that are questionably 'ethical or even effective' (ibid).

In this campaign 'grabbable gut' appears as a proxy for waist circumference or waist-to-hip ratio which is a proxy for body fat (type and distribution) which is an indicator of population-level risk for chronic disease. This weakens the predictive power of a risk tool such as 'grabbable gut' and means risk can only really be validly established as individual risk for chronic disease by reference to other biomedical and behavioural indicators (National Health & Medical Research Council 2003, p.2). In this campaign both BMI and a grabbable gut are suggested as indicators to measure the risk for chronic disease. The original research, referenced by the LiveLighter campaign, came from the Mayo Clinic in the USA and concluded that, 'those studied who had a normal body mass index but central obesity, measured as a high waist-to-hip ratio, had the highest cardiovascular death risk and the highest death risk from all causes...' (Klein 2012). This contradicts the emphasis in the campaign to lose weight to the 'healthy' range of BMI 18 to 24.9. If anything those in the normal weight BMI category with

The social construction of obesity in an Australian preventive health policy 'central obesity' (a 'grabbable gut') appear to be at greater risk for CVD according to the Mayo Clinic research and this is supported by more recent research (Klein 2012; Oliveros et al 2014, p.431).

Image 5.1 (below left) from the LiveLighter campaign (2014b; 2014c) was accompanied by text that stated:

The ads may seem graphic and confronting, but adults need to realise that achieving and maintaining a healthy weight should be a priority right now and not something to be put off until tomorrow.

This text subjectifies 'adults' as denying reality and as procrastinators and constructs fatter bodies as 'toxic'. A main assumption within this campaign is that there is a successful solution to changing body shape and size that fatter individuals are deliberately avoiding yet such an assumption denies the decades of evidence that successful, long-term weight loss is very rare (Gaesser 2009, p.39-40). The disclaimer also seeks to deflect any criticism of the 'graphic and confronting' images by subjectifying the target group as needing and deserving any stigmatising or negative psychosocial effects that may result. Stigma in this construction is salutogenic, acting as social disapproval and driving individual behaviour change. Yet as discussed earlier this is clearly generating stigma rather than social disapproval.

The LiveLighter campaign is championed by biomedical and some social health experts frustrated at the denial of the problem by some members of the general public (Olds et al 2013). Mike Daube, a leading public health expert, called LiveLighter, 'a forceful and innovative media campaign' (Daube 2012). This is despite a body of research that suggests the use of fear and shame in social marketing can generate negative effects including denial in the targeted population groups (Brennan and Binney 2010, p.145) and the continued rejection by the public of fear and shame marketing (Puhl, Peterson and Luedicke 2013, p.774; Olds et al 2013, p.121). In researching public attitudes to obesity Olds et al (2013, p.126) suggest;

previous studies have highlighted the inaccurate and at times exaggerated information that is communicated about obesity from the media, academics, industry and government while research into public health campaigns suggests that individuals may be 'shutting off' from obesity messaging strategies which are increasingly based on 'fear' and which they consider at best to be irrelevant for their needs and at worst stigmatizing.

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Negative press reports regarding the campaign were followed by blog comments that demonstrated how intensely obesity policy and obesity as a problem divides the community (Lupton 2012b; Edwards 2012).

Resistance to the LiveLighter campaign was visible in the suburb of Lyneham in Canberra in November 2014 where the *Grabbable Gut* poster was displayed in a bus shelter and body positive/respect pamphlets were illegally pasted over the top (Image 5.2). The bus shelter is not far from a psychological practice that specialises in treating young women with body and eating disorders. The big-bodied bikini clad woman in the middle pamphlet in Image 5.2 is accompanied by a text stating, 'Love your body because you cannot take care of something that you hate'. The two pages of text on the right refer the reader to the work of Traci Mann et al (2007) who reviewed the literature on dieting and weight loss and found the long-term effect for most dieters was a

Image 5.1: LiveLighter campaign: Screen grab from the LiveLighter website (left),
Image 5.2: LiveLighter campaign poster in Canberra with signs of resistance: suburb of
Lyneham in the ACT, November 2014 (right)





Source: Left side: LiveLighter (2014b); Right side: Photograph by Lily Kleeman taken at Lyneham bus stop, Canberra (18 November 2014)

The social construction of obesity in an Australian preventive health policy higher weight than prior to starting the diet. The original LiveLighter image constructs bodies as toxic and has lived effects on those within the population who have poor body image or are ashamed of their bodies. Such negative constructions of the body are resisted by these alternative and positive representations of body fat, shape and size.

In their 2012 publication on the psychology of appearance Rumsey and Harcourt (2012, p.1) report on a recent survey in Britain that included 77,000 subjects. Among the startling findings are that only 16 per cent of women and 27 per cent of men report liking what they see when they look in the mirror and 46 per cent of women and 62 per cent of men report feeling ashamed of how they look. If Australia is similar to Britain in this regard there are already high proportions of the population who are struggling with negative body image. If such psychosocial research is taken into consideration when constructing obesity as a policy problem an important question must be 'what population level of body shame is considered necessary to induce long-term reductions in population levels of body fat?' In general psychosocial research shows the relationship as going the other way as discussed (Phelan et al 2015). Also global psychosocial research shows population obesity rates and fat stigma rates are positively correlated (Brewis et al 2011).

The rational autonomous and decontextualised individuals constructed by the LiveLighter campaign are only able to exist within a narrow, reductionist model of biomedical health, disease and body fat and by excluding the research bodies of psychosocial health and critical studies that show the social context including the harsh body culture and stigma generation as centrally important. This biomedical construction of the problem is understandable given the LiveLighter expert advisers (ACT campaign) were overwhelmingly biomedical experts - cardiologist, nutrition scientist, general practitioner, physiotherapist, nutrition and dietetics expert along with one behavioural researcher with an international reputation in tobacco control, one representative from an NGO specialising in eating disorders (where the problem is mainly constructed as psychological), and three Heart Foundation staff (LiveLighter 2014d).

There is no place in this campaign for the extensive work of international psychosocial health and critical studies experts such as Rebecca Puhl, Kelly Brownell, Susan Bordo, or Linda Bacon (see reference list). Adding to psychosocial research on the iatrogenic

The social construction of obesity in an Australian preventive health policy social and psychological effects of a focus on weight in public policy, in the clinic and other settings (Graham & Edwards 2013; Bacon 2010; Puhl & Heuer 2009) is research showing the link between a focus on weight and poorer physical health outcomes including more and sustained rates of obesity (Sutin & Terracciano 2013).

## 5.4 Influential international representations

The dominant biomedical health representation of the problem in preventive health in Australia was influenced by international representations of obesity from the mid-20<sup>th</sup> century. James (2008, p.S120) suggests 1948 was the turning point for obesity as a 'potential public health problem' with the classification of obesity as a disease in the 6<sup>th</sup> edition of the nomenclature *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death* endorsed by the first World Health Assembly in *World Health Organisation Regulation No. 1* (World Health Organisation 2014). Despite this, James (ibid, p.S120,121) suggests the medical professions and government all but ignored obesity until statistical reports from the 1980's suggested it was becoming more prevalent and research began reporting stronger links between obesity and major non-communicable chronic diseases such as CVD and DT2. The 'new public health' paradigm rose to prominence at this time with the rise in population health research (Petersen & Lupton 1996, p.2,3,) and this made it possible for problems such as obesity to be represented in research as both a social health and biomedical/population problem.

International health documents before the mid-1990s do not usually construct the problem as obesity as a single problem but refer to obesity within a problem matrix that includes nutrition, food, diet and physical activity (James 2008, p.S121,122). The representation as this complex of risk factors broadens the prevention project to include a wider target group including individuals of *all* body fat proportions who have heightened risk for chronic diseases. For example by targeting food in Australia rather than obesity only, the target group is broadened from the 27.5 per cent obesity level in Australian adults in 2011-12 (Australian Bureau of Statistics 2013) to 94.5 per cent of the adult population who did not have an adequate usual daily intake of fruit and vegetables, an indicator of poor micronutrient intake that is linked to increased risk of most major chronic diseases (ibid) including DT2 (Carter et al 2010).

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International representation of the problem continues to interchange what the problem is represented to be for governments as obesity alone and as obesity as part of a matrix of problems. In 1998 the World Health Organisation first released a report that focused on obesity alone. That report was later formally released in 2000 as, *Obesity: Preventing and Managing the Global Epidemic* in which obesity is represented as a 'rapidly growing threat' and a 'serious disease' with comorbidities including many noncommunicable chronic diseases, and as a health risk even with 'a relatively small increase in body weight' (WHO 2000, p.4).

Then in 2004, the WHO report, *Global Strategy on Diet, Physical Activity and Health* (2004, p.1) was published with the express aim 'to promote interventions to reduce the main shared modifiable risk factors for non-communicable diseases: tobacco use, unhealthy diets, physical inactivity and harmful use of alcohol'. Obesity is represented within this document as a minor factor subsumed by diet (food) and physical activity as the problem focus (ibid, p.3). Despite such changes from the publication of the first obesity focused WHO report in 2000 obesity has grown to be represented alongside tobacco as the major preventive health problem for governments around the prevention and management of chronic disease (James 2008, p.S120).

There continues to be considerable debate in the literature over whether or not obesity should be considered a disease. Biomedical research and health organisations often presume obesity is a disease, for example WHO reports, while alternative researchers claim it is not (Heshka & Allison 2001). In 2008, The (U.S.A.) Obesity Society's, Obesity as a Disease Writing Group (Allison et al 2008, p.1161-1162) suggested that because there was no 'clear, specific, widely accepted, and scientifically applicable definition of 'disease' the question could not be 'is obesity a disease' but 'should obesity be declared a disease'? This changed the question from one of positivist knowledge designed to scientifically determine fact to a question of normative knowledge designed to find out what ought to be done.

Finally, not according to scientific rationality or popular and expert opinion but on the grounds of values, specifically utilitarian values, the writing group (ibid, p.1162) decided obesity should be declared a disease as;

...considering obesity a disease is likely to have far more positive than negative consequences and to benefit the greater good by soliciting more resources into

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The assumptions in this statement reflect those of the dominant biomedical/population representation of obesity – individualistic, medicalised care and self-care supported by government authority (Brownell et al 2010, p.379; Vartanian & Smyth 2013, p.49). These assumptions are challenged at several levels including empirically in psychosocial research linking the representation of the problem as biomedical/population obesity and the generation of stigma (Lewis et al 2010; Thomas et al 2008, p.322), in critical studies, exploring the moral and ethical dimensions of such discourse (Carter et al 2011; Rich & Evans 2005) and exploring the social construction of obesity as disease, epidemic and crisis (Murray 2007; Bell, McNaughton & Salmon 2011).

In 2013 the American Medical Association (AMA) adopted Resolution 420(A13), *Recognition of Obesity as a Disease* (American Medical Association 2013). The resolution acknowledged that obesity is recognised as a disease by the WHO, the US Food and Drug Administration, the US National Institutes of Health, the American Association of Clinical Endocrinologists, the US Internal Revenue Service and by CIGNA the largest health insurance company in the US (ibid). This resolution overcame the problem of 'what is a disease' by identifying 'the following common criteria in defining a disease: 1) an impairment of the normal functioning of some aspect of the body; 2) characteristic signs or symptoms; and 3) harm or morbidity'. These criteria are general enough to cover many other human conditions that are sometimes but often not defined as disease.

In the AMA Resolution 420(A13) obesity was identified as 'congruent with this criteria' and it was stated that (ibid);

there is now an overabundance of clinical evidence to identify obesity as a multi-metabolic and hormonal disease state including impaired functioning of appetite dysregulation, abnormal energy balance, endocrine dysfunction including elevated leptin levels and insulin resistance, infertility, dysregulated adipokine signaling, abnormal endothelial function and blood pressure

The social construction of obesity in an Australian preventive health policy elevation, nonalcoholic fatty liver disease, dyslipidemia, and systemic and adipose tissue inflammation...

The problem construction is not as a risk factor for disease but as a diseased state. This definition is biomedically invalid. It denies the possibility of obesity occurring without any of these disease indicators some of which are currently untestable in a primary health care setting, such as appetite dysregulation.

This AMA definition also denies the substantial biomedical evidence of metabolically healthy obesity (MHO). In a recent paper, Hamer and Stamatakis (2012, p.2483) found no significant different in the risk for CVD between metabolically healthy obese and metabolically healthy non-obese subjects. In discussing the research around this issue they state 'a metabolically healthy phenotype was observed in 24% of the obese sample from the present study, which is largely comparable with other studies, although the prevalence has ranged from 10 to 30%' (ibid, p.2486). Roberson et al (2014) found an MHO prevalence in their study of 32 per cent among adults over 20 years of age. Meigs et al (2006) found 37 per cent of their obese subjects did not have metabolic syndrome or significantly increased risk of CVD or DT2 and much of the risk associated with elevated BMI was due to other risk factors. Even in the higher categories of BMI (40+) investigated by Kitahara et al (2014) it is suggested that 'diabetes and hypertension are common mechanisms that might explain the majority of the excess mortality burden in the class III obesity group'.

As yet a widely accepted definition of MHO has not been settled on making it difficult to accurately assess MHO prevalence (Roberson et al 2014) and some studies have found that MHO is also associated with raised all-cause mortality compared to metabolically healthy non-obese subjects. Such studies rarely consider the psychosocial stress of fat stigma or that overweight and obese people more often avoid health care for fear of stigma (Puhl & Heuer 2009, p.947). Taking this into consideration any MHO study results would be likely to over-read the disease risk of overweight subjects. Adding to this is the ambiguous state of the BMI as a clinical indicator as suggested by Heymsfield and Cefalu (2013, p.88) medical doctors at the Pennington Biomedical Research Centre in the USA. These doctors (ibid, author's brackets) state 'not all patients classified as being overweight or having grade 1 obesity (BMI 30-34.9), particularly those with chronic diseases, can be assumed to require weight loss

The social construction of obesity in an Australian preventive health policy treatment. Establishing BMI is only the first step toward a more comprehensive risk evaluation'.

At the clinical level, obesity defined by BMI category or waist circumference, is considered one of the lowest grade of biomedical risk indicators for chronic disease (National Health & Medical Research Council 2003). Some research that has assessed chronic disease risk such as metabolic syndrome research that measures cardiovascular and diabetes type 2 risk has either excluded body weight (or shape) or embedded it with a cluster of other variables (Alberti, Zimmet & Shaw 2005, p.1059). Adding to this is research on inflammation suggesting obesity as an accomplice rather than always an offender in chronic disease (Egger & Dixon 2009). Roberson et al (2014, p.1471) suggest that MHO is an 'important, emerging phenotype' or population subgroup 'with a CVD risk between healthy, normal weight and unhealthy, obese individuals'.

Defining obesity as a disease in the U.S.A. AMA resolution opens medical practitioners up to uncertainty in clinical and legal decisions. If a medical practitioner managing a patient with obesity fails to find any other biomedically testable disease has that practitioner failed the patient? If it is a disease can the medical practitioner be sued for failing to treat the obesity even in the absence of other risk factors? If the doctor's recommended 'treatment' fails will there be medical liability issues? The problem with the AMA definition is that it is not medico-legally or biomedically satisfactory. Nor is it socially satisfactory as it has underexplored iatrogenic social and psychological effects that are likely to outweigh the current, minimal, long-term, positive physiological effects of doctors treating patients for obesity.

Further the AMA resolution (2013) states 'the suggestion that obesity is not a disease but rather a consequence of a chosen lifestyle exemplified by overeating and/or inactivity is equivalent to suggesting that lung cancer is not a disease because it was brought about by individual choice to smoke cigarettes'. This is a denial of the biomedical/population construction of obesity and a reassertion of the biomedical/expert construction as a clinically-defined disease requiring therapeutic measures. Obesity, a bodily condition which many people will live with and die from other causes, is medicalized as a disease 'equivalent' to lung cancer.

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A further passage in AMA Resolution 420 (2013, author's brackets) shows more clearly the reason for the AMA recognition of obesity as a disease in 2013, some 65 years after the WHO defined it as such:

The (AMA) Council on Science and Public Health has prepared a report that provides a thorough examination of the major factors that impact this issue, the Council's report would receive much more of the recognition and dissemination it deserves by identifying the enormous humanitarian and economic impact of obesity as requiring the medical care, research and education attention of other major global medical diseases, therefore be it resolved (the AMA) recognize obesity as a disease state...

In the same manner as The Obesity Society in 2008, the AMA in 2013 has constructed obesity as a disease to influence government and other funding institutions toward funding and attention for this issue including a biomedical/expert construction of the problem and therapeutic solutions.

# 5.5 Representing the problem as single risk factor/chronic disease in Australia

Caldwell (2001, p.1) suggests the falling away in the early and mid-20th century of infectious disease in developed countries such as Australia played a significant and unacknowledged part in the rise of non-communicable chronic disease as a focus of health authorities and researchers at that time. This is a kind of rock and sea effect so that as the sea withdraws the rock becomes more visible. The increase in life expectancy at a national level in Australia from the mid 1940's onward supports the view that the rise in government attention to chronic disease was not precipitated by the overall state of population health.

Six major changes in Australia since 1980 influenced the biomedical representation of the problem of chronic disease as a problem for government attention:

- acceleration in the proportion of aged in the population meant that chronic diseases which are more prevalent with age were predicted to accelerate health spending (Gibson 2010),
- the baby boomers as the most populous and politically powerful age cohort were reaching middle age and experiencing the senescent upswing in chronic disease (Minister for Ageing 2001, p.xi),

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- the government campaign to reduce the consumption of saturated fat was strongly linked (incorrectly) to the decrease in heart disease mortality. The decrease was more strongly effected by reduced smoking rates, innovations in medical technology, practices and drugs, (see Australian Institute of Health and Welfare 2014a; Coveney 2006, p.143),
- more research linking smoking and tobacco to lung cancer and other chronic diseases was available (Chapman 2007, p.157),
- the denormalisation of smoking and tobacco and the long downward trend in daily smoking was strongly linked to government preventive health policy (ibid, p.153), and
- the long term rising trend in the prevalence of obesity provided a looming health 'crisis' in need of funding and attention (World Health Organisation 2000).

Coronary heart disease (CHD) was the main cause of cardiovascular (CVD) death in Australia in the 1950s and 60s. The representation of CVD was of a single chronic disease group, caused and prevented by individual behaviour around risk factors including smoking, diet and physical activity and particularly through the consumption of saturated fat which, as a public health issue, vied with smoking for government funding and public attention (Dwyer & Hetzel 1980). CHD is represented to be of high social, economic and population health significance as it is often debilitating, leading to chronic poor health, disability, lost productivity and early death (Australian Bureau of Statistics 2006; Australian Institute of Health & Welfare 2010, p.1; 2011, p.54). Heart disease and dietary fat, particularly saturated fat, were the forerunners to obesity being represented as a single risk factor, disease and legitimate target for government attention in Australia.

Rather than targeting the visible fat of bodies, in these early campaigns by Commonwealth and State governments, fat in the blood (cholesterol) and in food was targeted. Once warned of the dangers of saturated fat Australian consumers began to buy low fat animal products such as vegetable fat alternatives (margarine) instead of dairy butter (Hetzel et al 1989, p.886). In Australia the consumption of animal (saturated) fat fell and of vegetable fats rose from the 1950s (Dwyer & Hetzel 1980). Declines in meat consumption occurred (animal product is a major source of saturated fat) and these declines were highest in the fattier meats such as beef. This was matched

The social construction of obesity in an Australian preventive health policy by increased sales of chicken meat between 1960 and 1975 as Dixon (2002, p.4,135,172) suggests in this 'low-fat era' chicken was represented by nutritionists and industry as a low-fat meat.

The fall in saturated fat consumption in these decades is linked to falls in CHD mortality (Hetzel et al 1989) and CVD mortality although the prevalence of CVD is thought to have dropped less significantly however more data is needed to confirm this (Australian Institute of Health & Welfare 2010, p.6; 2011, p.41). Lloyd (1994, p.124) attributes at least half of the decline in mortality from ischaemic heart disease (one of the CVD diseases) to 'lifestyle' including falling smoking rates, rising ratios of vegetable to animal fats and decreasing consumption of saturated fats. As discussed the drop in the consumption of saturated fat through public adherence to public health messages since the 1980s is not recognised as a major factor in the decline in CHD mortality with this drop mainly attributed to the decline in tobacco smoking and better medical care (Australian Institute of Health & Welfare 2010; Hooper et al 2001, p.757).

Although the mortality rate of CVD has trended downwards since the late 1960s prevalence remains high and this is represented as an expenditure problem for government including high medical and productivity costs (Australian Institute of Health & Welfare 2011, p.x). Broom (2008, p.130) notes, that the current popularity of educational health promotion policy aimed towards 'improving health-related behaviour' is due to the apparent success of earlier campaigns to decrease saturated fat consumption, smoking and cardiovascular disease. In 1998 researchers from the American Heart Association compared obesity as the new target-for-research to dietary fat (Eckel & Krauss 1998). 'Obesity research today is in its infancy, at a stage comparable to lipid research 20 years ago' and suggest 'we have done a good job in educating consumers' who on average, in the 1960s consumed 40-42 percent of total calories as fat and in the 1990s consumed 34 per cent on average (ibid, p.2099). However '...despite indications that the percentage of calories consumed as fat is decreasing' overall more calories are being consumed and 'simply put, fat restriction is only part of a heart-healthy diet' (ibid). This reflects the move in the 1990s away from dietary fat and toward obesity as a predominant and single disease/risk factor representation of the policy problem.

Heart disease, fat consumption and smoking preventive health models were used for the new policy representation of obesity in the 1990s but it was physical activity (PA) that was added as a government-targeted risk factor early in that decade with research from the US showing decades of decline in physical activity (PA) up to the mid-1990s (Dietz 1996, p.832). In 1996 the National Health and Medical Research Council (NHMRC) (1996, p.35) listed the 'major alterable risk factors for CVD and stroke' as 'smoking, high blood pressure, elevated blood lipids and physical activity'.

Many PA programs and policies were funded but with little result (Owen et al 1995, p.247,248; Armstrong, Bauman & Davies 2000, p.51) and over the next decade the rates of PA in the Australian population declined slightly and continued to declined, in adults and children, up to 2008 (Bauman et al 2003, p.76; Salmon et al 2005, p.337; Australian Bureau of Statistics 2011a). The decline in some PA related chronic disease such as coronary heart disease over this decade was, as cited earlier, attributed to changes in therapeutic technology, techniques and drugs and a decline in smoking rates along with a smaller attribution to changes in dietary fat consumption. Despite and perhaps in part because of, the disappointing results of dietary and PA preventive health policy up to the mid-1990s, obesity grew to become the predominant risk factor subsuming both diet and PA in the early 2000s. National-level strategic non-communicable chronic disease policy began to be discussed and researched around this time in Australia.

Obesity as policy problem bloomed in a context already ripe with meaning and morality around individual behaviour. Coveney's (2006, p.13) description of 'Foucault's work on the formation of the modern subject' is relevant to the representation of the problem as single risk factors, single diseases or single disease groups. According to Coveney (ibid) the modern subject is 'a subject which knows and understands itself as an object through technologies of knowledge/power and one which knows itself through technologies of the self on the self via ethical practices'. In this way 'science...has taken on the role that was once the province of religion in that it articulates the basis of our moral concerns' (ibid, p.1).

In interview the idea of taking a more wholistic approach to preventive health policy by grouping risk factors or diseases or by concentrating on more distal factors was suggested as unsupportable by one expert as there is no evidence of such approaches working in the way the single factor approach has worked for tobacco and road injury

The social construction of obesity in an Australian preventive health policy (Interview 160). Not grouping risk factors and diseases creates other problems such as the trade-off of managing just one risk while other risks are maintained or growing, or concentrating on proximal factors where distal factor solutions are more effective. Hastings and MacFadyen (2002, p.74) in discussing smoking prevention suggest public health tends to 'fragment health into different topics and engage in an odd kind of consequence proliferation, where smoking, driving, having sex, and a dozen other behaviours vie with each other to present more dramatic risks'. Constructing the problem as a disparate array of diseases and risk factors is suggested as having, 'the net effect (of turning) health promotion from a tremendous opportunity for people to enhance their enjoyment of life, into a clutch of disparate and capricious threats' (ibid).

Critical studies of health policy have analysed the continued policy representation of the problem as single diseases and risk factors (Petersen & Lupton 1996; Bell, McNaughton & Salmon 2011). The reductionism inherent in the biomedical model of preventive health has been heavily critiqued by new public health (social health) researchers such as Fran Baum (2010, p.36) and Dorothy Broom (2008, p.130). Yet policy-makers and biomedical researchers consulted by policy-makers ride on the perceived essential nature of biomedical knowledge to construct knowledge-for-policy as also essential, individualistic and politically neutral and shut out representations of the problem that are more socially, psychosocially and politically complex and challenging (Petersen & Lupton 1996; Bell, McNaughton & Salmon 2011, p.2-3).

Government structures also influence what the problem is represented to be. Joining up food, obesity, high blood pressure and cholesterol among other related biological risks under the umbrella of food and physical activity promotion policy is not possible within the current or past structure of the Australian government bureaucracy. For example, food as a government policy problem traditionally falls under multiple portfolios such as health, agriculture, fisheries, commerce, transport, and food safety. The recent *National Food Plan* attempts a cross-portfolio strategic view on food but concentrates heavily on commerce and farming and fails to include health in any meaningful way (Department of Agriculture, Fisheries & Forestry 2012). This problem is recognised within government. In interviewing State government, statutory authority and non-government organisations (NGOs) senior representatives on government regulation around healthy food, Shill et al (2012, p.167) found the 'most dominant theme' among participants was 'the need for a whole-of-government approach'.

Representing the problem as single risk factors and diseases in the past has been successful for tobacco and for the reduction of saturated fat in the diet of Australians. Some health researchers defend such siloed representation with one anti-tobacco expert, in interview, declaring total disinterest in the negative effects some anti-tobacco measures may have on other chronic diseases such as depression by stating 'I am only interested in decreasing the prevalence of smoking, and other problems are not my concern' (Interview 160). However this model, including the reduction in smoking, saturated fat consumption and the decades-long focus on obesity, or obesity-related diet and physical activity has not translated to a downward trend in the prevalence of chronic diseases such as CVD (almost steady) or diabetes type 2 (rising) (ABS 2002; Australian Institute of Health & Welfare 2014a, p46).

#### 5.6 Change and resistance to biomedical representations

Within the 2003 NHMRC clinical guidelines for general practitioners in the management of obese patients, GPs are advised to consider the patient's sensitivity to a focus on weight (National Health & Medical Research Council 2003, p.3). In the summary of the updated 2013 *GP Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults, Adolescents and Children in Australia* (National Health & Medical Research Council 2013a, p.7) GPs are asked to 'establish a therapeutic relationship, communicate and provide care in a way that is person-centred, culturally sensitive, non-directive and non-judgemental'. This represents the problem of stigma as able to be ameliorated by GP behaviour and denies the broader social context including the harsh body culture that persists in Australia.

Yet GPs seem unconvinced that weight is not an inherently sensitive and stigmatising issue especially for children (King et al 2007, p.7). Research by Ogden et al (2007 cited in Adler & Stewart 2009, p.53) found that GPs are often reluctant to raise weight as a problem with men and women. In the Australian Weight of Opinion study GPs reported 'that children's weight was a sensitive topic and that there were real risks of alienating families or losing them altogether by simply raising the issue of weight' (King et al 2007, p.126). One of the clinical implications of this research was that 'strategies should be considered that would promote the regular monitoring of all children's weight and height as part of routine care, to normalise the discussion of weight' (ibid, p.120). In this research the problem is represented as the patient's reaction to the problem of

The social construction of obesity in an Australian preventive health policy weight and it is assumed that can be ameliorated by sporadic and 'sensitive' GP surveillance and health discourse. The significance of the broader social context including the powerful negative body culture that is a significant part of the lives of fat individuals does not appear in this research.

A lot of work has been done within government and by health experts and organisations, such as the NHMRC to move GPs towards a representation of the problem as biomedical/population obesity as categorised by the BMI and as a lifestyle issue (Royal Australian College of General Practitioners 2012). In an Australian study Laws et al (2009, p.66) investigate low implementation of lifestyle counselling by GPs 'despite the effectiveness of brief lifestyle intervention'. A main finding of this study is the implementation of such counselling 'reflects clinician beliefs about whether they should (commitment) and can (capacity) address lifestyle issues' (ibid). Using the schema in this thesis a lack of 'commitment' by GPs to address lifestyle issues is suggested as GPs representing the problem as biomedical/expert and so a matter for the patient to initiate and the GP to respond to with biomedical technology, techniques and therapeutic drugs. This shows a resistance to the biomedical/population problem representation which assumes GPs should initiate the interaction and offer lifestyle advice freely and frequently around individual behaviours.

The 2013 GP guideline representation of obesity as a disease is clearly unwarranted biomedically and may be more of a normative construction as per The Obesity Society and the American Medical Association as discussed earlier in this chapter. The biomedical construction of obesity is clear in these guidelines in both the dismissal of the social health context as irrelevant to the work of GPs and in the statement, 'weight management is primarily the individual's responsibility, with health care professionals recommending strategies and providing continuing support' (National Health and Medical Research Council 2013a, p.ix). The struggle of the two biomedical constructions of obesity is ongoing in academic, industry, media, and government fora and has recently become highly visible around the issue of bariatric surgery (see Zimmet 2011).

The work of Wake et al (2009, p.1,8) found that, like similar studies 'primary care screening followed by brief counselling did not improve BMI, physical activity, or nutrition in overweight or mildly obese 5-10 year olds' and argued for a rewrite of the

GP clinical guidelines on the treatment of childhood obesity and for public monies to be moved to 'primary prevention at the community and population levels'. The assumption is that the problem representation could be more successful if moved from biomedical/expert representation to biomedical/population representation and out of the clinic and into the community. The representation of the problem as a highly visual body characteristic is not problematised in such research despite a recognition of stigma in psychosocial literature as an important health problem.

Alternative representations of the problem that decentre body fat are being practiced in the Australian health field although the prevalence of these practices is not known. In his Melbourne practice a GP, Rick Kausman who specialises in weight loss is breaking new ground with his patients by only weighing those who choose to be weighed and by working with patients to create a positive relationship with food and activity and improve body image no matter what the patient's weight (Kausman 2012). This health practitioner is putting into practice an alternative and wholistic representation of the problem which includes physical, mental, social, and emotional aspects of health. This practice follows some of the more weight sensitive recommendations set out in the GP Clinical practice guidelines (National Health & Medical Research Council 2013a, p.23) such as 'ask whether the individual would be comfortable with having his or her weight measured'. The biomedical problem of excess body fat is not ignored but rather is embedded and even subsumed among other issues such as emotional well-being, with the overall target being much the same – reduced risk for chronic disease and improved wholistic health.

Resistance to the dominant biomedical representation of the problem is also visible in public constructions of body shape and size. Research by Olds et al (2013) studied the attitudes to obesity of over 300 Australian parents and children and found deep divisions in public opinion. In this study the question of who was to blame was asked of childhood obesity and may well have been answered differently if asked about adult obesity. Three categories of subjects were produced by Olds et al (ibid) from their data. The Concerned Internalisers (27 per cent) 'placed the blame for the obesity crisis on individuals', the Concerned Externalisers (38 per cent) '...felt that addressing obesity was as much a societal as an individual issue', and Moderates (35 per cent) 'believed obesity was not such an important public health issue' but did suggest remedies were more of an individual problem (ibid). Although the researchers named the category

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Concerned Externalisers these subjects could more accurately be described as

Concerned Balancers as they attributed blame almost equally between parents/children

and the society we live in (ibid).

Olds et al (ibid) express concern about a focus on personal responsibility and state 'while not a community-wide phenomenon, a substantial minority of the sample (27%) believed that individuals were personally responsible for causing and resolving this issue. As such we would argue that there should be a more concerted effort by public health practitioners to create a more balanced spectrum of messages which cover both individual and collective measures...' Yet, from the overall data of the three subject groups in this study, the most substantial portion of both blame and remedy was attached to individuals by two groups with the third group apportioning around half the blame to individuals. Overall this suggests the majority of Australians apportion most of the blame for obesity to the individual.

For the question on what messages should be used in obesity prevention policy the researchers (ibid) juxtaposed 'fear and shame work for tobacco: they should work for obesity too' with 'we should focus on healthy eating and physical activity' and put 'maybe a bit of both' in the middle range. The answers were overwhelmingly toward the positive end and away from shame and fear despite the researchers leading with the idea of what works for tobacco being what 'should work for obesity too' (ibid). Tellingly none of the groups had significantly different proportions of overweight or obese subjects - so neither individualistic constructions nor more balanced individual/social/systemic constructions around obesity remedies were associated with more 'successful' population weight profiles.

These research findings would suggest the assumption that 'attitude to weight' including individualistic constructions of blame and remedy as a necessary precursor to weight prevention or management is problematic. The resistance to biomedical constructions of weight can be seen in both the Concerned Externalisers group that balanced the blame and remedy between the social/systemic and the individual, and the moderates who rejected the construction of weight as an important health problem. A fracture is visible between two thirds of Australian adults and children believing obesity is an important health issue and the very low take-up rates for government policy initiatives such as the Measure Up campaign. This gap points to the public, perhaps,

The social construction of obesity in an Australian preventive health policy having alternative constructions of obesity or having little belief that such campaigns will be of practical use (ibid, p126).

In analysing public health campaigns Puhl, Peterson and Leudicke (2013, p.774) found public responses to be more positive and motivating when messages contain, 'no mention of obesity at all' and suggest it may be more motivating to, emphasis health, 'rather than body weight per se'. Rather than critically analysing the construction of the problem their conclusion concentrated on the problem of 'weight-related terminology' citing a United Kingdom (UK) proposal to leave the word 'obesity' out of the new Change4Life campaign (ibid). For these researchers the problem of obesity stigma is constructed as a public health problem rather than a problem that is also of public health. Although the word obesity is a particularly negative word for many people, euphemisms will do little to change the poor health and social effects generated by negative constructions of body fat, shape and size that are produced by health authorities within a powerful, negative body culture.

#### 5.7 Conclusion

Obesity in early health authority discourse is a mixture of medical, moral and aesthetic representations. From at least 1900 to the 1980s the individual was considered to be both the instigator of the problem and to be in control of remedies including initiating medical attention and changing individual behaviours mainly around food and physical activity. The government had little or no place in affecting the individual or the environment with regard to weight. Fat was openly stigmatised both culturally and within the medical/health professions. This changed mainly from open and public to unrecognised or hidden stigma with the rise of critical studies around identity politics in the early 1960s. Since the early 2000s obesity constructed as a preventive health target has been linked to an increase in stigma including in the medical and health professions. From 2000 the psychosocial effects of stigma have been extensively researched. Psychosocial research is divided on whether a preventive health focus on obesity is iatrogenic or salutogenic overall. More recent research shows that fat stigma is a risk factor for obesity and obesity maintenance.

Around the mid-20<sup>th</sup> century the WHO classified obesity as a disease but medical practitioners, researchers and governments in general did not act on this until the 1980s

The social construction of obesity in an Australian preventive health policy when population health studies began to show a strong upward trend in the prevalence of overweight and obesity. International literature from the 1990s onward represents the problem in two ways - obesity as a single risk factor or disease (a biomedical representation) or obesity as embedded and subsumed by other risk factors such as food and physical activity or other distal factors such as the social determinants of health (a social health representation).

Both biomedical representations of the problem (expert and population) construct obesity as a preventive health policy problem in the single risk factor/single disease model used for saturated fat and heart disease since the 1950s. From the 1980s the dominant representation of the problem of obesity in the health policy field and in medical guidelines has been a biomedical/population representation. This has been constantly challenged not only by biomedical professionals and the public but continuously within biomedical/expert, social health, psychosocial health and critical studies research.

# **Chapter 6**

# Case study of the Measure Up campaign-Strategic and Intermediate levels

#### 6.1 Introduction

In this chapter I present a case study of what the problem is represented to be within a specific but important Australian government obesity prevention policy, the Measure Up campaign that was active from 2008 to 2013. I first of all set out a history of government representations of obesity that are part of the policy context of the Measure Up campaign from the 1970s up to 2008. A description is then provided of campaign material and media activity produced by the campaign. The schema of representations I developed in chapter four is then used to analyse the problem representations within relevant policy output and supporting documents of the Measure Up campaign.

To aid this analysis I divide representations in the campaign into three levels, strategic, intermediate and policy-output. These layers reveal the hidden contradictions within the representations of the problem as these change from the broad strategic planning level, to the intermediate level and then to the narrower representation within policy output. The construction of a policy problem, drawn in broad strokes at the strategic level of policy development, often involves the highest level of government, experts and interested parties. I analyse how important concepts, assumptions and effects of the representation of the problem are set at this level and alternative representations of the problem are silenced. At the intermediate level the policy problem is represented more narrowly and excludes research important to the strategic aim of the prevention of chronic disease. Finally the last and narrowest representation of the problem is analysed in the policy output (public materials) of the Measure Up campaign.

In conventional policy analysis what happens inside this policy development funnel is often analysed without questioning or theorising the shape and placement of the funnel itself. A critical social constructionism analysis allows just such an exploration. By exploring the different layers of what the problem is represented to be it is possible to expose not only how the problem was shaped but also, to some degree, why it took that shape. In this chapter I analyse the strategic (first) and intermediate (second) levels of

The social construction of obesity in an Australian preventive health policy problem representation in the Measure Up campaign. Some evaluations of the campaign produced for government and by independent researchers are then analysed for what the problem is represented to be along with underexplored assumptions and effects. The third level, policy output, is the most important representation of the problem by the government as it is the one most extensively communicated to the public and I analyse this level in the next chapter.

## 6.2 Government representations of obesity 1970s to present

In Australia the construction of obesity as a government/policy problem began in a slow, fragmented and oblique way in the late 1970s. One early public policy was the joint state/territory and federally funded (1978-81) national social marketing campaign Life.Be in it (2014). This campaign specifically targeted individual behaviour around food, alcohol, and physical activity (ibid). The central visual representation of the problem was the cartoon character of Norm. Norm was fat with a big belly, sat on the couch a lot with a beer in hand and fended off invitations to exercise, from his slim wife, Libby, with that gentle dry wit enjoyed by many Australians (ibid). The birth of Norm with the Life.Be in it campaign could be considered the birth of the public construction of Commonwealth Government authority around the weight, body shape and body size of individual Australians.

The Life.Be in it campaign constructed a biomedical/population representation of obesity as a highly obvious, biomedical body characteristic being body weight, shape and size, and an unacceptable risk or disease (ibid). Media analyses since 1980 in the USA and Australia show this representation of obesity has continued where media articles, 'emphasised obesity as a matter of personal responsibility, avoided through healthy eating and lifestyle choice' (Rosen & Smith 2008, p.1; Bastian 2011, p.139). This was a change in representation from the earlier biomedical/expert assumption of weight as a matter for the individual, and if they chose it, also a matter for their doctor, to being included as a matter for governments.

This change to a biomedical/population representation of obesity occurred with no recognition of the important social context that includes the harsh Australian body culture made more persistent, pervasive and powerful by an expanding visual culture, and the new market economy promoting financial and social insecurity, inequity, and

The social construction of obesity in an Australian preventive health policy overconsumption (Pause 2013; Bordo 2003; Boero 2007, 2013; Pocock 2003; Dixon et al 2014). Fatness essentialised as negative (a risk, a disease) by medical science and authenticated as such by health policy dovetailed with a gendered culture dominated by highly negative moral and aesthetic constructions of fatness for many women (the thin ideal) and a growing culture of big bodies (highly muscular) as masculine for many men (the big-man ideal) (O'Kane, Craig & Sutherland 2008; Olds et al 2013).

The recall rate from the Life.Be in it (2014) campaign was high and spin-off T-shirts and other merchandise were very popular. However, rather than accepting the negative biomedical/population construction of body fat and being spurred on to change their physical activity levels and dietary patterns, many Australians empathised with the central character, Norm. Norm was withdrawn from the campaign a few years later when it was recognised that instead of becoming an anti-hero, Norm had become a hero, enjoyed and loved by many of the target audience of the campaign. Dr Colin Benjamin a founder of the campaign stated in a media article that 'people were going to parties dressed up as Norm... They were identifying with him rather than hearing the message' (Le Grand 2011). This reaction to Norm is suggested as one of the first examples of widespread Australian public resistance to the biomedical/population construction, in preventive health policy, of bigger body size and shape as negative or problematic.

From the early 1990s Gary Egger and Boyd Swinburn, (1997, p.477) two Australian obesity researchers developed an ecological model of obesity that 'proposed three main influences on equilibrium levels of body fat - biological, behavioural, and environmental...' Using the schema developed in this thesis this model fits a social health representation of obesity as it constructs the problem as centred on social causes and solutions. These researchers reject narrow biomedical constructions of the causes and solutions and suggest 'a paradigm shift to understanding obesity as normal physiology within a pathological environment (that) signposts the directions for a wider public health approach to the obesity pandemic' (ibid, p.480). These were early attempts by social health researchers to place the biomedical construction of obesity within a more dominant social health model especially around causes and solutions.

In 1994 the (then) Commonwealth Department of Human Services and Health (DHSH) released, 'Better Health Outcomes for Australians' a report that focused on health system, therapeutic and preventive measures around four disease and accident areas;

The social construction of obesity in an Australian preventive health policy cardiovascular disease, cancer, injury and mental health, with diabetes included a few years later (National Health and Medical Research Council 1997, p.195). These strategies included preventive health targets around 'healthy lifestyles' including overweight and obesity, physical activity and nutrition (ibid).

The targets set around overweight and obesity are quantified in terms of changes to the proportion of adults with normal BMI, overweight and abdominal obesity and state that specific strategies for 'countering the increase in BMI' were to be developed. This left the recommended strategy to meet those targets as simply the continued implementation of current diet and nutrition, and physical activity strategies (ibid). However in the years that followed the prevalence of overweight and obesity in Australia continued to climb steadily and the quantification of weight targets for the Australian population did not appeared again in strategic Commonwealth government policy until 2008. This move signals that the Commonwealth Government probably began, in the mid-1990s, to expect government policy around obesity to be ineffective.

In 1997 the NHMRC with the Commonwealth Department of Health and Family Services (DHFS) and with input from Egger and Swinburn among others, published the report *Acting on Australia's weight: a strategic plan for the prevention of overweight and obesity* (National Health & Medical Research Council 1997- rescinded 2006) that was claimed as the world's first strategic policy plan on obesity. The goal of this plan (ibid, p.4) was:

to prevent further weight gain in adults, and eventually reduce the proportion of the adult population that is overweight or obese; and to ensure the healthy growth of children by combined environment approaches to physical activity and diet, through public health action occurring at the level of the macroenvironment.

Obesity is constructed in this strategy as a combination of biomedical representations that put the individual at the centre of the problem and social health representations placing the social/systemic at the centre of the problem as per the Egger and Swinburn ecological model. For example, the strategies for implementation (ibid, p.13) were aimed at the social/systemic level including targeting state and territory governments and agencies, professional bodies, food industry, employers, unions, and schools. However these strategies were mainly aimed at assisting those groups to more

The social construction of obesity in an Australian preventive health policy successfully educate and urge individuals with a smaller focus on providing a less 'obesogenic' environment.

Population-based interventions were to be developed by December 2002 (five years away). The conclusions of the report (ibid, p.81) suggested more data were needed, that findings on four major international weight interventions were disappointing and this; suggests that, in addition to encouraging individuals to take steps to control their weight, future efforts to prevent overweight and obesity should place a much greater emphasis on promoting and supporting changes to physical and social environments that would increase opportunities for people to participate in regular physical activity and to make healthy food choices.

The social health representation of the problem in this document was problematic for governments in the following ways. This was policy aimed at social/systemic solutions when many in the population constructed weight as a matter of individual/personal responsibility or did not represent bigger bodies as problematic as acknowledged in the report (ibid, p.58-59). The attitudes to obesity suggested by this report reflect those described by Olds et al (2013) in that women tend to construct body shape and size around the thin ideal and men tend to construct bigger bodies as unproblematic and 'relate size to masculinity' (ibid, p.59). Also these social health strategies were based around the notion of self-regulation in assuming that those groups and organisations named as influencing weight gain, industry, schools etc. would take up the 'suggestions' made, but few did.

Representing the problem of obesity as an important social health issue continues to be uninfluential with policy makers, the Australian public, the media, and industry (Olds et al 2013; Lawrence 2004). These reasons along with the rise in obesity rates are suggested here as being among the main reasons the Australian government from the late 1990s adopted a more biomedical construction of the problem in policy strategy. In the early 2000s Australian governments were moving toward coordinating national strategy on non-communicable chronic disease and citing reasons such as the social complexity of emerging problems like obesity (National Public Health Partnership 2001, p.2).

In 2002 the Australian Health Ministers Conference (AHMC) put chronic disease even more firmly on the government's agenda and the Australian Health Ministers' Advisory Council (AHMAC) agreed to develop a national strategic policy approach to chronic disease prevention and care (National Health Priority Action Council 2006, p.iii). The National Health Priority Action Council oversaw the development and endorsed two elements of a national approach, a national chronic disease strategy and five supporting national service improvement frameworks that covered five national health priority areas: asthma; cancer; diabetes; heart, stroke and vascular disease; and osteoarthritis, rheumatoid arthritis and osteoporosis (ibid). This work was published as the *National Chronic Disease Strategy* (NCDS) in 2006 (ibid). Although obesity makes only a minor appearance in this report the future representation of the problem in preventive health policy is in large part set by this report. An excerpt of the strategic discourse of the NCDS (ibid, p.iii,5) is presented in Box 6.1 and is analysed below.

#### Box 6.1: National Chronic Disease Strategy 2006, Excerpt

Page iii. Preparation of the Strategy and Frameworks has been the work of expert groups and individuals, including leading clinicians, policy makers, peak consumer bodies, members of non-government organisations, and other health organisations. The Strategy and Frameworks are high level, generic policy guides. They are designed to inform senior health policy makers, health planners, peak consumer organisations, health professionals, and health service managers...

Each Framework is structured to reflect the phases of the patient journey - reducing risk, finding disease early, managing acute conditions, long term care and care in the advanced stages of disease.

Page 5. The NCDS focuses mainly on the directions taken by the health system. This focus recognises that the health sector must achieve significant and sustainable change to cope with current and future demand for chronic disease prevention and care.

However, the NCDS recognises that the health system cannot work in isolation from other sectors and services, and must take a leadership role in advocating, engaging, and partnering with other sectors to influence the social and environmental factors that determine the burden of chronic disease. An effective response to chronic disease prevention and care requires a whole-of-government and whole-of-community response.

Source: National Health Priority Action Council (2006, p.iii,5)

The three main groups that forged this strategy consisted of senior bureaucrats and clinical specialists/researchers with a few consumer advocates. The National Health Priority Action Council in 2005 was made up of eleven senior bureaucrats from the Australian government and each state and territory and two consumer representatives one of whom was representing an Indigenous primary health care representative organisation (ibid, p.51). The National Chronic Disease Strategy Reference Group was made up of biomedical researchers and clinicians in each of the five framework areas and in mental health and kidney health along with seven clinical nominees from State and Territory bureaucracies (ibid, p.52). The project management bureaucratic group was the National Chronic Disease Working Group with ten health bureaucrats from all jurisdictions and one consumer representative (ibid, p.53).

The expert members of these groups were heavily biomedical in their professional roles either from a clinical speciality or from a government department whose work around therapeutic care was central and around primary prevention was minor. Of the two health consumer representatives one was from the primary care sector. Of the two advisory members of the Reference Group one was from the National Public Health Partnership (NPHP) (2001) set up by AHMAC to provide a forum for crossjurisdictional promotion of public health in health policy. One of the core functions of public health set out in the NPHP document *Public Health Practice in Australia Today* is to 'promote and support healthy lifestyles and behaviours through action with individuals, families, communities and wider society' and under this heading an 'emerging practice' for public health is to 'shift focus from action at the level of the individual to broader societal and structural issues e.g. food supply' (National Public Health Partnership 2000, p.4). This 'emerging practice' is a move towards social health representations of health, disease and prevention however it does not 'emerge' in the *National Chronic Disease Strategy* (National Health Priority Action Council 2006).

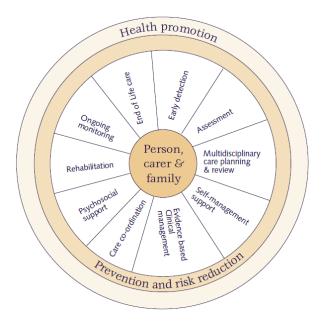
As the NCDS (2006) was designed to inform senior policy makers and health sector experts, the representation of the problem was largely determined at this very senior level (Box 6.1). The problem was represented to be one of coordination between different government jurisdictions and different levels within health systems around a handful of specific chronic diseases. Health is assumed to be the absence of disease with policy success a decrease in the prevalence of these diseases and it is presumed that little or no exploration is needed of the underlying assumptions and effects of the

The social construction of obesity in an Australian preventive health policy dominant representation of the problem. Target groups for this policy are already constructed as a part of the health system with the first phase of 'the patient journey' being 'reducing risk' (ibid) (Box 6.1). The rolling of prevention into the first step of a therapeutic journey and into the ill-health systems is unproblematised. The focus is on the health sector that must 'change to cope with current and future demand for chronic disease prevention...' (Box 6.1).

The usual strategic nod in the direction of a social health representation of the problem is provided in suggesting 'the health system must take a leadership role (in engaging) other sectors to influence the social and environmental factors that determine the burden of chronic disease' with 'an effective response to chronic disease prevention (requiring) a whole-of-government and whole-of-community response' (Box 6.1). The suggestion of a leadership role for the health system in preventive health is strongly disputed by social health researchers. Ilona Kickbusch (2008a, p.2) a renowned social health researcher, in discussing a South Australian government model of health-in-all-policies suggests that with regard to the prevention of chronic disease the 'health (system) has a key role, some of which includes getting its own house in order, but this must be as a catalyst or a guide to action- a provider of support, information, data and advice – and not as 'the boss''.

The emphasis throughout the NCDS is on individual self-management, medical expertise and the coordination and efficiency of health systems. The individual is acknowledged as at the 'core' of this strategy in Figure 6.1 reproduced from the NCDS (National Health Priority Action Council 2006, p.8) despite the earlier reference to the important role of social and environmental factors in the prevention of chronic disease.

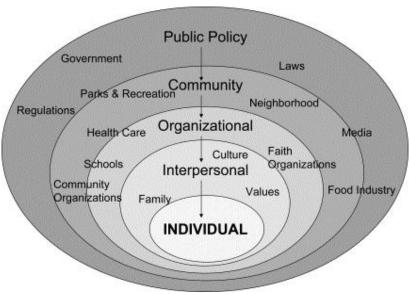
Figure 6.1: National Chronic Disease Strategy (2006): Core elements of the continuum of chronic disease prevention and care



Source: National Health Priority Action Council (2006, p.8)

The placement of prevention, risk, and health promotion as thin, undetailed rims works to de-emphasis the influence of social context. This contrasts with the social health representation of the problem of obesity in the socio-ecological model (Figure 6.2) constructed as part of a consensus statement of *Shaping America's Health* and The Obesity Society (Caprio et al 2008, p.2217). The individual is again central but the

Figure 6.2: Shaping America's Health and The Obesity Society: Socio-ecological model of obesity



Source: Caprio et al (2008, p.2217)

The social construction of obesity in an Australian preventive health policy social context is complex and detailed and visually far outweighs the role of the individual and the health system.

Paralleling and influencing the development of the NCDS was the work of the *National Obesity Taskforce* convened in 2003 by AHMAC to make recommendations on national strategy around obesity (The National Obesity Taskforce 2003). Later in 2003 the taskforce presented the report *Healthy Weight 2008: Australia's future: The National Action Agenda for Children and Young People and their Families* to AHMC (ibid). This single focus document again set the representation of the problem at the highest level as weight but did not set quantitative targets of reduced prevalence of obesity or overweight.

In 2006 the National Obesity Taskforce for AHMC produced, *Healthy Weight for Adults and Older Australians: A National Action Agenda to Address Overweigh and Obesity in Adults and Older Australians 2006-2010* (The National Obesity Taskforce 2006). Once again this document does not set specific targets of reduced prevalence of obesity or overweight but states three broad goals 'prevent weight gain at the population level, achieve better management of early risk, and improve management of weight' (ibid, p.2).

Also in 2006, the Council of Australian Governments (COAG) funded the Australian Better Health Initiative (ABHI) (\$500 million) to reduce the impacts of chronic disease within six priority areas, promoting healthy lifestyles, supporting early detection of risk and chronic disease, supporting lifestyle and risk modification, encouraging active patient self-management of chronic conditions and improving communication and coordination between care services (Department of Health & Ageing 2006). Lifestyle factors were targeted such as poor diet, insufficient exercise and 'better management of conditions such as high blood pressure or obesity' (ibid). At this strategic level what the problem was represented to be was overwhelmingly set by politicians, high level bureaucrats and biomedical experts.

In December 2007 COAG agreed to a reform agenda throughout the healthcare system and included a focus on preventative health care and targeted 'key risk factors driving increasing rates of diabetes, cancer and poor mental health (Coalition of Australian Governments 2007). In 2008 COAG agreed on the National Partnership Agreement on

Preventive Health (2010) which included a performance target to 'increase the proportion of children and adults at healthy body weight by 3 percentage points within ten years'. The first quantification of targets around weight in over 10 years was an increase of just 0.3 of a percentage point per year in healthy body weight. This is a very low target that is only marginally above simply stopping the annual increase in overweight and obesity.

In the 2011 National Healthcare Agreement the target was lifted to 'by 2017, increase by five percentage points the proportion of Australian adults and Australian children at a healthy body weight, over the 2009 baseline. This was amended to 'by 2018' in the following year (Coalition of Australian Governments 2012). However in 2014 COAG reported that between 2007-08 and 2011-2012 the proportion of adults at a normal weight had fallen 1.2 percentage points (Coalition of Australian Governments Reform Council 2014). Taking into account that the underweight category dropped by 0.4 percentage points over this time means that without this influence the normal weight category would have dropped even further. Neither the 2008 targets nor the 2012 targets have been widely publicised despite COAG suggesting such targets are necessary for public support.

In 2008 AHMC added obesity to the seven existing National Health Priority Areas (Australian Institute of Health & Welfare 2014b). In 2009 the National Preventative Health Taskforce (NPHT) released an interim report *Australia: The Healthiest Country by 2020* (National Preventive Health Taskforce 2009a). On the basis of this interim report in early 2009 COAG, through the National Partnership Agreement on Preventive Health, allocated an additional \$872 million in government funding over six years (2009 to 2015) for preventive health measures including; infrastructure for a national prevention agency, better data collection, more research, social marketing and interventions including more funding for the Measure Up campaign (Department of Health & Ageing 2010b, p.52). The Commonwealth Minister for Health & Ageing, Nicola Roxon (2009) suggested this was the largest investment in preventive health ever made by the Australian Government and it occurred nine months before the NPHT taskforce released its final report in late 2009 that emphasised a social health representation of the problem of obesity (National Preventive Health Taskforce 2009a).

In 2010 the Australian Government released the report *Taking Preventative Action* in response to the final NPHT report and reiterated those strategies it had funded on the basis of the draft report (Department of Health & Ageing 2010a, p.i) including;

- the world's toughest regime on cutting smoking rates,
- establishing a national agency to guide investments in prevention,
- tackling binge drinking through a \$103.5 million strategy,
- providing approximately \$300 million for social marketing campaigns tackling tobacco, alcohol, obesity and illicit drugs,
- helping Australians to participate more in sport and active recreation through a boost to sports funding, and
- delivering the most ambitious study of Australia's health ever conducted.

The headline introduction to the *Taking Preventative Action* report by Minister Roxon suggests a heavy emphasis on prevention in stating 'the saying is true prevention is better than cure. But for all the strengths of our health system Australia has historically not invested enough effort and funding in preventing chronic and life-threatening diseases' (ibid). Overall the representation of the problem as biomedical/population obesity did not differ from past government representations. This is manifest in the main strategies for the prevention of obesity in the *Taking Preventative Action* report that do not differ greatly from previous government obesity initiatives in focussing on individual behaviour change, health systems development and educate-and-urge social marketing.

In a media release in September 2009, the Obesity Policy Coalition, an organisation formed by the Cancer Council Victoria, Diabetes Australia Victoria, VicHealth, and the WHO Collaborating Centre for Obesity Prevention at Deakin University, suggested the lack of structural, that is social/systemic, change in the form of government regulation of food industries within the *Taking Preventative Action* (2010) report was disappointing as such change was indicated by the evidence (Obesity Policy Coalition 2009). The major government strategy for the prevention of obesity is around social marketing which has been a mainstay of health promotion at the national level in Australia for decades despite continuing and widespread disputes over the efficacy of this method in affecting behaviour change especially when produced in a bureaucratic context (Baum 2008a, p.466).

Social health representations of the problem are almost absent from the policy initiatives of the report being rolled into both the development of preventive health within primary health care through ongoing programs and into the government's social inclusion agenda. Neither of these has the capacity nor scope to effect the kind of changes that social health representations of the problem assume as primarily important. For example action on social inequity such as income distribution toward a sustainable reduction in the incidence of chronic disease across the social gradient (Commission on Social Determinant of Health 2008) cannot be affected from within the health system or by a social inclusion agenda that has very little funding or influence in any of the major government portfolios.

Critiques of the current health promotion field suggest in general it is dominated by behavioural models that restrict the use of evidence, it focuses on individual risk factors and changing individual behaviour, it lacks in analysis of theoretical foundations, is supportive of some political ideologies often against the research findings and fails to effectively promote social or health equity (Baum 2008b, p.11,48,51,81,91, 274-5; Dixon & Broom 2007, p.8; Lupton 1994b, p.111-112; Swerissen & Crisp 2004, p.127; Egger, Spark & Donovan 2005, p.99; Friel & Broom 2007, p.169). These points hold true for health promotion of biomedical obesity constructed within the strategic policy discussed. Social marketing is not inevitably individualistic or stigmatising and can create and support alternative representations of the problem, causes and solutions such as social/systemic solutions around food and physical activity, and as suggested by Thomas et al (2010b), anti-stigma campaigns.

In January 2011 the Australian National Preventive Health Agency as planned in the *Taking Preventative Action* (2010a) report was launched in the hope of making preventive health policy more systemic with one national agency and one national strategy. Dr Rhonda Galbally was named as the transitional Chief Executive Officer and stated the agency's strategic focus as the risk factors obesity, smoking and alcohol estimated as causing around 30 per cent of the burden of disease in Australia (Roxon 2011a; National Preventative Health Taskforce 2009a, p.7). The new agency was allocated the resource-heavy, line role of managing the big social marketing projects and in the reporting arrangements with the Minister of Health was structurally less independent than most other agencies (Interview 114). Once again the problem was narrowly represented as biomedical obesity despite the original plan for a preventive

The social construction of obesity in an Australian preventive health policy health agency as a site for strategic change. ANPHA also called Promoting a Healthy Australia was marked for closure by the Australian government in the May 2014 budget with 'essential functions' being re-allocated back to Department of Health (DoH) and the National Partnership Agreement on Preventive Health was terminated (ANPHA 2014).

At interview one expert suggested obesity policy makers to be awaiting a golden key being that one intervention/ drug/ therapy/ education/ motivation method that will fit a risk-adverse model of policy, the siloed-bureaucratic structure, be politically and commercially positive or inert, be publicly popular and that will turn the ship around and return Australia to a pre-1980, safe, body-fat population profile (Interview 150). It is this narrow, oddly-shaped possibility to which Jane Halton, Secretary of the Australian Department of Health and Ageing refers when she suggests no country currently has the answer to obesity and Australia like all countries is waiting for the solution to be discovered (Halton 2012). The 'golden key' assumption reflects the biomedical representation of the problem as this is constructed as a health system, medical and therapeutic 'problem' with a known aetiology and an unknown therapeutic cure. The search for just such a therapeutic cure was described in a literature review for the British Foresight obesity project, as a search that had yielded, 'some drug advances but no *fat vaccine*' (Foresight 2006, author's emphasis). Such a representation confines the public policy problem to the government portfolio responsible for ill-health.

The biomedical representation of obesity produced by current preventive health policy includes a heavy reliance on the concept of lifestyle. John Powles (1992, p.379) argues a focus on lifestyle as well as structural/social-level change is nothing new in public health. He suggests in the mid-1800s in England a mix of structural, behavioural and normative measures were used to change attitudes and practices relating to personal cleanliness, including 'relentless campaigns to change behaviour and the social norms that supported that behaviour' (ibid). These normative measures created resistance with some declaring they preferred cholera to being bullied into cleanliness. Powles (ibid, p.378-379) argues each method was important and that lifestyle changes along with increased consumption may have been more important to the decline in infectious disease than structural change such as state action to improve water supplies and remove sewerage.

The mix of structural, behavioural and normative measures that worked for public health problems in the past did not represent the problem to be an embodied state (obesity) but embodied behaviours (spitting, smoking) that were amenable to social-level change (Bell, McNaughton & Salmon 2011, p.7). Representing the problem as biomedical obesity immediately constructs the entire population within two target groups that are visually obvious and identifiable by body size and shape...those who are overweight/obese and those who are at risk of being so (see Thomas et al 2010a). This move inevitably also produces an emphasis on individual body, behaviour, choice and responsibility (ibid). This construction dovetails with public 'personal responsibility' attitudes to body shape and size and this, in part, explains low public support for government-funded obesity prevention solutions and social/systemic policy (Olds et al 2013; Lund, Sandøe & Lassen 2011, p.1584).

### 6.3 Measure Up campaign description

The Measure Up campaign is a policy of the ABHI and was developed within the Commonwealth Department of Health and Ageing and launched on 17 October 2008 by then Minister for Health & Ageing, Nicola Roxon (Measure Up 2013a, Australian Better Health Initiative 2012; Roxon 2008). As an ABHI policy initiative the campaign was funded by Commonwealth and State and Territory governments with the exception of the Victorian government (Social Research Centre 2010, p.1). In 2004 the Victorian government funded the, Go for Your Life, chronic disease prevention strategic plan that focused on individual behaviour through programs around food and physical activity in community settings such as schools and workplaces. This plan was extended and expanded in 2006 and was part of the reason the Victorian government did not fund either of the two COAG national initiatives, Go for 2 & 5 (2005) a social marketing initiative that promotes the consumption of two fruit and five vegetable serves per day, or the Measure Up (2008) campaign (ibid, p.iii,iv; Measure Up 2013b).

Later in 2008 the Measure Up campaign became a part of the COAG National Partnership Agreement on Preventive Health and funding was extended to 2011 and then 2013. In 2010 phase two of the campaign, Swap it: Don't stop it was added to Measure Up (Roxon 2011b). In January 2011 responsibility for the campaign was transferred from the Commonwealth Department of Health and Ageing (DoHA) to the new agency ANPHA. The campaign was superseded in February 2013 by a similar

The social construction of obesity in an Australian preventive health policy obesity prevention campaign called Shape Up Australia and the Measure Up campaign formally finished in June 2013 (see Image 6.1).

Image 6.1: Measure Up: Kick start your health life & Shape Up Australia: Main image Measure Up



Source: Kick start your healthy life, Measure Up campaign (n.d.); Shape Up Australia (n.d.) To put the Measure Up campaign in perspective in the funding of preventive health, this obesity prevention social marketing campaign was just one part of the suite of preventive health measures funded by the \$872 million investment in preventive health by Australian and State and Territory governments (Roxon 2011a). A 2010 summary of the National Partnership Agreement on Preventive Health (2010, p.10,11) measures included;

- Healthy communities (\$71.8m, 2009-2013) community based lifestyle programs,
- Healthy children (\$294.6m, 2011-15) physical activity and nutrition programs for children aged 0 to 16 years,
- Healthy Workers (\$294.6m, 2009-13) healthy lifestyle programs in workplaces,
- Industry Partnership (\$1m, 2009-13),
- Social Marketing (\$120m, 2009-13) Measure Up (\$59m) Tobacco (\$61m), and
- Enabling infrastructure (\$59.2m, 2009-13) including the establishment of ANPHA.

The Measure Up campaign appears to be one of the smaller programs in preventive health undertaken by governments over this time. However as the major social marketing initiative this campaign is the premier way in which the Australian government communicated to the citizens of Australia what the problem is, who the target groups are, who is responsible, how it can be remedied, what the consequences will be if those remedies fail, and so also communicated the under-explored assumptions of that problem construction (see Measure Up 2013b).

Social marketing was chosen as the policy vehicle needed to 'enhance awareness of healthy lifestyle choices and stimulate behaviour change' (Roxon 2008). A diverse spread of media was used in the campaign including TV, radio and internet advertising to construct the problem around biomedical knowledge, body fat, weight, Body Mass Index, waist measurement, risk, disease causation, and population statistics along with individual behaviour change around weight, food, and physical activity (Social Research Centre 2012, p.1-4).

Visual images, along with text, in TV advertisements, posters, supporting resources (such as a 12 week planner to kick start healthy habits) and on the Department's website are pivotal in the government/policy representation of the problem (see Image 6.2). The campaign also advertised and overlapped (from 2009 to 2011) with a free NSW state program that provided mailed-out health information, telephone counselling and an 'intensive and evidence-based 6-month coaching program that provides ongoing support...aimed at helping adults achieve and maintain lifestyle based changes' around physical activity, nutrition and healthy weight. This was the Get Healthy Information and Coaching Service, NSW (2009) (O'Hara, Bauman & Phongsavan 2012).



Image 6.2: Measure Up campaign: How to measure yourself

Source: Measure Up (n.d.)

The biomedical construction of the problem for policy is visible in the objectives of the campaign (see Box 6.2) along with assumptions of the individual as central including individual behaviour, responsibilities and choices, other risk factors as subsumed by obesity, and a highly individualistic concept of lifestyle.

Box 6.2: Measure Up campaign: What are the objectives of the campaign?

The short term objectives for the first phase of the campaign are:

- to increase awareness of the link between chronic disease and lifestyle risk factors (poor nutrition, physical inactivity, unhealthy weight);
- to raise appreciation of why lifestyle change should be an urgent priority;
- to generate more positive attitudes towards achieving recommended changes in healthy eating, physical activity and healthy weight; and
- to generate confidence in achieving the desired changes and appreciation of the significant benefits of achieving these changes.

The long term objectives of the campaign are:

- to encourage Australians to make and sustain changes to their behaviour, such as increased physical activity and healthier eating behaviours, towards recommended levels; and
- to thereby contribute to reducing morbidity and mortality due to lifestyle related chronic disease in Australian adults.

Source: Measure Up (2013b).

Despite overwhelming evidence to the contrary obesity constructed as the problem is therefore assumed to be the best vehicle or tool to effect changes in individual's behaviour around stated objective areas- preventive health literacy, motivation and positive attitudes to change, belief in the possibility of success and all this around physical activity, healthier eating behaviours and lower population-levels of illness and early death. In the following analyses I have attempted to use text and visual images that strongly represent these main campaign constructions of the problem and key concepts.

# 6.3.1 Strategic level representation of the problem – chronic disease, lifestyle and obesity

An information section of the main website of the campaign entitled *About the Measure Up campaign* represents the problem at the strategic level as a rising prevalence of

The social construction of obesity in an Australian preventive health policy preventable chronic disease that is associated with decreasing productivity and increasing health expenditure (see Box 6.3) (Measure Up 2013b). The World Health Organisation is cited as an authority. This text emphasises the risk to Indigenous Australians but does not mention other population groups that also have a high incidence of chronic disease notably the poor. The focus on Indigenous Australians acts to produce the problem as difficult, isolable to certain target groups and almost intractable in the same way Indigenous health is produced within government health portfolio discourse. This construction acts to both lower expectations around outcomes and long-term progress and to silence broader concepts of health and social equity that are pronounced in social health constructions of chronic disease. It is within such texts that the problem becomes more narrowly represented as lifestyle-related chronic disease.

Box 6.3: Measure Up webpage: Extract from, About the Measure Up campaign

The World Health Organization (WHO) has noted that chronic diseases are the major cause of death and disability worldwide. Australia reflects the global situation, with chronic diseases estimated to be responsible for nearly 80 per cent of the total burden of disease and injury, and more than two thirds of all health expenditure. These chronic diseases also have a disproportionate impact on some population groups, particularly Aboriginal and Torres Strait Islander people.

By addressing lifestyle risk factors for chronic disease, the impact of chronic diseases can be reduced, population health enhanced and health system sustainability improved. At the same time, the nation's productivity can be strengthened by ensuring that people are sufficiently healthy to remain active and productive participants in the workforce.

(Source: Measure Up 2013b)

Silencing the social health construction of the policy problem is the opening reference to the referent reality of disease in essential, matter-of-scientific-fact and matter-of-life-and-death language - a biomedical construction of the problem. Possible alternative conceptualisations can lay bare the socially constructed nature of the 'problem' in this text. For example, the referent reality of disease and risk at the population level could feasibly be constructed as *not* a problem for government with the opening paragraph alternatively stating 'the rate of chronic disease is a major cause of death and disability in Australia however the century long upward trend in life expectancy rates for

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Australians is expected to continue into the foreseeable future. As such government resources are more efficiently directed toward...'

Rather than this, chronic disease is represented as an international and national level problem, a crisis and an epidemic in urgent need of government attention centred on health systems and individuals. Health is represented narrowly as the absence of biological chronic disease in both the individual body and population body, and chronic disease is represented as an economic problem -weakening national productivity and health system sustainability. The Australian government claims legitimacy in acting on this problem through the reference to 'the nation's productivity' and through referencing the higher health authority of the WHO.

Petersen and Lupton (1996, p.174,175) in a study of the 'discourses, practices, strategies, and assumptions' of 'the new public health' note the alignment of values and assumptions of that project with 'neo-liberal humanist philosophies held by governments in contemporary Western societies'. The new public health, described by Petersen and Lupton is visible in the rising dominance of biomedical/population representations of preventive health problems from around the year 2000. At this strategic level the shaping of the problem is an exercise of a type of productive power -governmentality (Foucault 1982, p.212; Lemke 2001, p.191) in producing objects (bodies, populations, diseases) in producing subjects (individuals who are diseased or at risk of disease, productive or unproductive and financially burdensome or sustaining of the health system) and in producing facts or regimes of truth (biomedical knowledge) (Coveney 2006, p.xv).

Alternative social health representations of the problem are also part of the new public health according to the description by Petersen and Lupton (ibid, p.175). However these representations expand the prevention of chronic disease by placing it in a social context so that, 'as health care costs rise and the chronic disease epidemic takes hold, the question of the determinants of health and how they should be addressed is central' (Kickbusch 2008b, p.4).

Preventive health in this social health construction spills out of the confining boundary of the ill-health portfolio (the Department of Health) and spreads over most other portfolios creating a bureaucratic crisis discussed further below. Although not openly

The social construction of obesity in an Australian preventive health policy accepted or claimed by governments a social health 'inequity' representation of the problem is a part of all public policies that build social equity such as, taxation, welfare, public education and publicly-funded health services. In discussing equity issues governments tend to talk about more direct social equity policies such as the former Australian government Social Inclusion initiative and the Indigenous Closing the Gap policy (see for an example Department of Health and Ageing 2010a, p.14). The consequent lack of connection between direct and indirect health equity policies means direct health policy such as the Measure Up campaign almost solely references the biomedical paradigm that dominates the thinking, research, knowledge for policy, models and past policy of the Department of Health.

Sharon Friel (2009, p.8, emphasis in original) provides an example of a social health construction of the problem at the strategic level in her submission on obesity, alcohol and tobacco to the Australian National Preventive Health Taskforce:

The combination of structural factors and daily living conditions — the social determinants - are the determinants of empowerment, freedom and ultimately health and health equity. Technical and medical solutions such as disease control and medical care are, without doubt, necessary for health but they are insufficient - medical and healthcare solutions do not exist for many of the problems that need to be addressed. Any serious effort to promote well-being, prevent ill-health and reduce health inequities must address the social determinants that shape the way people grow, live, work and age, which ultimately affect their health.

Such strong advocacy against the strategic level of the biomedical construction of chronic disease by social health and psychosocial health researchers or would-be policy makers is not rare. It is however rarely included as research-for-policy because such advocacy immediately reveals the policy-making endeavour and the evidence-based policy model (see Bacchi 2009, p253) as inherently biomedical, political and as underpinned by neo-liberal political principles.

A social health construction of the problem brings up other problems. It requires serious, joined-up-government rather than weak, cross-portfolio and inter-government cooperation (Australian National Preventive Health Agency 2013, p.191). Such a construction of the policy problem would need something like a fully funded and

The social construction of obesity in an Australian preventive health policy structured health-in-all-policies initiative or a whole-of-government bureaucratic structural change that did not exist in 2006 for mainstream health matters and does not exist to date (ibid). In 2005 Peter Shergold then Secretary for the Department of Prime Minister and Cabinet and head of the federal public service, in speaking on indigenous matters, suggested, '(o)ne of our key failings, I think, in terms of public policy is the failure to have a whole-of-government approach to issues' (Australian Senate 2005, p.2).

Such a cross-portfolio effort for preventive health around chronic disease would need something even stronger than the South Australian government health-in-all-policies described by Kickbusch (2008b, p.5). In 2007 the South Australian government constructed the most visible, social health representation of the problem of preventable chronic disease through the health-in-all policies (HiAP) strategy. The SA government health website (South Australia Health 2013) states:

The majority of these chronic conditions are preventable and are closely linked with living conditions or the determinants of health which tend to be influenced by policies outside the health sector ... The determinants of health highlight the need for policy makers in all sectors to be aware of the impact of their decisions on population health and to act to incorporate considerations of health into their policies.

Kickbusch (2008b, p.3) as a social health researcher states 'today, HiAP combines classic public health knowledge on the determinants of health with an understanding of new forms of governance in the 21<sup>st</sup> century'.

However bureaucratic structural change is only one of the necessary conditions for social health constructions of chronic disease and obesity to become the main policy problem at a strategic level. Others problems include; the ideological problem of a focus on social/systemic change such as more comprehensive government regulation (social democracy assumption) rather than individual-level change (neo-liberalism assumption), the necessity for substantial industry and market change and the powerful resistance that would invoke, and perhaps most importantly the clash such a construction makes with current public constructions of the problem of obesity when considering the harsh Australian body culture with body shape and body size constructed as overwhelmingly individualistic (Olds et al 2013).

The centrality of disease and risk in the Measure Up construction of the policy problem is also produced through the context in which the text sits. It is *health* strategy in a public policy document on the website of the government portfolio, Department of Health, with a central interest in disease, illness, and ill-health systems. The possibility of the prevention of chronic disease being a non-problem or having an alternative problem construction such as a social health construction or a psychosocial or critical studies construction that was *not* obesity, would move the problem away from the central function of this portfolio. The biomedical construction of the problem is therefore in the portfolios interest as well as the interest of health system organisations, experts and practitioners, and non-government organisations reliant on the problem-forgovernment being constructed around individuals (Petersen & Lupton 1996, p.71). It is also in the interest of commercial industries like food, transport and land development that benefit from a problem construction where responsibility for change belongs overwhelmingly to the individual rather than being shared with society through structural or social/systemic changes that would impact on industry profits (Lawrence 2004, p.56; Robbins & Nestle 2011, p.143,144; Brownell et al 2010).

The opportunity to construct the policy problem in an alternative way was lost well before DoHA began to develop the Measure Up campaign after the ABHI commenced on 1 July 2006. It was lost in the late 1990s and early 2000s at the strategic level of policy development when the problem was constructed within the biomedical paradigm by government health ministers along with senior bureaucrats and biomedical/clinical experts. It was also lost when the policy developers looked at similar programs to Measure Up such as the Waistline Obesity Prevention initiative run by the nongovernment organisation Cancer Council Victoria, and to overseas obesity prevention health promotion such as the British BBC program Fighting Fat, Fighting Fit (1999) (Cancer Council Victoria 2007, Wardle et al 2001, p.343). Such programs predominantly construct the problem narrowly, as body fat, shape and size, reducing the knowledge-for-policy to biomedical science around risk/disease and individual behaviour around food and physical activity, and subjectify individuals as ignorant and ill-disciplined.

At the strategic level the early policy development of the problem for Measure Up represents a missed opportunity to communicate to the wider public a better balance of social and individual constructions of the problem, causes and solutions. As previously

The social construction of obesity in an Australian preventive health policy discussed, the lack of social/systemic causes and solutions is constantly analysed and lamented by social health researchers (Novak & Brownell 2012, p.2345-2350). Taking into account the substantial bodies of psychosocial and critical studies research around stigma, discrimination, negative body perceptions and the ill-health effects of these, the greatest lost opportunity at the strategic level was the possibility of including a radical re-construction of the problem away from the inherently individualising embodied state of obesity/body fat, shape and size. With that was lost the opportunity to represent more clearly, plausibly and publicly the link between other leading risk factors (that are not inherently individualistic such as food and physical activity), and disease, disability and early death. Also within such extrinsic-to-the-body, alternative constructions of the problem lies the possibility of constructing a much more publicly plausible balance between individual and social/systemic causes and solutions.

#### 6.3.2 Intermediate level construction of the problem – lifestyle

At the intermediate level the construction of the problem as lifestyle is analysed through formative research reports and evaluation reports for the Measure Up campaign along with on-line information from the campaign's website. The narrowing of the problem construction from the prevention of chronic diseases (strategic level) to individual lifestyle (intermediate level) is aided by the same assumptions which also support most preventive health policy including '...implicit assumptions of individualism, rational choice, perfectibility and the superiority of what passes for expert and scientific knowledge' (Broom 2008, p.136). Adding to this is research on public attitudes which shows support for the idea of obesity being caused by individual lifestyle and solved through personal responsibility (Olds et al 2013; Wang & Coups 2010).

In the Measure Up campaign the aim constructs a concept of individualistic lifestyle which allows a distance to be built between the problem of obesity (body fat at the population level) and the expected outcome of the campaign (changes to lifestyle knowledge and attitudes) (Australian Better Health Initiative 2012):

Measure Up is a social marketing campaign which aims to raise awareness of the healthy choices that can help protect people from chronic diseases, beginning with physical activity and healthy eating.

This aim absolves the campaign of any solid or sustained outcome such as a reduction in population levels of obesity or a long-term reduction in chronic disease, and moves to The social construction of obesity in an Australian preventive health policy a vague but measureable short-term performance indicator, 'raise awareness of healthy choices'.

Contrary to the statement within the aim, the campaign does not 'begin' with healthy choices around physical activity and healthy eating but constructs the problem, in the first instance, as disease-producing excess body fat on individual bodies. It does this through the title, Measure Up and through the textual and visual campaign material, such as TV ads and photographs of overweight and obese subjects measuring waist size, talking about weight, weight-related risk and family responsibilities, and through the expected education outcomes, such as knowledge of the link between waist circumference and risk for chronic disease.

Formative reports and research for the Measure Up campaign were produced for DoHA by a private market research organisation, Blue Moon Research and Planning Pty Ltd, and later by Gfk bluemoon. In 2006 the Department of Health contracted Blue Moon to complete SNAP-O (smoking, nutrition, alcohol, physical activity and overweight and obesity) concept testing research on modifying the lifestyle behaviour of 'consumers' through government social marketing messages (Blue Moon 2007). In particular Blue Moon was tasked to research what messages worked to encourage consumers to change their behaviour around lifestyle- smoking, nutrition, alcohol, physical activity and overweight/obesity (ibid, p.22). The report concluded that 'modifying lifestyle behaviour requires an appreciation of 'what' change is needed, 'why' it is necessary and 'how' it can be achieved' (ibid, p.5).

It follows that the formative report for Phase 1 of the Measure Up campaign produced requirements that are all individualistic. The primary representation of the problem is biomedical, around individual body, weight, body fat, body shape, body size, disease and risk for disease, and behavioural; individual lifestyle, eating habits, and physical activity levels. Individualism and the rational choice theory are further reflected in the construction of target groups according to their attitude to lifestyle change, being; defiant resisters, quiet fatalists, apathetic postponers, help seekers, endeavourers and balance attainers – all terms that imply educating or urging individuals is the most important policy problem including moral urging around 'defiant resisters', and 'apathetic postponers' (ibid, p.38).

Broom (2008, p.130, brackets in original) a social health researcher suggests there are three iatrogenic consequences to presuming individualistic constructions of health and these are suggested here as relevant to the construction of the problem within the Measure Up campaign..., 'stigmatising the sick, occluding the structure, and increasing surveillance (of self and others)'. The construction of chronic disease as mainly caused by individual lifestyle is unsupported by most of the preventive health research either biomedical or social. Lemke's (2001, p.201) description of Foucault's notion of governmentality is relevant here:

The strategy of rendering individual subjects 'responsible' (and also collectives, such as families, associations, etc.) entails shifting the responsibility for social risks such as illness, unemployment, poverty, etc., and for life in society into the domain for which the individual is responsible and transforming it into a problem of 'self-care'. The key feature of the neo-liberal rationality is the congruence it endeavours to achieve between a responsible and moral individual and an economic-rational actor.

Saltman and Ferroussier-Davis (2000, p.78) comment that the stewardship model of government, as discussed earlier, that seeks a greater role for government in systemic-level social and environmental change is promoted by social health researchers in an unsurprising 'reaction to the relentlessly atomistic consequences of basing social policy exclusively on narrow notions of individual preference and cost containment associated with the policy hegemony of market-oriented economic theory in the late 20<sup>th</sup> century'.

Although the strategic construction of the problem in the Measure Up campaign of lifestyle-related chronic disease set the stage for further individualised constructions such as lifestyle behaviours, this construction of lifestyle is not inevitable as suggested in the work of William Cockerham. Lifestyle is a widespread and contested concept that is mainly used in four domains, health, social and behavioural science, marketing, and in 'common everyday parlance' (Korp 2008, p.18). Health lifestyle has a long and varied representation within health research and is suggested as under-theorised by Cockerham (2005, p.51,53,64). Cockerham (2007, p.49,50) ties the changed construction of health and with it lifestyle in the past few decades to the rise in prevalence of chronic disease, new forms of modernity such as globalization, and a shift in the construction of social identity away from forms of work to consumer habits. He (ibid, p.73) suggests the current construction of lifestyle, unlike the concept favoured

The social construction of obesity in an Australian preventive health policy earlier by Max Weber and others, uses an 'individualistic paradigm of health lifestyles (that) is too narrow and unrealistic because it fails to consider structural (social) influences on health lifestyle choices'. To remedy this Cockerham (ibid) constructs a 'healthy lifestyle model' that reflects a social health construction of the problem.

Using the theory of Bourdieu and Weber, Cockerham (2005, p.63) argues for a model of health lifestyle that is a balance of social context or structure with individual choice or agency that seeks to better capture the 'reality of everyday life'. The adoption of such a model in policy or in research presumes the problem can be constructed, at a strategic level, in a social health paradigm rather than in the dominant biomedical paradigm. A weakness of Cockerham's new model of health lifestyle is that it is proposed without critically analysing why social health representations that already include important assumptions around structure have been and continue to be unused within policy and health practice. Constructing the problem as biomedical chronic disease or risk around the individual body at the strategic level acts to promote the construction of lifestyle at the intermediate level as overwhelmingly individualistic and while this may be a matter of poor theorising and conceptual modelling it is more importantly a matter of politics, economics and culture.

Following the construction of the problem as individualistic lifestyle comes the construction of the problem for policy as obesity, nutrition/diet, and activity/exercise. In two of their list of eight research recommendations Blue Moon (2007, p.7) suggests the government:

- consider aiming to leverage the threat of chronic disease in relation to nutrition, activity and weight by conveying the severity of these conditions (chronic diseases) that can result from inaction, as well as people's susceptibility to them, and
- convey 'what' constitutes a 'healthy weight' ideally using waist measurement information.

At this stage it appeared the construction of the problem as lifestyle-related chronic disease and lifestyle behaviours could not have been other than individualistic. Yet the formative report for the Measure Up campaign (ibid, p.6, author's brackets) also contained a warning that suggests targeting individual behaviour could be problematic:

The correlation between health and diet, exercise and weight is complex and there is a great deal of potential for miscommunication. Moreover, there is potential to cause harm by stimulating 'victim blaming', as well as by leaving people feeling depressed and helpless. Response (to bluemoon research) indicated that these challenges might be mitigated to some extent by also conveying the positive benefits of change and /or presenting messages about 'how' change can be achieved.

In a review of structured weight loss interventions in the United States, Anderson et al (2001), found that after five years the average individual maintained a weight loss of just 3.2 percent of initial body weight. The failure rate of weight interventions across more than 2 years is well researched. Some research suggests it is as high as 98 per cent over 5 years and most systematic reviews conclude there is little evidence of the efficacy of obesity interventions in either clinical or community settings (Byers & Sedjo 2007, p.488). The positive benefits of preventive health are notoriously difficult to convey where the change is short term but the benefits are long term, for example, with obesity, tobacco, and alcohol although tobacco control in Australia has shown gradual long-term success is possible. The possibility of another government weight loss intervention achieving long-term social/behavioural change in the broader population was very slim. Yet weight was constructed as the main problem for policy.

The jump within the Measure Up campaign from chronic disease to individual lifestyle at the strategic and intermediate levels creates unresolved problems such as;

- silencing of alternative representations of the problem that also have a health framework such as social health and psychosocial health representations, and
- silencing of critical understandings of underexplored presuppositions,
   assumptions and effects of the dominant construction of the problem.

It also works to preclude from policy possibilities;

- a multifactorial lifestyle approach where lifestyle is represented as influenced by both the individual (agency) and structure (social systems),
- the connecting up of risk factors into a systemic or wholistic representation of health as more than the absence of one disease or risk factor, and
- an extrinsic-to-the-body construction of the problem being the dominant problem for policy, for example a substance such as food.

Finally it provides no incentive for governments to research the effects of empowering and strongly engaging with citizens in constructing the policy problem. Such effects could bring;

- positive social benefits like the effect of decreased stigma and discrimination around body shape and body size and amelioration of the harsh body culture in Australia, and
- positive psychosocial effects such as higher self-efficacy that is strongly linked to better preventive health behaviours.

# 6.4 Problem representations in evaluations of the Measure Up campaign

In 2009 an initial evaluation of phase one (Wave 1 and 2) of the Measure Up campaign was conducted by Gfk bluemoon (2009). The objective set out for phase one was about increases in knowledge and attitude (ibid). The aim was to increase public knowledge of 'what' the problem was and 'why' it came about (ibid). Key findings from this evaluation were;

- The Measure Up campaign reached the vast majority of the Australian population,
- Many knowledge measures improved around several risk factors, including that
  one in two Australians are overweight, which rose from 28 per cent correctly
  mentioning this statistic to 31 per cent,
- Measures to do with waist measurement increased, including intention to measure waist, up from 29 per cent to 33 per cent, and
- Behavioural increases in several indicators, including the proportion trying to lose weight in last 6 months, up from 52 percent to 55 per cent.

Decreases in the proportion intending to increase fruit consumption and physical activity were considered to be affected by the seasons with winter coming between the first and second media waves of the Measure Up campaign (ibid, p.12-13).

The recommendations of this evaluation report were that the campaign was successful in that 'many of the messages have cut through' but there is 'still significant room to improve the knowledge and attitudes surrounding the 'what' and 'why' messages and to potentially bring in 'how' messages', that is how to change behaviour to decrease risk (ibid). Also 'objectives of subsequent campaign phases should focus on improving self-

The social construction of obesity in an Australian preventive health policy efficacy and personal relevance, reinforcing awareness and changing attitudes and behaviour (particularly regarding nutrition and physical activity)' (ibid). And 'the creative approach should continue with the highly distinctive waist measurement theme (featuring a male). Using a male as the main 'hero' of the campaign was also successful (amongst both males and females) and should continue into subsequent activities' (ibid).

Contradictions in the construction of the main problem of the campaign and the main outcomes and recommendations of the report abound. Weight or body shape is the main construction of the problem despite the warnings that this is a socially sensitive and almost immutable problem in the formative report and in the health literature. If the campaign reached the vast majority of Australians why were only 31 per cent aware that one in two Australians were overweight and why would only 33 percent of a population with 50 per cent overweight (at this time) intend to measure themselves. If immunisation rates were as poor as the take-up of Measure Up messages there would be a general panic by government and the health sector. Also the psychosocial construction of a focus on weight as productive of stigma and discrimination, and the critical studies construction of a focus on weight as a source of resistance are not visible in explanations within any of the three formal evaluations of the Measure Up campaign (Gfk Bluemoon 2009; Social Research Centre 2010, 2012).

Two further comprehensive formal evaluation reports for the Measure Up campaign were conducted by The Social Research Centre in 2010 (Wave 4 and 5) and 2012 (Wave 5 and 6) (Social Research Centre 2010, 2012). These reports concurred in their conclusion that the campaign had succeeded in increasing the awareness of the link between weight, diet, activity and chronic disease, increased awareness of the use of waist measurement to assess risk for chronic disease but failed to effect any significant change in either weight, diet or activity levels of 'consumers' (ibid).

King et al (2013, p.1036) in evaluating the effectiveness of the Measure Up campaign within the state of New South Wales suggests;

Using a completely new way of framing obesity related lifestyle risks, the 'Measure-Up' campaign reached most NSW adults with campaign-relevant messages. Waist measurement as an indicator of chronic disease risk rather than just weight was an innovative approach, never before explicitly used in

The social construction of obesity in an Australian preventive health policy purposive mass-reach campaigns. There are few campaigns reported that have focused on weight rather than weight-related behaviours (such as nutrition and physical activity); and the 'Measure-Up' campaign is the first nationwide campaign implemented in Australia that has focused explicitly on this important public health issue. Consistent with other similar campaigns, the findings show that mass media of this type can achieve effective awareness and impact health knowledge, attitudes and motivations.

King et al's (ibid) enthusiasm is for innovation in the method of individual risk assessment - waist size rather than weight, the use of weight as the main problem for policy, and in the research findings including that the campaign had an impact on knowledge and attitudes. Findings from their sample of 1006 adults included that most individuals remembered the campaign (when prompted 89 per cent), how to measure their waist and how that measurement linked to disease also increased but this did not translate into behaviour change including that there was 'no significant changes in reported fruit and vegetable intake nor in physical activity' (ibid, p.1029).

King et al (ibid, p.1037) suggest the 'underestimation of the personal relevance of key lifestyle factors and lack of behaviour change is similar to other campaigns and highlights 'the complexity of translating awareness into motivation to change behaviour...' Overall the evaluation found that, as per other campaigns, knowledge rose slightly and behaviour stayed the same (ibid, p.1029). Despite this their conclusion is that 'continued long-term investment in campaigns such as 'Measure-Up', supplemented with community-based health promotion, may contribute to population risk factor understanding and behaviour change to reduce chronic disease' (ibid, p.1029).

Missing from evaluations of the Measure Up campaign, is an examination of the hidden assumptions within the campaign problem construction such as predominating individualism leading to a focus on personal responsibility, generating stigma and consequent iatrogenic psychosocial effects (Brownell et al 2010, p.379). Some evaluation work of the Measure Up campaign was conducted by Puhl, Peterson and Luedicke (2013, p.780, 782) who analysed the text (no images) of messages of the campaign and found several were stigmatising such as, 'the more you gain the more you have to lose'. Lost in most evaluations was the opportunity to research the psychosocial

The social construction of obesity in an Australian preventive health policy and physical health effects of this biomedical construction of weight used in a government social marketing campaign. Such research may have helped to explain how a campaign could succeed in educating and urging (at least to some small degree) but fail to change the targeted population health indicators with obesity rising in the Australian population over the duration of the campaign (Council of Australian Governments 2014, p.15).

In a 2011 evaluation of the Measure Up campaign University of Sydney researchers found that when prompted nearly 90 per cent of their sample of 1,000 adults between 18 and 65 years recalled the campaign (Prevention Research Collaboration 2011). The researchers then suggested that the campaign was successful because 'knowledge thresholds to reduce disease risk increased significantly' (ibid). This was based on 'knowledge thresholds' (tape measure risk categories) being known by 9.8 per cent of men and 36.5 per cent of women. The obvious question is, of the 90 per cent who recalled the campaign why did 91.2 per cent of men and 63.5 per cent of women not know the simple, central message? This is an even more interesting question if it is considered that an estimated 65 per cent of Australian adults and children state obesity is an important health problem (Olds et al 2013), and early formative research for the campaign 'indicated the broad appeal of information about a healthy waist circumference as a compelling, credible and easy to understand goal' (King et al 2013, p.1030). The reasons that individuals shut-off from this new information delivered by a government campaign through a 'sizeable media purchase' should be a central question of any evaluation.

Perhaps the most convincing evidence that large groups within the target audience represented the problem in very different ways, and that the Measure Up campaign did not impact on those people, was that across time 'the proportion of those who reported a waist circumference above the recommended threshold, and who reported satisfaction with their current waist size, remained stable' (ibid). Despite this the construction of individual 'behaviour change' as the dominant solution to population levels of chronic disease was left largely unquestioned by King et al (2013, p.1037) who only briefly mention the failure of the campaign to 'refer to the social and physical environments in which obesity occurs'.

The social complexity of the issue of obesity and the element of trust was flagged in the Blue Moon formative report for the Measure Up campaign in 2007 when the idea of 'challenging' and 'clarifying' public constructions of obesity and unhealthy weight came with the caveat, '...care may need to be taken to avoid compromising the credibility of the campaign by presenting the issue in a way that is disputable and may ultimately therefore be rejected' (Blue Moon 2007, p.29). Trust must be an issue in such policy (Kass 2001, p.1782) but was not investigated or reported in evaluation findings perhaps reflecting the narrow terms of reference and expectations of formal policy evaluations. Randolph and Vishwanath (2004, p.433) note that mass media campaigns often 'measure what is intended and observable (and ignore) unintended consequences'. The study of most unintended consequences is missing from the evaluations of the Measure Up campaign. Using a CSC methodology an evaluation of the campaign could open the door to deeper theorising of what the problem was represented to be and could have lain bare how it conflicted in assumptions and effects with alternative constructions of obesity favoured by large sections of the Australian public.

## 6.5 Conclusion

In this case study of the Measure Up campaign three levels of representations of the problem are identified. At the strategic level the problem was constructed for policy in the early 2000s as biomedical chronic disease that was lifestyle-related and this was long before even the initial development of the campaign began in 2006. In turn this early individualistic, biomedical construction at the strategic level of government policy shaped the intermediate level construction as individual lifestyle, behaviours and attitudes. The construction of target groups in this campaign as ignorant and poorly disciplined consumers was almost inevitable given the assumptions of the higher level representations of the problem. Although it is possible to construct other lifestyle concepts that include both agency and structure it is very difficult to do so where the strategic level of construction is so strongly based on the biomedical models of risk and disease.

Alternative constructions such as the social health and psychosocial health representations of the problem were precluded by their own under-theorised assumptions such as social equity as an essential given rather than a political value that

The social construction of obesity in an Australian preventive health policy is deeply contested by the dominant, neo-liberal values in current policy making. A failure of critical studies representations could be suggested as the inability to successfully expose biomedical constructions as social constructions in a way that is relevant to policy makers at all levels of government and in a way that works to explore and foster alternative representations.

Other factors meant the social health model in particular was going to be difficult to use to construct a problem for policy. These factors included, necessary changes to bureaucratic structures and processes, powerful opposition from industry and politicians, and a lack of fit between popular constructions of the problem and the social health construction. Policy evaluations consistently talked up the value of the Measure Up campaign despite there being little evidence of the behaviour change that is deemed necessary to reduce the prevalence of chronic disease. These evaluations highlighted the gap between what the government and health field represents the problem to be and public representations. In the next chapter the policy-output level representations of the problem in the Measure Up campaign are examined.

# **Chapter 7**

# Case study of the Measure Up campaign- Policy Output



Source: Measure Up (n.d.)

## 7.1 Introduction

This chapter is part two of a case study of the Measure Up campaign and analyses representations of the problem at the policy-output level of that campaign. Policy output refers to all the material of the campaign aimed at the target groups of the campaign. This analysis falls into three parts. Firstly, the policy output is described in general terms and a range of visual images is presented. Secondly, like most developed nations, Australia has a very strong visual culture that constantly produces and supports a harsh body culture that is an important part of the social context in which 'body' policy such as the Measure Up campaign is produced. The social construction of the visual, the body, and their intersection are examined both in broad terms and then in terms of the campaign output such as advertisements and website images. Finally, specific material from the campaign is analysed for what the problem is represented to be and how this sits within the broader social context and for underexplored assumptions and effects and silenced alternative representations.

# 7.2 Policy output of the Measure Up campaign

Policy output of the Measure Up campaign was produced in two phases across five years from 2008 to 2013. The output is constructed using two health promotion strategies being, educate and urge (mainly phase one) and behavioural change support (mainly phase two). The primary output for the campaign is advertising, released both nationally and regionally across television, magazines and newspapers, radio (English and Non English Speaking Background, Indigenous and Print handicapped), digital, and out-of-home media (for example shopping centres). Secondary resources for

The social construction of obesity in an Australian preventive health policy behavioural change support include 'a paper tape measure, a consumer booklet, a recipe book, an interactive website and other printed materials, and were distributed by the Australian Better Health Initiative (ABHI) website, state and territory governments, peak health bodies (general practice, health services) and other relevant non-government organisations' (Social Research Centre 2010, p.4).

Output designed to educate and urge includes, information around body fat, weight, Body Mass Index, waist measurement, disease causation, population statistics, and behaviour change information around weight, food, and physical activity (Measure Up 2013a). The inclusion of material for behaviour change support is suggested as one of the main progressive aspects of the Measure Up campaign and was modelled after the success of anti-smoking campaigns that included a suite of developed support services as part of a comprehensive tobacco control policy strategy. When compared to antismoking services the range and type of support services offered by the Measure Up campaign were fewer and far less developed. Such support services have been found to be critical to the success of mass media campaigns (Wakefield, Loken & Hornik 2010, p.1268). Unlike the tobacco control national QUIT program that includes welladvertised phone support (Quit 2014) only a NSW state-funded phone counselling service was linked to the campaign for several years (King et al 213, p.1038). The inclusion of fewer support services represents the problem as being more under the control and responsibility of the individual as it implies people need less practical help from sources such as governments.

Risky and diseased obese bodies is an assumption made in the title of the campaign and in the campaign materials such as the provision of information and directions around obesity, overweight, the link between body fat and disease, and population statistics on weight. Such assumptions are also in the visual images like those on the main page of the Measure Up website showing an overweight man staring down seriously at a tape measure slung around his waist (see Image 7.1 below) (Measure Up 2013a). Representing weight in this manner and linking this representation of weight, body shape and body size to risk for disease has many detractors in the health literature across all categories of obesity constructions as discussed previously and in the section on stigma and coercion below.

On the Measure Up website individuals are encouraged to measure their waists and identify or diagnose their risk of chronic disease. The centre top of the home page of the Measure Up campaign website contains a paragraph of text entitled *Time to take some healthy measures?* with the question mark as a visual image of a tape measure in the shape of a question mark (Measure Up n.d.). The text (ibid) reads:

People often don't realise the impact that excess weight around the waist can have on their overall health and wellbeing. A high waist measurement can

Time to take some healthy measures?

mean an increased risk of lifestyle related chronic diseases. This website is part of the national Measure Up campaign which provides easy to follow tips and guidelines to help individuals decrease risk of chronic disease by reducing their waist measurement.

In this, as in other health discourse, such as the GP Clinical Guidelines (National Health & Medical Research Council 2013a) the population health risk of obesity is confused with the individual or clinical risk of obesity. Neither BMI nor waist circumference is a strong predictor of risk at the individual level and both are proxies for body fat. The tape measure is a measure of population-level risk which means those who meet the criteria for that group hold that risk as a group. Individuals within that group can only know their risk when individually tested for a range of other more predictive biomedical risk factors such as blood pressure, cholesterol level etc. Despite the caveat, 'high waist measurement *can* mean an increased risk...' the differentiation of these

Image 7.1: Measure Up Campaign: Male Poster

Source: Measure Up (n.d.)

risks is too subtle and often disappears in the rhetoric around campaigns (Measure Up n.d., author's emphasis). As an example of this effect, in an evaluation of the Measure

The social construction of obesity in an Australian preventive health policy Up campaign in New South Wales, King et al (2013, p.1038, author's emphasis) state the campaign, 'was effective in raising awareness and improving knowledge about the relevance of waist circumference *as a personal indicator of chronic disease risk*'.

Similarly a confusion of chronic disease risk and overall health is demonstrated in the 2012 evaluation of the Measure Up campaign by the Social Research Centre (2012, p.45):

All respondents were asked what they thought was the best indicator for good health; whether it was their weight as measured by the scales or measuring their waist with a tape measure. This message was not a specific objective of the communication campaign; however, it was felt to be a useful indicator of the community's views with respect to relatively simple, objective methods for assessing current health.

In this text the assumption by researchers is that the public will view the tape measure as assessing 'health' and they agree that is correct and desirable. Apart from constructing health in the narrowest terms as relating to a single risk factor and in a way that would not be recognised by many in the public or by general practitioners this construction is completely undone by the Measure Up website disclaimer as discussed further on in this chapter.

With research defining up to 30 per cent of obese subjects as 'metabolically healthy' and so at low risk for CVD and DT2 and finding up to a quarter of normal weight subjects with metabolic syndrome it is not possible for waist measurement to be an objective method for assessing health at the individual/clinical level (see chapter five). Like other campaigns, Measure Up attracted more educated individuals to participate in measuring up with the colour-coded tape measure (ibid). As higher socioeconomic status levels are associated with lower rates of risky health behaviours it is probable that the inaccuracy of individual risk assessment was further exacerbated.

In the campaign the representation of the problem as the body shape and size of individuals and the attribution of control of that to the individual is a rational choice theory favoured by the Australian government (Bacchi 2009, p.268). An example of this construction is provided by the website description of the target audience of the

The social construction of obesity in an Australian preventive health policy campaign (Measure Up 2013a):

The campaign's primary target is 25-50 year olds who have children. This group was selected on the basis that influencing parents' behaviours will also have an impact on their children's lifestyle behaviours. Parents are also interested in their long—term health and want to see their children grow up. The secondary target audience is 45-65 year olds as many people in this age group are likely to either have been diagnosed with a chronic disease or are starting to experience the consequences of an unhealthy lifestyle.

Parents are morally constructed as the main influence on children's behaviour around food and physical activity, as responsible for their body fat, shape and size, and for prioritising the long-term health of their children if they...'want to see their children grow up' (ibid).

The rational choice theory or rational ascetic has been attacked as a narrow representation of the complexity of human behaviour and a denial of the important role of social context including cultural, economic, political and socio-environmental aspects (Rich & Evans 2005, p.343-346, 349). Alternative representations to those of the campaign do not construct individuals as irrational or *not* choice makers. Rather social health critiques, suggest an individual focus as less relevant to government-initiated, systemic solutions to more complex problems such as poverty, low education and occupation levels and health inequity. Many social health representations attempt a balance in emphasis on environment (obesogenic) with an emphasis on the role of the individual as managing that environment (Egger & Swinburn 1997). Tobacco control is a study in this balance (see Chapman 2007).

The linking of excess weight and shape with ill-health falsely constructs slenderness/thinner waist as healthy for the individual rather than the more accurate description of being at a lower population-level risk of some chronic diseases. The construction of 'normal' weight/waist circumference as healthy de-emphasises the effects of other risk factors such as diet and activity for this population group and leaves this group vulnerable. Supporting this is research that shows doctors are much less likely to ask non-obese patients about diet and physical activity and as less likely to provide them with lifestyle information (Booth & Nowson 2010). Public confusion and the issue of trust of health discourse become problematic where those individuals categorised as 'healthy weight' or 'normal waist circumference' go on to be diagnosed

The social construction of obesity in an Australian preventive health policy with preventable chronic disease. Representing the problem as biomedical obesity presupposes that publicly calling attention to individual weight, body shape and body is the best way to gain attention and action from individuals on the lifestyle sub-problems of food, stress management and physical activity.

This presupposition was also at the basis of the biomedical obesity representation of the problem in research at Curtin University that developed a phone app called Future Me which digitally alters a photo of users to create an avatar (Creagh 2013). By adding data such as height, weight, body shape, intended calorie consumption and intended exercise the app changes the avatar to show weight gain and shape change at time intervals such as four weeks, eight weeks, 12 weeks, 26 weeks or a year (ibid).

In the same article, Adrian Bauman, a social health researcher made clear the alternative social health representation of the problem (ibid):

In my view, structural change and policies, as we achieved with tobacco control in terms of restricting environments where people could smoke, and plain packaging, are needed to complement individual advice. Without an integrated and resourced policy response to obesity, all the clever apps in the world will do no more than the fad diets did in the 1980s and 1990s.

In this text Bauman constructs obesity in the most common social health manner as a viable or sufficient policy problem (in the sense that such a construction has the possibility of producing successful policy) with the failure of policy being attributed to a lack of comprehensive (social/systemic) policy strategies.

A 'comments' response to the Future Me app article, by clinical psychologist Louise Adams (Creagh 2013), puts forward in a forthright manner the alternative psychosocial representation of the problem:

Does the Future Me app factor in the fact that 98% of people who lose weight will regain it? That 2/3 of these people will end up weighing more than they did before they started the diet? Or does it ignore this? Stupid waste of money, staggeringly insulting, prejudicial and hugely damaging to people's psychological health. Can you imagine going to the dr (doctor) and being 'prescribed' something that tells you that you're unattractive! And then recommends the most ineffective treatment known to modern medicine. I can't believe things like this get through the ethics committee.

Although Adams is referring to the Future Me app the presupposition underlying this app is the same as that underlying the Measure Up representation of the problem as body fat, body shape and body size. In the Measure Up campaign a main video image is of a man whose body is digitally altered to gain weight and age as he walks forward along a footpath-sized tape measure (also see the Poster in Image 7.1). Showing an individual an avatar representation of their body is not fundamentally different from producing this representation of an actor's body. The assumptions are that fat bodies are negative being unhealthy, unattractive and morally weak, and that this will be your future unless you take the recommended steps. The link between weight and disease is secondary in that neither the app nor the video shows the body as acutely diseased (for example, having a heart attack, suffering from diabetes-induced peripheral vascular disease) but rather as simply changed in body shape and body size.

Within the main educate and urge initiatives on the campaign website weight is represented as an immediate problem that has not been the subject of previous attempts at change, for example, 'time to take some healthy measures' (Measure Up 2013a,c). This ignores the evidence of widespread dieting behaviour in the population and the yoyoing of weight or weight cycling described in social and biomedical health research (Stevens et al 2012). It is also unreasonable to suggest it is time for individuals to take some healthy measures around body weight if, as Adams suggests above, there are no known successful, long-term weight loss strategies.

Some social health, psychosocial, and critical studies research has found that health authority communication programs that draw negative attention to the shape and size of individual bodies can have unexpected effects such as increases in perceived stigma, increased body dissatisfaction, fewer attempts to change eating patterns or physical activity levels, and a higher likelihood of eating disorders (Vartanian & Smyth 2013; Smith & Rieger 2010; Klaczynski, Goold & Mudry 2004; Puhl & Brownell 2003a). Downey (2005 cited in Puhl & Heuer 2010, p.1024) suggests obesity as a preventive health policy problem differs from other health problems (such as tuberculosis and HIV/AIDS) in failing to contain or combat the stigma that accompanies this 'disease'. Fear, guilt and shame are not acknowledged as produced by the Measure Up campaign in evaluation reports but are suggested as being produced by the problem representation in such campaigns by some research (Carter et al 2011; Vartanian & Smyth 2013; Puhl, Petersen & Luedicke 2013).

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Some social health researchers suggest the representation of the problem as obesity can
be made without the presuppositions of individualism, morality, or aesthetics. Olds et
al (2013) in researching attitudes to obesity in Australian parents and children suggests
this possibility:

Attitudinal clusters are important in the development of more effective social marketing strategies that seek to engage communities in tackling the social rather than individual determinants of obesity... Further research which examines how attitudes develop and are reinforced, could help social marketers create anti-obesity strategies that have greater saliency with diverse audiences and social contexts; encourage a balance of individualistic and collective approaches to health; effectively counterframe a diverse and often influential range of industry messages; and gain community support for a diverse range of regulatory and policy responses.

The possibility/impossibility of this representation of obesity leading to successful preventative health policy and outcomes is discussed further in chapter eight.

Rebecca Puhl, a prominent psychosocial health researcher also reflects this belief. At a critical studies conference and after delivering the keynote paper, Puhl (quoted in Kirkey 2011 cited in Stoneman 2012, p.199,200) was asked by critical studies researchers if;

...experts can ever really have it both ways—calling for the eradication of obesity while at the same time advocating for tolerance of fat people. (Puhl) suggested that what needs to change is not the population prescription to reduce obesity, which she maintains is a sound and urgent project, but, rather, the nature of the 'causal attributions' assigned to overabundant body weight. These tend to individualize the cause, indicting heavy people as 'architects of their own ill health'.

This standard social health response by Puhl is given despite her work reviewing the literature and conducting extensive research over a long period of time on the high prevalence and poor health effects of obesity stigma (Puhl & Heuer 2009; Puhl & Brownell 2001,2003a,b; Puhl, Andreyeva & Brownell 2008). It is also given despite her own research highlighting stigma-reduction initiatives as overwhelmingly ineffective (Puhl & Heuer 2009, p.957,958).

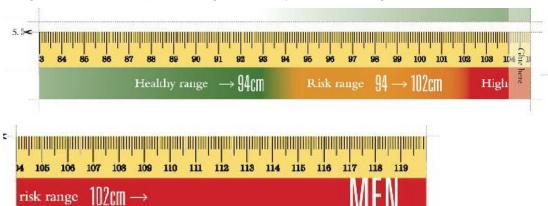
Many experts at interview saw the representation of the problem as biomedical obesity and as a positive development in health promotion but some were highly cynical about Measure Up campaign output.

The Measure Up campaign ... like the latest one is Swap It, Don't Stop It...I mean these (are) governments ads for PR (public relations) value, this is not serious social marketing. This is like we were trying to do 20 or 30 years ago on tobacco control. It's rubbish (Interview 105).

I suspect it will change about as much behaviour as Norm (Life: Be in it campaign) did over how many years Norm was running. I'm very pessimistic about its impact, I actually think it's all benign and a waste of money (Interview 108).

A variety of images from the policy output of the campaign is presented in Image 7.2. As can be seen, the campaign output is highly visual and as the primary construction is around body shape and body size this makes it an important campaign to examine the visual, the body, and their intersection.

Image 7.2: Measure Up Campaign: A variety of visual images from the website





ADVERTISEMENT



Source: Measure Up (n.d.)

# 7.3 The visual, the body and their intersection

One of the most important failures in constructing obesity as a problem for public policy can be described as a blindness of obesity policy makers to the power of visual culture. The images in the Measure Up campaign are part of and influence a vast and growing visual culture that is obsessed with the shape, size, colour and other visual features of the human body. To misread, ignore or underestimate the power of the

The social construction of obesity in an Australian preventive health policy visual in Australian culture is likely to result in aims or objectives of any visually-based health campaign being greatly undermined. The history of visual culture is highly relevant to any body-policy produced by government such as the Measure Up campaign and as such is discussed at length here.

John Berger (1972, p.7) a British post-modern art critic writes 'seeing comes before words. The child looks and recognises before it can speak'. This construction of visual communication as a neurological precursor to speaking, writing, or reading emphasises the centrality and power of the visual. Gillian Morriss-Kay (2010, p.158) a physiologist in a study of the evolution of human artistic creativity suggests creating visual images to be 'a defining characteristic of the human species' and as first used probably over 100,000 years ago in early human cultures in Africa. She accords the earliest known evidence of 'artistic behaviour' as images inscribed on the human body something that requires consciousness or a sense of self. This means in human history it is likely the very first visual, creative representations played out around social constructions of the body, the self, and others.

The primacy of the visual is reflected in English language idioms such as 'seeing is believing' and 'a picture is worth a thousand words' neither of which can be easily represented as a visual image. If the primacy of the visual renders it believable the lack of specific, nuanced meaning renders it much more open to interpretation than either speech or writing. Berger (1972, p.10) described different epistemological frameworks for interpretation of visual images as 'ways of seeing' and suggests 'although every image embodies a way of seeing, our perception or appreciation of an image depends also upon our own way of seeing'. Susan Sontag (2003, p.35), a social thinker, adds to this by suggesting 'the photographer's intentions do not determine the meaning of the photograph, which will have its own career, blown by the whims and loyalties of the diverse communities that have use for it'. Berger's seminal works include the reinterpretation of some of Europe's best loved historical artworks as socio-political constructions - seeing the poverty of the painter reflected in the faces of his wealthy sitters and the assumption in each painting of a woman that 'the 'ideal' spectator is always...male' (Berger 1972, p.11-15, 64).

The importance of vision as a sense along with sixty years of extraordinary advances in visual technology has promoted the visual as a paramount cultural tool in developed and

The social construction of obesity in an Australian preventive health policy more recently in developing countries. Before the internet, before multiple television stations, ubiquitous, mobile, personal communication devices, before advertisements appeared on shopping trolleys, café tables and footpaths and before T-shirts were purchased specifically to display a brand, before any of this, Berger (1972, p.129) wrote of 1970s Britain as drenched in visual images created by the market. 'In the cities in which we live, all of us see hundreds of publicity images every day of our lives. No other kind of image confronts us so frequently. In no other form of society in history has there been such a concentration of images, such a density of visual messages'.

Sontag in her remarkable book, *On Photography* (1977, p.24) is troubled by the pathology of such an excess of images and suggests, 'needing to have reality confirmed and experience enhanced by photographs is an aesthetic consumerism to which everyone is now addicted. Industrial societies turn their citizens into image-junkies, it is the most irresistible form of mental pollution'.

The sense of the visual as a glorious, ancient, truth-trap was further expressed by Sontag (1977, p.5-7):

Photographs furnish evidence. Something we hear about, but doubt, seems proven when we're shown a photograph of it...despite the presumption of veracity that gives all photographs authority, interest, seductiveness, the work that photographers do is no generic exception to the usually shady commerce between art and truth... Although there is a sense in which the camera does indeed capture reality, not just interpret it, photographs are as much an interpretation of the world as paintings and drawings are.

Berger and Sontag were the first wave of thinkers de-constructing the visual in the 1970s. Their work does not make the visual frivolous or irrelevant but flags that any explanation/truth/idea that makes use of the visual is bounded by a way of seeing that is an interpretive framework and so it is not essential but contingent, not universal but culturally specific, not reality but a representation of reality.

For the Measure Up campaign the biomedical research 'way of seeing' was transformed into policy untroubled. That is, obesity was constructed as the policy problem using the biomedical model of obesity that is used in biomedical research. In fact this transformation from research to policy was boosted by the match between evidence-based policy and the biomedical model of disease. The use of bigger bodies in the

The social construction of obesity in an Australian preventive health policy policy construction was the use of the visual as a reflection of some 'evidence' of biomedical referent reality. A presupposition of this biomedical obesity representation was that alternative representations that included more comprehensive psychosocial or cultural understandings of the visual were irrelevant or unnecessary. As Sheets-Johnstone (1992, p.133 quoted in Sobo 1994, p.132) suggests 'the concept of the body in any culture and at any time is shaped by medical beliefs and practices'. Understanding the power and ubiquity of the visual means it is impossible to suggest that social marketing like the Measure Up campaign is somehow separate from, or above, the thickly layered social context.

Contrary to Australian Government obesity policy, since the late 1970s body studies have been researching the visual social context of bodies. In 1978 Susie Orbach wrote about the visual and bodies as feminist issues. She suggests 'the deluge of visual images that wallpaper our world has seeped into all of our consciousness's. It has changed the way we view our bodies and what we can and should do to our bodies, including those of our children' (Orbach 2006, p.vii). For Susan Bordo a feminist scholar whose book *Unbearable Weight* (1993, 2003, p.xiii) is considered a founding text of the sub-discipline of body studies, this is an 'image-bedazzled culture' with an 'empire of images' including ubiquitous advertising and marketing images that are 'like the water in the goldfish bowl, barely noticed by inhabitants'. By contrast the visual as powerful is not ignored in tobacco control and Scollo and Winstanley (2012) link 'the advent of television in the late 1950s' to demand for cigarettes by bringing, 'an avalanche of advertisements for cigarettes into the lounge rooms of Australian families...'

In *Unbearable Weight* (2003, p.xviii) Bordo describes the insidious power of visual images to shape body culture in the USA:

Now, in 2003, virtually every celebrity image you see- in the magazines, in the videos, and sometimes even in the movies- has been digitally modified. Virtually every image... This is perceptual pedagogy, How to Interpret your Body 101. These images are teaching us how to see. Filtered, smoothed, polished, softened, sharpened, re-arranged...digital creations, visual cyborgs, teaching us what to expect from flesh and blood. Training our perception in what's a defect and what is normal.

Bordo (ibid) suggests cultural imagery now constructs what is 'normal' body shape and body size so that many women use plastic surgery such as breast augmentation to feel 'normal' or less imperfect in a world where perfection is expected.

The growing importance of the visual in the transmission of such cultural norms and ideals around the body is revealed in two studies. The first was a study of the rise in body dissatisfaction from 1972 that was mapped by three survey waves conducted on behalf of the journal, *Psychology Today* (Garner 1997) (see Table 7.1). Reporting on the final wave in 1997, Garner (ibid, p.42) states, 'the dissatisfaction we feel toward our bodies has not only risen since 1972, the rate at which it's rising is accelerating'.

Table 7.1: Psychology Today: Body Image Survey: Body dissatisfaction with overall appearance of men and women 1972,1985,1997

	1972	1985	1997
Women	25	38	56
Men	15	34	43

Source: Garner (1997)

Male dissatisfaction with muscle tone and chest almost doubled from 1972 to 1997 and results showed clear links between body dissatisfaction in women and exposure to media promoting body ideals such as 'very thin or muscular models' (ibid, p.42,76). Becker et al (2002) conducted a study of adolescent girls in a province in Fiji both before and after the introduction of Western television in 1995. Against a background of almost non-existent eating disorders and of traditional Fijian practices encouraging and valuing 'robust appetites' and 'a robust body habitus' Becker et al (ibid, p.509, 514) found both the ideals of slenderness and disordered eating had increased in the three years after the introduction and widespread viewing of Western television.

Resistance to the 'pedagogy' described by Bordo (2003) and Becker et al (2002) is growing, led in academia by critical, mainly feminist, studies and including the subdiscipline of fat studies, psychosocial research around fat stigma and research around psychological indicators like self-efficacy, body image, and health behaviours. Public resistance is growing in fat appreciation websites and blogs, magazines, books and movies such as the 2012 release of *Fat Kid rules the World* (2012) an adaptation of the 2003 novel of that name by K.L. Going. In the 2014 release of *Cuban Fury* (2014) the

The social construction of obesity in an Australian preventive health policy central protagonist is an overweight male who overcomes his lack of confidence, without changing his body shape or size, to dance his way to winning his woman who is normal weight and beautiful.

Resistance to market and culture-driven ideals around body shape and body size are diverse and messy, sometimes radical, conflicting and wide of the mark, and although rarely lacking in passion they are also very much minority voices and constructions. An example of such resistance is the work of a young Melbourne woman. In 2012 Jessica Barlow began a digital petition entitled *Cleo Magazine: Stop digitally altering images to change appearances #RealGirlsCleo* (Barlow 2012). She collected over 20,000 signatures, met with the editor of Cleo and effected major policy changes at the magazine including more transparency about which photos were altered and how.

Barlow's (2012) rationale for such work was her own experience:

In high school, not a day would go by without hearing another girl complain about her weight or appearance. I saw girls get severely bullied and excluded because they didn't live up to the beauty ideals of women in magazines. And it made me want to doctor my own appearance even more. My friends and I looked up to the models in Cleo magazine. It was one of the most popular among my classmates. But what I think many of us didn't know is that Cleo was altering the images of women to make them skinny and blemish free. The altered pictures make readers question their weight, appearance and self-worth. I know this much first hand. They teach us that to be "pretty" you have to be thin and have perfect skin.

For Barlow it is the deception that is important to target rather than the idea that young women should be judging their own body against an 'ideal' produced and normalised by the market, media and culture (Bordo 2003, p.xix). Even after Barlow's successful intervention, young girls will still be 'taught' by Cleo that being thin and having perfect skin is necessary to be pretty. Although models may not be so thin or have quite such perfect skin, they will continue to be chosen by Cleo for those attributes. The thin ideal within the negative Australian body culture is almost untouched by the outcome of Barlow's protest but she has resisted overt dishonesty in that culture.

Resistance to the normalisation of perfection, slenderness, and whiteness in media constructions of the ideal woman's body was more visible in 2002 than a decade earlier in 1991 according to Naomi Wolf (2002, p.6) with more images of older women and women of different races and ethnicities showing up in the media. Yet the ideal of the body of these women as blemish-free, wrinkle-free and ageless continues, and despite a growing market catering to large bodied women, slenderness continues to be overwhelmingly constructed as the ideal especially for and by young women. Other changes have seen a formalising of culturally driven disorders such as the normalization of eating disorders like bulimia among young girls (ibid).

Decades of academic work around themes such as normalisation and deviance, addiction, and stigma have produced careful understandings around important preventive health issues and contributed to public policy or critique of policy around, for example, HIV/AIDS, illicit drugs, alcohol, and tobacco (see Kowalewski, Henson & Longshore 1997; Keane 2002; Banwell & Bammer 2006; Bayer 2008). However Townend (2009, p.179) suggests in the health sphere, '...moralising discourse reaches a peak in the issue of obesity, a condition which is both highly visible and directly associated with immorality in the sins of gluttony and sloth, and which is suffered disproportionately by people who are poor and/or working class'.

In the last few decades the de-normalisation of fat bodies and the production of ideal norms, such as the thin ideal and the big man ideal have been critically analysed by Bordo (1993, 2003) and others (Wolf 1991 & 2002; Lewis & Donaghue 1999; Terry & Urla 1995) including for health consequences such as eating disorders, anxiety, and depression. Rather than a preoccupation with 'fat, diet, and slenderness' being abnormal, Bordo (1993, p.186) suggests this functions, 'as one of the most powerful normalizing mechanisms of our century, insuring the production of self-monitoring and self-disciplining "docile bodies" sensitive to any departure from social norms...' For Bordo (2003, p.xxi) disordered eating that results in a diagnosis of anorexia nervosa or obesity is not a sign of individual pathology but of 'social formation (and a) crystallization of particular currents, some historical and some contemporary, within Western culture'.

Like tobacco, obesity policy has been criticised as generating stigma with greatest harm done to specific population groups such as women, the poorly educated, and people in

lower socioeconomic status levels (Le Besco 2011; McNaughton 2011; Townend 2009, p.179). Unlike tobacco- a substance, or smoking - an embodied behaviour or the signs of these on the body such as, stained fingers, yellow teeth, or the smell of cigarettes, the problem for obesity is an embodied state... it is the body itself, the very site of identity, constructed as excessive, dangerous, risky and unacceptable (Bell, McNaughton & Salmon 2011, p.7). For Goffman (1986, p.9,43,48 [1963]) key features of the generation of stigma are visuality, embodiment, and immutability. The construction of obesity in the Measure Up campaign includes two of these features - the visual and embodiment, and denies immutability despite this being a popular construction of weight by many in the population who have struggled and failed over time to maintain weight loss, and despite research detailing almost 30 years of 'steadily increasing obesity prevalence' across 200 countries (Gortmaker et al 2011).

# 7.4 Coercion, stigma and the Measure Up campaign

Analyses of the Measure Up campaign in the literature have tended to accept the premise that obesity is *the* problem but some have probed more deeply. In a critique of the Measure Up campaign Carter et al (2011, p.465) propose that all health promotion should be guided by 'two related systems of reasoning: an evidential system and an ethical system'. Using this model the authors' (ibid, p.466) analysis of the Measure Up campaign concludes the intervention pays insufficient attention to both evidence and ethics and find 'little evidence for whole-of-population intervention targeting the weight of adults' and that better evidence exists for 'interventions targeting behavioural risk factors (such as fruit and vegetable consumption...)'. The authors suggest ethics defined as 'what should be done: a prescriptive, systematic analysis of what is required for human well-being' is an under-developed field in health promotion with conceptual vagueness being a major problem in general and in the Measure Up campaign specifically (ibid).

Conceptual vagueness is not a trait associated with biomedical research where the construction of concepts is often socio-politically simpler and so less contested, for example, the biomedical indicators and numerical parameters by which most disease is diagnosed. However conceptual vagueness becomes a problem on the transfer of complex, value-laden and contested social concepts such as justice and empowerment into a biomedical frame without adequate theorising or defining of such concepts (ibid).

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Using two ethical concepts, coercion and stigmatization, Carter et al (ibid, 466-7)

examine both the concepts themselves and their relevance to the Measure Up campaign.

Their description of a Measure Up TV advertisement from the campaign is quoted in

Box 7.1 (ibid, p.467).

Box 7.1: Carter et al (2011): Description of a Measure Up TV advertisement

A 60-second television commercial features a male protagonist; there is no set except a giant tape measure running along the floor directly toward the viewer. The protagonist walks along the tape measure toward the camera wearing only modest white underpants. At the outset of the television commercial, he is "20-something"; later in the commercial he is "aged" and made fatter to match his position on the tape measure. The script specifies that he begins with a waist measurement of 84 centimeters (33in) and ends with a measurement of 102 centimeters (40 in). As he walks toward the viewer he says, "You know how it is—you settle down, put on a few kilos. But I'm not worried. Then you have kids, life gets busier, you let yourself go a bit. I'm not worried. But when I first realized it was affecting my health—well, yeah, I got worried." This script is interspersed with an unseen narrator providing technical information, including "Unhealthy eating and drinking and not enough physical activity can seriously affect your health," "For most people, waistlines of over 94 cm for men and 80 cm for women increase the risk of some cancers, heart disease and type 2 diabetes," and "The more you gain, the more you have to lose." The climax of the commercial revolves around the protagonist's daughter, as he first realizes overweight is affecting his health when he can't catch his daughter in a game of tag. In the following scene, his daughter runs into view beaming, but, presumably foreseeing the early death of her overweight father, rapidly assumes a serious and concerned expression; he becomes similarly stricken. This segment is followed by the campaign slogans: "The more you gain, the more you have to lose" and "How do you measure up?"

Source: Carter et al (2011)

The ethics literature according to Carter et al (ibid) suggests unreasonable coercion 'might include teaching people to perceive themselves negatively in new ways or exposing them to fear about new and previously unidentified risks, especially if they are at low risk of actual disease, suffer no apparent symptoms, and may never experience the predicted impact on health outcomes'. The authors conclude that the Measure Up campaign by playing on parental guilt by teaching viewers with a BMI of more than 25

The social construction of obesity in an Australian preventive health policy to perceive themselves and their future health negatively and by creating 'self-surveillance in low-risk individuals ...satisfies several criteria for unreasonable coercion' (Carter et al 2011, p.467).

Although it is defined as an ethical concept by Carter et al (ibid), coercion is also a political concept, that is it can be seen as having positive value where it brings about the best result overall- a utilitarian aim, or it brings economic equity- a Marxist aim.

Therefore what constitutes unacceptable or unreasonable coercion differs according to political beliefs and economic interests. This political ambiguity of ethical concepts makes it even more difficult to include these in the utilitarian calculus (as discussed previously) of a public health policy as other political aims, such as neo-liberal principles may be the preferred principles of the Government. For example, in the preventive health field, proposed legislation to regulate aspects of the food and physical environment has been suggested by 'manufacturers, retailers, advertisers and the media' as an unacceptable form of political coercion and an interference of government in individual rights. This nanny state analogy has been widely debated by public health experts (see Moodie 2009 for examples and analysis of the nanny state analogy).

An evaluation of unreasonable coercion in the Measure Up campaign coincides with the target audience suggestion of the tone of the first phase of the Measure Up campaign as too 'authoritative'. Gfk bluemoon (2010, p.74) wrote in the phase two formative report that an authoritative approach was appropriate for the 'what' and 'why' messages (the educate-and-urge strategy) of the first phase of the campaign. In addition Gfk bluemoon (ibid) suggested, 'the target audience indicated that the tone may be overly authoritative for a 'how' message, indicating that the next phase of activity should potentially be more encouraging and supportive' and added that such an approach is 'most relevant and likely to facilitate positive behaviour change'.

Rather than this assessment, public health experts, bureaucrats, and others at interview spoke of the first phase of the Measure Up campaign being a needed wakeup call for individuals who were not taking their weight/health risk seriously. Rather than unreasonable coercion many experts thought the campaign needed *more* of an authoritative approach, that is was 'too soft' and needed to 'cut through the denial' and despite needing to be 'careful about stigma' such campaigns '...have to get people to think about their behaviour because they have got to change' (Interview 102). The

The social construction of obesity in an Australian preventive health policy advice from Gfk bluemoon that the audience wishes were for a gentler approach was taken up by the government in phase two with Swap it: Don't Stop It (2013) which featured Eric a blue balloon character with his balloon family and pet dog (see Image 7.3).

Image 7.3: Measure Up Campaign: Phase 2: Eric the balloon man from the Swap it: Don't Stop It campaign



Source: Swap it Don't stop it (2013)

Only one of the 22 health experts, bureaucrats and others who were interviewed discussed phase two of the Measure Up campaign in positive terms and most were scathing in their assessments:

I mean it is just such a shame to see a step back from Measure Up which was good. That was really good work. And I don't know (who) developed this but honestly...why you would have a whole new (sigh)...I don't know why you would start again. You shouldn't do that. It's a journey you are taking people on a journey. Eric...Oh God...I mean it is so 70s (Interview 101).

Measure Up was...I was involved...they came and presented it ... to see what we thought about it and I don't think any of us were over impressed...that they were just throwing away money. Now I think there is some guy Eric...I don't know if you ever knew the Life: Be in it campaign. We had Norm I think Norm...they should have resurrected Norm instead of bringing in Eric (Interview 102).

I think the people in the health department at the moment are probably the best group we've ever had working on this area but they're constrained by the workings of the health department. So instead of designing a better, broader or a better more focused, more outcome orientated campaign, because I think of the situations within (the) bureaucracy, we came up with an intermediate (Interview 113).

Rather than fearing the charge of unreasonable coercion many health experts and even some health ethics experts want to see advertising that delivers a harder hitting message linking excess weight and disease (see Daube 2012; also Callahan 2013 as discussed in chapter five). In this regard the use of coercion and the generation of stigma are closely linked. Recent debates in the literature about the stigmatising effects of constructing obesity both as a public problem - generating stigma, and as a public policy problem - governments generating and legitimizing stigma, are unresolved (Burris 2008; Bayer 2008). The distinction between social disapproval seen as salutogenic in producing positive overall health outcomes, and stigma seen as iatrogenic and producing negative overall health outcomes is at the heart of these debates as discussed previously.

Boero (2013, p.375) suggests research (Saguy & Almeling 2008; Schudson 2003 cited in Boero 2013) has found the media use scientific findings to 'further moralize about the culpability of individuals in the spread of the obesity 'crisis''. She (ibid) suggests the media is expert in drama and sensational stories as these sell papers and that, because of time and space constraints, obesity science is oversimplified. However a more 'compelling explanation' for Boero (ibid) is that 'the long-standing stigma and cultural truisms associated with fatness have not been supplanted by science, but have been incorporated into science and the reporting of science'. Yet Boero (ibid, p.377) like other social health and psychosocial health researchers concludes more research is the answer especially hearing from fat subjects themselves. Like other social health and psychosocial health research this pre-supposes the possibility of either constructing obesity as (or almost as) a morally-neutral problem, or presupposes the possibility of changing the body culture (de-stigmatizing body shape and size) in a major way in a relatively short time. Neither seems likely or feasible.

The term, obesity, has negative connotations in popular culture with some studies showing that both male and female subjects are less reluctant to label themselves as 'too

The social construction of obesity in an Australian preventive health policy fat' or 'overweight' than label themselves as 'obese' (Wardle & Johnson (2002) and Blokstra, Burns & Seidell (1999) both cited in Truesdale & Stevens 2008). Truesdale and Stevens (ibid) found that although 'obese subjects self-reported their current weight and height with reasonable accuracy the main discrepancy came when they had to put a label on their weight. The term obesity can have negative social associations such as bias, stigma and discrimination'.

Critical studies researchers and Health at Every Size (HAES) proponents, Bacon and Aphramor (2011) construct obesity and other BMI categories in opposition to the biomedical construction in an appendix to an article arguing for the focus of health interventions to shift away from weight:

Critics challenge the value of using BMI terminology, suggesting that BMI is a poor determinant of health and the categories medicalize and pathologize having a certain body. We accept this argument; we have used "overweight" and "obese" throughout this paper when necessary to report research where these categories were used. We recognize, however, that "normal" does not reflect a normative or optimal value; that "overweight" falsely implies a weight over which one is unhealthy; and that the etymology of the word "obese" mistakenly implies that a large appetite is the cause.

Although using other terms for the bigness of a body may be popularly preferred, it is the negative social construction of the problem around bigness of the individual body especially produced by the health field that is the more fundamental problem.

# 7.5 Specific visual analysis of policy output of the Measure Up campaign

## 7.5.1 Man and woman in underwear, and tape measure

Two visual images (see Image 7.4) are repeated throughout the campaign on the website, in television advertisements and on posters. The first image features a man and woman from the primary target age group 25 to 50 years of age dressed in white underwear and looking solemnly down at a tape measure slung around their waists. The title text above the images reads *Measure Up* and *Time to take some healthy measures*. The text accompanying the main image states 'See if your lifestyle has a major impact on your health'. The second image is of the coloured ends of tape measures showing graduations of risk for men and women and is captioned 'Are you at risk?'

Image 7.4: Measure Up Campaign: Woman and Man measuring themselves and a tape measure colour-coded for risk





Source: Measure Up (n.d.)

In the first visual image the man has more muscle definition in his upper body than would appear to be usual for an average Australian male and the woman's body is rectangular rather than the usual pear shape of women in Australia. As Gary Egger noted in a news journal article over twenty years ago, '(Australian) men look like apples, women look like pears. And that's the way it's going to be' (quoted by Kirk and Tinning 1994, p.600,601).

Some questions remain unanswered such as; is the idea to make the models overweight but not too overweight so the audience will identify with them? Do these images function as a form of visual euphemism 'suggesting that the truth is so distasteful that it needs to be masked' in the same way that Saguy (2013, p.7) suggests euphemistic words are often used in place of 'fat'. How will these images be interpreted by those in the target group that already suffer poor body image and low body confidence? Is this an attempt on the one hand, to tell people their bodies are not good enough in that they do not 'measure up' and then visually assure them that they are not so bad or ugly? Are the toned down images used because the evidence suggests that many people with bigger body sizes and shapes do not see themselves as having a problem or as being obese, or as obese but not unhealthy (Olds et al 2013). Are overweight models used rather than obese models so those suffering 'obesity-blindness' may be better persuaded

The social construction of obesity in an Australian preventive health policy to begin aligning their framing of the problem with that of the campaign's biomedical/population representation of their body shape and body size?

The use of models in underwear looking solemnly down invokes a sense of guilt or shame. Brennan and Binney (2010, p.145) suggest 'negative campaigns aimed at generating enduring behavioural change need to consider that people develop very sophisticated (but maladaptive) coping strategies to ensure that their core emotional and psychological wellbeing is not influenced'. These researchers found that fear, guilt and shame are 'differentially motivating; with an overuse of fear messages resulting in *fight* more often than not and shame resulting in *flight* from the message. Guilt can be motivating but only when accompanied by some hope that individual action is both needed and capable of making the requisite social changes' (ibid, also Apollonio & Malone 2009 on the positives of 'negative advertising'). According to this reasoning the immutability of weight at the population level is a major reason not to use negative social marketing campaigns.

In this first image the problem is represented as visually obvious body shape and body size. The bland background and state of near undress of the models coupled with the solemn measurement of health risk insinuates a clinical space of medical expertise, care, and trust, yet people measuring themselves in their underwear are likely to be at home. The medicalisation of the problem extends past the individual who becomes an expert at assessing risk in a clinical sense and into the medicalisation of the home as a place in which such 'clinical' measurement should take place. The individual is constructed, not only as a member of a group targeted by the government for education and urging around self-management of the body but also as both a patient and a medical expert who recognises the need to assess their own risk for disease, diagnose their risk, educate themselves on solutions and enact those solutions for themselves.

All this is despite the disclaimer on the Measure Up website (Box 7.2) that attempts to carefully undo any of the self-management or medicalization of the solutions presented, and switches the social construction of the problem back from biomedical/population to biomedical/expert.

Box 7.2: Measure Up Campaign: Disclaimer: Information provided for education and research information only

The information on this website is presented by the Australian Government Department of Health and Ageing for the purpose of disseminating health information free of charge for the benefit of the public.

While the Commonwealth has exercised due care in ensuring the accuracy of the material contained on this website, the information on the site is made available on the basis that the Department is not providing professional advice on a particular matter.

This website is not a substitute for independent professional advice. Nothing contained in this site is intended to be used as medical advice and it is not intended to be used to diagnose, treat, cure or prevent any disease, nor should it be used for therapeutic purposes or as a substitute for your own health professional's advice.

The Australian Government Department of Health and Ageing does not accept any liability for any injury, loss or damage incurred by use of or reliance on the information provided on this website.

Source: Measure Up website (2013a, author's emphasis)

Despite the disclaimer the tape measure provided as a paper image to be downloaded, cut-out and used by individuals is marked with coloured gradations of risk that imply the use of the tape measure will allow the assessment of individual risk of chronic disease as discussed earlier. However the tape measure is a population-level risk assessment tool and not an individual-level risk assessment tool. A male adult using the Measure Up tape measure and discovering a waist-measurement of 103cm is actually being given the information 'you are part of a population group that has a greatly increased risk of chronic disease' not the implied message 'you as an individual have a greatly increased risk of chronic disease'.

Although the waist measurement may be more accurate than BMI (Klein et al 2007; Jean et al 2014) it continues to indicate risk at the population level that is not, as it suggests, an accurate clinical evaluation of risk for chronic disease (Hamer & Stamatakis 2012). The possibility that the population risk, marked in centimetres on the tape measure, reflects an individual's clinically assessed risk is too unlikely (see the earlier discussion on metabolically healthy obesity (MHO) in chapter five). Trust is

The social construction of obesity in an Australian preventive health policy also lost for individuals who measure their waist and find no risk indicated but go on to find they have some 'underlying' metabolic disorder such as hypertension or hypercholesterolemia which were undetectable using a waist measurement. The tape measure's inaccuracy for significant proportions of the Australian population must act to undermine the credibility of the campaign's message and public trust that Kass (2001, p.1782) suggests is essential to any public health work such as health promotion.

#### 7.5.2 Videos

Images within the Measure Up campaign include three videos showing the success stories of Measure Up participants (see Image 7.5).

Image 7.5: Measure Up Campaign: Three video front pages from the website







Source: Measure Up website (n.d.)

Two of these videos emphasise physical activity almost exclusively and one shows physical activity as the main change with food as a minor and easier change (Measure Up 2013a). 'The boys love hummus sandwiches' one woman declares. The first image is of a community bike riding group with women as the main communicators. The second is of a white, middle-class, English-as-a-first-language, rural, mother of two boys discussing changes she made for herself and her family around physical activity and food and how she made these. The third is of a white, middle class, father discussing the difficulty with getting to the gym and how he overcame that and discussing food and gardening with some shots of him with his two young girls in their family garden.

The images construct a problem for policy that centres on weight as changed by individuals through healthy behaviours around exercise and food and on weight gain and lack of weight loss as a failure to self-manage those factors. These constructions can be divided into those that invoke an embodied state - body fat loss, and those that invoke embodied practices - healthier eating and more activity (Bell, McNaughton, Salmon 2011, p.7). Key to this representation is the construction by the individuals of a self-shaming identity such as Caroline 'making excuses' about why she couldn't exercise and David 'not liking what he saw in the mirror'. This is a very clear example of the subjectification effects described by Bacchi in the WPR(2009, p.16) who suggests '...discourses make certain subject positions available. And when such a position is assumed, a person tends to make sense of the social world from this standpoint...how we feel about ourselves and others – is at least to an extent an effect of the subject positions made available in public policies'.

The social construction of obesity in an Australian preventive health policy Burris (2008, p.475) in describing the self-acceptance of stigma suggests 'stigma's cruelty is most prominent in the phenomenon of self-enforcement. To cut a person off from the esteem and support of others is bad enough, but then to turn the individual into his own jailor, his own chorus of denunciation, takes inhumanity to an ultimate pitch' (ibid).

The stigma generated by these images of bigger body shape and size is welcomed by both policymakers and public health experts, as discussed, who suggest the Australian public needs a wake-up call in recognising their own body shape and size as diseased and risky (Interview 101). The generation of stigma by such images is unavoidable even given the more nuanced definition of stigma by Link and Phelan (2001) and Burris (2008) who separate stigma from social disapproval. There is no room in these videos for alternative social/systemic representations of causes and solutions such as time pressure, food environments, or even negative psychological outcomes that may accompany personal injury and affect health behaviours.

## 7.5.3 Swap it: Don't stop it

The shaming and blaming inherent in the visual images in Measure Up of 'real' people expressing shame and dismay is replaced in the Swap it Don't stop it campaign by the happier balloon characters enacting the tiny suggested steps toward better eating and more activity. The loss of the visual image of obese individuals is a loss of the power of a photograph over a painting or drawing. The truth-value and shaming power attached to photographs is missing and the power of the representation to stigmatise is diminished (see Image 7.6.).

Image 7.6: Measure Up Campaign: Swap it: Don't stop it: It's time to become a swapper



Source: Swap it:Don't stop it (2013)

Although the images are less stigmatising the construction of the problem remains problematic. Box 7.3 is an excerpt from *Swapper News* on the Swap it: Don't stop it website. The case is discussed of an individual 'swapper', Tracey Hoffman, at a life-changing point, turning 50 and about to become a grandmother, who engages with the weight loss social marketing. Research shows turning points or 'triggering events' such as Tracey's 'becoming a grandmother' are linked to long-term successful weight loss but are no guarantees of eventual success (Klem et al 1997). Elfhag and Rössner 2005, p.71) suggest the literature shows that the ability to cope with stress is more important to successful maintenance of weight loss, 'than the actual number of life changes and circumstances that are potential stressors'.

#### Box 7.3: Swap it: Don't stop it campaign: Swapper News

Standing in a fitting room, Bracken Ridge mother-of-six Tracey Hoffman experienced a defining moment that changed her lifestyle and spurred her on to shed 20 centimetres from her waistline.

In Tracey's words, she was 'fat, fifty and about to become a grandmother' and she knew, with every fibre of her being, that she did not want to buy the size 18 jeans staring back at her.

Source: Swap it Don't stop it (2013)

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Other research with women has shown that psychosocial factors such as higher body dissatisfaction and lower self-esteem are highly relevant to weight loss maintenance (Teixeira et al 2002, p.499). There is no way of knowing if these factors affected Tracey and no follow up to see if she maintains the weight loss over five years or more. If there is, as is common, no long-term success what will the psychological or social outcomes be for Tracey if she has publicly celebrated weight loss and then regains that weight? Representing the problem as biomedical obesity, as a single, isolated risk or disease that has no complex social and psychological context raises the probability of iatrogenic psychosocial effects when the almost inevitable weight regain occurs for the majority of individuals who 'swap it'. Representing long-term successful weight loss as reasonably probable using BMI categories and current strategies is not supported by Australian (Walls, Walls & Loff 2012, p.97) or international research (Gostin 2014).

## 7.6 Conclusion

The policy output of the Measure Up campaign extends the representation of the problem to include powerful, public, visual images of individual bodies, actors, and material tools of risk assessment and weight loss. The impossibility of de-centring the individual from the representation of the problem as biomedical obesity is made clear through the analysis of the images and text around bodies, risk, self-management and self-discipline. The lack of alternative social/systemic representations is understandable in the dovetailing of biomedical representation with neo-liberal principles, the harsh body culture and dominant mass media and public constructions that centre the problem on the individual. It is highly probable that the portrayal of population-level risk assessment as individual-level risk assessment further undermined the credibility of the message and damages public trust in government health messages and campaigns.

Within a major policy initiative like the Measure Up campaign, with final public expenditure in excess of \$30 million, the exclusion of decades of academic understanding around the visual and the body from policy development needs explanation if only because the resulting policy is described by many experts as a waste of effort and by some as quite probably iatrogenic. If the government, as suggested by the then Secretary for the Department of Health, Jane Halton (2013), does not have the policy answer to obesity and like the rest of the world is waiting for a solution why have the alternative bodies of research remained unused in knowledge-for-policy and in

The social construction of obesity in an Australian preventive health policy constructing the policy problem? A comparison with some aspects of tobacco, a public health policy success story, will help shed some light on these questions.

### **Chapter 8**

### A comparison of obesity and tobacco

#### 8.1 Introduction

The last three chapters analysed the constructions of obesity in historical and broad policy context and in a case study of the Measure Up campaign. This chapter seeks to draw a comparison of some major aspects of obesity and tobacco as these have been constructed as preventive health problems within Australian government policy since the 1970s. The relative success of tobacco control and failure of obesity policy has led to many comparisons of these problems in the health literature. I apply a critical social constructionism approach to analyse some of the literature that compares tobacco and obesity. This analysis explores how that literature often uses and produces a social health representation of obesity. A comparison is then made of obesity and tobacco constructions within the two specific public policies, the Measure Up campaign and the Australian government plain packaging of cigarettes initiative (PPC) (2011). Finally, I argue for radical alternative representations from the health field that move obesity away from being the central policy problem and suggest one alternative problem representation within a primary health care setting.

## 8.2 Comparing obesity and tobacco constructions from the 1970s in Australia

From the 1970s anti-tobacco advocacy and activism played an important part in changing the dominant problem construction from smoking (a problem for individuals) to tobacco (a problem for society and government). In the decades that have followed the majority of the public, governments and, in smaller part, the media have slowly accepted, supported and produced this new construction (Chapman 2007; Bonfiglioli et al 2007; Walsh et al 2008). In social marketing, smokers were subjectified as weak-willed, spendthrifts, and high risk takers (Chapman & Freeman 2008) but these individual-centred and stigmatising constructions changed over time. The smoker as 'informed risk taker' became 'smoker as tobacco industry pawn' and as addict (McLeod et al 2009, p220) This meant the representation of the smoker as the problem became secondary to the construction of tobacco as a dangerous substance in the broader policy

The social construction of obesity in an Australian preventive health policy context. This changed the way smokers were represented making them more the victim of a dangerous substance than morally weak or deviant.

Rather than the problem, causes and solutions being centred on individual behaviour, choice, and responsibility, these now mainly centre on the dangerous and addictive substance of tobacco, the industry that profits from it, and government efforts to protect the community from it, especially vulnerable subjects such as children and pregnant women. The work of McLeod et al (2009) supports this. Their research tracked changes in the representation of smokers in a major Australian newspaper from 1995 to 2005. They (ibid, p.220) concluded, 'due to the level of tobacco control media advocacy, and the way in which smokers are represented, the smoking-related discourse in an Australian newspaper predominantly supported tobacco control objectives. Tobacco control measures since the 1970s have been more and more social/systemic in nature including taxation, marketing and sales restrictions, close-to-total advertising bans, smoking bans, and recently the plain packaging of cigarettes.

This is in stark contrast to the United States which has enacted far fewer and weaker social/systemic tobacco policies. Stuber, Galea and Link (2008) argue that smokers are highly stigmatised and that this has not changed across time because 'unlike many other western nations who had a direct stake in the health and disease of their populations due to the enactment of national health insurance programs, in the USA there was a strong disposition to hold individuals accountable for the risks they take'.

I argue the change in the dominant representation of the problem in Australia began in tobacco control's early switch in the 1970s from a biomedical to a dominant social paradigm construction of the problem for policy and advocacy. This switch was aided by several inter-related factors;

- tobacco was a single substance that was external to the body, and so was socially and commercially isolable, as was the industry producing it and media promoting it,
- there were strong, historical, and hidden negative constructions of tobacco
  probably by a majority of adult Australians at least from the mid-1940s (at the
  peak of prevalence around 1945 only a little over half of Australian adults
  smoked),

- tobacco had a history as a legitimate substance for government activity since the early 1900s around the sale of tobacco to minors,
- from the mid-1950s there was a rising tide of anti-tobacco health research findings (Doll et al 2004),
- since the 1960s policy has been seen as successful in the slow but consistent downward trend in the prevalence of adult daily smoking in Australia, and
- since the 1970s anti-tobacco advocacy has become a clever, highly organised, unified and media-savvy force with one 'song book'.

The point made by Stuber, Galea and Link (2008, p.427-428) should be added to this in that the Australian government has been directly economically invested in its citizens' health since 1975 (less a few years in the early 1980s) through Medibank/Medicare the national health insurance scheme.

In comparison, in the late 1990s, obesity as a preventive health policy problem had no record of success and obesity prevention groups had no united voice in advocacy. The clash between the biomedical/expert, biomedical/population and social health constructions of obesity was played out, for example, in the first national strategic policy document and its implementation, *Acting on Australia's weight: a strategic plan for the prevention of overweight and obesity* (National Health & Medical Research Council 1997- rescinded 2006). The early 2000s also saw the rise in the evidence-based model of policy that mimicked biomedical models and hierarchies of evidence, and an increase in the influence of neo-liberal principles in policy development. These factors influenced the formative construction of obesity as a policy problem towards biomedical obesity.

As discussed earlier, in the early 2000s, the Australian and State/Territory governments moved to construct a 'national strategic approach to chronic disease prevention and management in Australia' (National Health Priority Action Council 2006, p.iii). The first *National Chronic Disease Strategy* (NCDS) in 2006 (ibid) included seven major largely preventable lifestyle risk factors cited as; 'tobacco smoking, risky and high risk alcohol use, physical inactivity, poor diet and nutrition, excess weight, high blood pressure, (and) high blood cholesterol' (ibid, p.12). The NCDS (2006) muddled together the preventive health project of reducing the incidence of day-to-day risk factors at the population level with the therapeutic care of disease in ill-health systems.

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The possibility of constructing preventive health problems such as obesity in a social health model was faint.

However by the time this strategy was produced the tobacco horse had bolted and the social health construction of the problem- tobacco as a dangerous substance, remained the predominant public, government and anti-tobacco advocates' construction of the problem. The tobacco industry stood increasingly isolated in attempting to construct the problem as predominantly individual, around individual behaviour, responsibility, rights and freedom and in constructing the science as weak especially around second-hand smoke (Chapman 2007). In spite of the NCDS and industry pressure, comprehensive, social/systemic tobacco strategy and policy ( its component policy outcomes unmeasurable and unsupported by narrowly-defined biomedical evidence) was a *fait accompli*.

The biomedical or non-biomedical nature of tobacco control evidence has not been the main issue for either the public or policy makers for many years. The 'strong evidence' suggested by tobacco advocates as underpinning tobacco policy, such as the PPC, (see Chapman & Freeman 2014, p.ix) is not biomedical but mostly psychosocial. This is visible in Mike Daube's reference to tobacco control's, 'stellar researchers who live in the real world and understand its needs, while maintaining a constant focus on academic rigour and integrity' (ibid, p.ix). As an example, in commenting on the success of plain packaging in slowing the uptake of smoking by young people Simon Chapman (Alexander 2014) stated, 'It's almost like finding a vaccine that works against lung cancer'. With high public support for policies that are consistently successful this borrowing of the status of biomedical science while relying on social health and psychosocial knowledge-for-policy is both ironic and clever.

Obesity policy is a different story. In the 2006 NCDS the obesity representation is clearly biomedical and subjectifies the individual as a patient-in-waiting. This representation is politically benign as the focus on individual behaviour and responsibility means any government or industry responsibility can be avoided or easily diverted back toward the individual. The need for difficult action by government is avoided. Robbins and Nestle (2011, p.144) as editors of a public health journal argue that research also plays this role, 'we have come to believe that research studies concentrating on personal behavior and responsibility as causes of the obesity epidemic

The social construction of obesity in an Australian preventive health policy do little but offer cover to an industry seeking to downplay its own responsibility'. It is argued in this thesis that obesity as both an intrinsic body characteristic and an inherently individual problem construction in the current social context cannot be reframed to avoid this problem. There is a wealth of social health research that argues against this idea.

#### 8.3 Analysis of literature that compares obesity and tobacco

It is often suggested in the preventive health literature that tobacco and obesity are population health problems with similar causes and should be amenable to similar policy solutions (Chopra & Darnton-Hill 2004; Blouin & Dubé 2010; Yach et al 2003, 2005; Walls, Walls & Loff 2012). Tobacco, with a longer history of public policy, an international treaty and a better record of success is touted as providing an example for obesity prevention experts and policy makers (Blouin & Dubé 2010). For those constructing obesity as a biomedical problem the comparison with tobacco does not make sense as much as a comparison with another biomedical problem, such as HIV/AIDS (Interview 149) probably because obesity is seen as primarily a biological or physiological problem of body fat, epigenetics, appetite regulators etc. It is the social health constructions of obesity and tobacco that appear most relevant for comparison as both presume health as primarily a social responsibility, use a more wholistic concept of health, and construct social/systemic causes and solutions (see Appendix 4.2). This disjuncture between major constructions of obesity means just how tobacco control can be used as an example for obesity prevention is highly contested.

Social health literature that compares obesity and tobacco has a long history of emphasising the need for a change of problem frame from individualistic to systemic and expresses a sense of frustration at the lack of success in transferring or transforming the social health construction of obesity into policy and the media (Lawrence 2004, p.57; Broom 2008, p.130; Gostin 2014, p.149a; Byers & Sedjo 2007, p.491). For example, the social health researcher, Amber Bastian (2011, p.139) is frustrated by the lack of ability to transfer social-structural representations of the problem of childhood obesity into the media where individualistic representations are favoured, and sees this as an obstacle to social-structural public policy, and as a problem for public health to solve through advocacy (also Bonfiglioli et al 2007, p.442).

Yach et al (2003, 2005) also use a social health construction of obesity and insist that obesity control has much to learn from tobacco control but the first lesson is that no international treaty similar to tobacco's *Framework Convention on Tobacco Control* (FCTC) (2005) is needed for food. Yach et al (2003, p.276; 2005, p.900) argues for a 'more nuanced approach to diet and physical activity' that includes, unlike tobacco, a partnering with the food companies. Obesity and tobacco are constructed as problems with a balance of social and individual aspects but the individual is central in terms of solutions especially around self-maintenance practices (ibid, p.277). In this weak social health representation, the role of government is limited and social/systemic solutions are aimed at educating and urging individuals. In this paper the focus on the individual as central to solutions fits comfortably with the biomedical construction of the problem of obesity, its causes, and solutions.

In a later paper Yach et al (2005, p.898-900) list 12 lessons from tobacco control for improving diet and physical activity but interchange these freely with obesity as the problem and never doubt that obesity should be the main construction of the problem even after outlining better evidence for other problem constructions:

There is evidence of the beneficial effects of reducing serum cholesterol concentrations and increasing physical activity on cardiovascular disease, reducing salt intake on hypertension, and increasing fruit and vegetable intake on diabetes. For obesity, we currently lack evidence of effective interventions. A strategy should be developed to address obesity as a chronic relapsing disorder that may require several weight loss attempts and the use of effective drugs that are developed in collaboration with the public health community.

Yach et al (ibid) have presumed several things about obesity including that it is a benign and necessary problem construction to tackle chronic disease, it is unproblematically individualistic and it can produce public support for effective government policy. In chapter five and six arguments show that none of these presumptions are reasonably supported.

Blouin and Dubé (2010) also compare obesity and tobacco and come to a different conclusion. For these researchers (ibid, p.253) 'global health diplomacy for obesity prevention' is in its infancy with a lot more work needed toward an FCTC style of treaty. Obesity is mainly a social/systemic problem with social/systemic causes and solutions, and food and physical activity environments are central to this strong social

The social construction of obesity in an Australian preventive health policy health representation of the problem (also Bastian 2011 and Bonfiglioli et al 2007). Hence Blouin and Dubé (2010, p.251) conclude, 'global health diplomacy for obesity prevention requires a much higher level of mobilisation of political leaders, civil society organisations, governments and non-state actors in developing countries, and engagement with the many private actors in the agri-food industries before healthy diet proponents are ready to negotiate a treaty similar to the FCTC'. The main unsupported assumption in this work is that an inherently individualistic problem construction such as obesity can be used to construct publicly supported social/systemic solutions around food.

Underexplored in the work of both Yach et al (2005) and Blouin and Dubé (2010) is the psychosocial context of such constructions. A substantial body of psychosocial research concurs that the mass media, relevant industry, the health field and public policy produce constructions of body shape and size that are moral and aesthetic as well as being around health (Bordo 2003; Pause 2013). The individual, the body and the visual are all central themes of such constructions (ibid). The call by Australian social health researchers Gary Egger and Boyd Swinburn (1997, p.479, brackets in original) nearly twenty years ago reflects the repetitive failure to move beyond the individual in obesity representations:

Historically, epidemics have been controlled only after environmental factors have been modified. Similarly, reductions in population levels of obesity seem unlikely until the environments which facilitate its development are modified. Yet this is often neglected in obesity management (as it was initially with tobacco control).

Yach, Blouin, and their colleagues plead for effective food and physical activity policy agendas, modelled on anti-tobacco policy, but remain in the blind alley created by obesity as an inherently individual problem construction.

In July 2014 Lawrence Gostin a Professor of Law at Georgetown University wrote a comment for the journal *Nature* that summed up the global state of non-communicable chronic diseases (NCDs) and preventive health. He (ibid) then compared the work in tobacco control with work on other risk factors for chronic disease, including food, physical activity and obesity. The article expressed frustration with the weak, patchy and fractured global response to NCDs, suggesting there has been 'no groundswell of support for NCD prevention, and an 'anaemic political response' which he attributes,

The social construction of obesity in an Australian preventive health policy 'in part to governments beholden to business interests'. Gostin (2014, p.147-149) suggests a long list of causes for the global spread and upward trend in NCDs including: rapid travel, mass migration, the globalization of culture, rising air pollution, physical inactivity, consumption of alcohol, tobacco and excess calories, rich foods, cigarettes, fine wines, leisurely lifestyles, urbanization, and globalized markets that are 'harmonizing cultures and nudging people worldwide towards unhealthy habits'. Gostin (ibid) continues, 'From Dallas to Dhaka, city streets are filled with fast-food restaurants; billboards advertise unhealthy food and alcohol. Something must be done.'

Obesity is constructed by Gostin (2014, p.148) in this article as an important, almost immutable risk and disease. He (ibid) states the findings of a review that 'no country out of the 188 studied had lowered its obesity rates'. Of the two pictures that accompany the article, one is of a giant billboard of a meaty burger and the other is the fat lower legs of 'a child at a weight-loss camp in China' (ibid). Visually the article makes obesity a central problem but the text then holds up the FCTC as an example of what to do and this centres the solution on food. Then Gostin (ibid, author's brackets) complains that, '...NCDs are often framed as a problem of individual responsibility, with prevention policies criticized as paternalistic (but) the damage caused by NCDs goes well beyond individuals (and) these conditions should be reframed as a collective problem that requires a global response'. Gostin (ibid) does not examine the problem representation at all, and so fails to see that the individualistic construction of the problem as obesity precludes the extrinsic reframing he and others (see Lawrence 2004, p.59, Adler & Stewart 2009, p.50) argue to be essential to successful policy.

A final analysis is of the 2010 paper by Klein and Dietz that is entitled, *Childhood Obesity: The New Tobacco*. In this article the researchers (2010, p.388) suggest one-directional influence in stating, 'tobacco control became a successful public health movement because of shifts in social norms and because cigarette companies came to be perceived by many as a common enemy' (also Lawrence 2004). Rather than this, as Simon Chapman detailed in his book, *Public Health Advocacy and Tobacco Control* published in 2007 tobacco control was both produced by, and productive of, those things. Klein and Dietz (2010, p.388) then suggest, 'in contrast (to tobacco), obesity advocates have not identified a common threat or mobilized grass-roots change, nor have they identified strategies that resonate across diverse settings and constituencies'. Finally, these researchers (ibid) suggest, 'framing obesity as a common threat can lead

The social construction of obesity in an Australian preventive health policy to consensus regarding the interventions needed to achieve healthier children and communities'.

A substantial body of psychosocial research points the other way. Constructing obesity, body fat, shape and size as a 'common threat' is argued to be divisive, to drive resistance and produce negative psychosocial and physical effects (Olds et al 2013; Sutin and Terracciano 2013; Puhl & Heuer 2009). Body fat as the single common threat also means any attempt to re-frame the causes or solutions as social/systemic that looks threatening to industry profit, is matched by industry through the media (re)framing body fat as individualistic (Lawrence 2004, p.65). I argue the single common threat in any obesity policy is obesity as a socially constructed concept. It is this singular, measurable, inherently individual construction of the problem that makes it both fit for narrow policy models that are politically palatable and bureaucratically manageable but unfit for the generation of public support for social/systemic causes and solutions that social health researchers continually call for.

I would also suggest bigger body sizes are slowly becoming normalised and that the negative construction of body shape and size may be less and less accepted by the public because it is subject to what is called the 'Aunt Susan Principle'. Putnam, Campbell and Garrett (2012, p.526-7) suggest that one of the main factors having a positive effect on interreligious acceptance is that most Americans now have religiously diverse social networks and know someone of a different religion that they believe to be so good that they will surely go to heaven. Such belief is contradicted by church leaders but is growing among their congregations. In the same way with over 60 per cent of the Australian population constructed by health authorities as having problematic body shape and size it is probable that most Australian's have an Aunt Susan they will not believe to be a morally bad, ugly, or unhealthy person despite being fat.

Comparisons of obesity and tobacco in the literature often aim to promote the social health construction of the problem over the dominant biomedical problem construction. There is no possibility in such comparisons of radical doubt. Under-examined are the problematic assumptions in most health representations of obesity (biomedical, social health and some psychosocial health), that reveal important differences with tobacco:

- Obesity constructions are inherently individualistic, whereas tobacco is
  predominantly constructed as a dangerous substance with social/systemic causes
  and solutions, and secondarily as a problem of individual behaviour and
  responsibility, and
- Within tobacco control the visual, the body and identity are assumed to be
  vitally important aspects of the social context of tobacco, but within obesity
  policy are assumed to be almost irrelevant where I argue they are in fact even
  more important.

The shape and size of the bodies of people around us are highly visual but it is possible for us to not know who is a smoker and who is not as there are very few visual signals if people are not smoking at the time. Literature comparing the policy problems of tobacco and obesity cannot progress beyond its history of bewilderment, frustration and ignored pleas without better theorising the problems themselves and their differences and similarities at this deeper social construction level. The latter part of this chapter attempts just such a depth of analysis in comparison.

# 8.4 Comparing the policy-output level of Measure Up and the Plain Packaging of Cigarettes

A comparison of what the problem is represented to be in the *Measure Up* campaign and the Plain Packaging of Cigarettes initiative (PPC) reveals similarities and differences in what the problem is represented to be. The Measure Up campaign's visual images and text, around weight, body shape and size, disease, risk, and individual behaviour around food and physical activity were analysed in chapter six. This campaign used a wide range of media to disseminate material containing text and images, including television, radio and print media. The main images of the campaign were of fat, semi-naked bodies both male and female and tape measures with colour coded risk categories for waist measurement. Other images involved testimonial/confessional videos of those who had 'measured up', found themselves and their lifestyle wanting, and made changes to good effect.

Such images and text in the Measure Up campaign place body fat in the space between disease and other extrinsic factors such as food or physical activity so that social/systemic changes such as food labelling appear less important than changes to

The social construction of obesity in an Australian preventive health policy individual lifestyle, behaviour, responsibility and choices. The power of the visual and of morality and aesthetics in cultural constructions of body shape and size are assumed to be irrelevant or unimportant. These assumptions are the product of a historical biomedical/population construction of obesity despite there being; no evidence of success at a national level of such a preventive health project, problems with the individual or clinical level predictive risk power of body shape and body size, and major problems with the generation of stigma and the ill-health effects that follow.

For the policy output of the PPC initiative, the task of analysing what is not there (plain) may seem facile, however plain packaging is a highly constructed social object, and far from plain, as graphic health warnings have replaced tobacco promotion graphics. Australian government regulation controls every aspect of the packaging, creating a monopolisation of the social construction of tobacco within that tiny but important marketing space. This policy adds to the history of monopolisation of media constructions of tobacco by Australian governments through such public policy initiatives as ad bans and marketing restrictions. The ability of a tobacco corporation to distinguish their brands from other brands is almost as curtailed as is possible without nationalising the industry and fully commoditising the product. This can be compared to obesity where the possibility of government monopolisation of constructions of body shape and size is politically inconceivable and obviously impractical.

In the PPC the power of the visual is central to what the problem is represented to be in the images, colours, and restricted text of the policy output. The graphic health warnings construct the problem as, tobacco as a dangerous, seductive, addictive product that requires more than the usual textual warnings of scheduled drugs and poisons (Therapeutic Goods Administration 2007, Chapman & Freeman 2008, p.28). The smoker as individual is stigmatised by the text and visual images in the health warnings however even more social disapproval is directed toward the dangerous, addictive substance of tobacco with the suffering it causes clearly depicted in rotting limbs and mouths, emaciated and dying cancer victims and children struggling for breath. As Chapman & Freeman (ibid, emphasis in original) suggest with such packaging, 'tobacco products are thus positioned as *exceptionally* dangerous. The smoker appears as the victim- led astray to catastrophic consequences that no-one would choose for themselves or their families- by this awful substance. The packaging now covertly

The social construction of obesity in an Australian preventive health policy states, be warned- the substance within will seduce you, addict you and then cause you and your family to suffer and die early'.

Smokers who have resisted such dire warnings in social marketing are now reminded each time they purchase tobacco products. Tobacco control advocates have warned that plain packaging is not expected to change the consumption patterns of long-term smokers but to deglamourize smoking and so deter new starters especially the young. In this way plain packaging acts to cut tobacco companies off from their consumer base (Chapman & Freeman 2014). Rather than stigma that necessarily involves shame, the substance of tobacco and the tobacco industry that profits from it attract strong social disapproval (Walsh et al 2008) with research from 2010 finding over half of adults believe a ban on tobacco sales should occur in the next 10 years (Hayes, Wakefield & Scollo 2014, p.183).

However the construction of tobacco in the PPC has an equally important influence on the other 84 per cent of non-smokers in the adult population. The PPC controversy drives up public interest and media activity and these act to reinforce the construction of tobacco as a dangerous substance and increase support for government activity. This may seem a lot for a small packet with a flip-top lid but the controversy is widespread and consistent, including international trade agreement disputes, high court challenges, and million dollar anti-PPC funded activities such as nation-wide 'nanny state' ads funded by the tobacco industry.

The historical and current construction of biomedical obesity as the policy problem has had the opposite effect. What the problem was represented to be in the Measure Up campaign was almost an inevitable product of the problem construction at the strategic and intermediate policy levels in the early to mid-2000s. Obesity representations and evidence-based policy modelled after the biomedical paradigm subjectifies populations as made up of rational, autonomous individuals who are making the wrong choices out of ignorance and moral weakness. The solutions are then necessarily around the educating and urging of these deviant individuals and their deviant bodies, both in social marketing and in the clinic where GPs are directed to offer lifestyle advice. The importance of and the ability to understand and theorise obesity around the socially-complex social context is lost. Such a construction of the problem was also an inevitable product of the dovetailing of biomedical obesity representations with those of

The social construction of obesity in an Australian preventive health policy the general public who overwhelmingly construct fat bodies as the moral, aesthetic and health problem of individuals.

To copy tobacco control's success other policy problems that are external to the body, not highly visible, not almost immutable, and not so stigmatising need to be produced. Moving away from such an entrenched problem construction as obesity will require not silence but the promotion of positive constructions of the body as both individual health and social change instruments. The most prominent example of this in practice is the Health at Every Size movement in the USA that is currently followed by a few Australian practitioners. Only when body fat is no longer constructed as the dominant problem will extrinsic-to-the-body policy problems, such as food or physical activity, or even a social/systemic model of health have a chance to become the *dominant* problem representation in policy. Only then will it be possible, as was achieved by tobacco control, to foster public support for social/systemic solutions and fully expose the role of industry in causation and solution.

#### 8.5 Industry as politically embedded in body fat representations

As argued, in this thesis, biomedical obesity cannot fail to support similarly individualistic constructions of body shape and size produced by financially-interested industries, such as the weight-loss, fashion and food industries (see Bordo 2003, p245-275; Nestle 2013, p360-363). These industries are supportive of obesity policy and promote this problem construction by, for example, supporting and producing research, generating media discourse and through financial support for obesity prevention and management organisations. In comparison the rise to dominance of the policy problem of tobacco as a dangerous substance has seen the vanishing of public trust in the tobacco industry, their vanquishing from public policy development and a great rise in public support for policy solutions that balance individual with societal responsibility (Walsh et al 2008). I suggest the use of media monopolisation by the government continues to be a vital plank in supporting and producing negative public sentiment towards the tobacco industry.

For obesity the history was very different. In the 1990s in the USA the food industry was wary of the construction of the problem of obesity especially around the possible regulation of sugar in food (Brownell & Warner 2009, p.274-275; Brownell & Frieden

The social construction of obesity in an Australian preventive health policy 2009). The industries were also wary of the linking of sugar to NCD risk and threatened the WHO with a loss of US support (Moodie et al 2013, p674). Since then these industries have been successful at countering such regulation in several ways including by pushing the theme of 'personal responsibility' (Brownell & Warner 2009, p.265-266) of the problem in public fora. The use of the nanny state analogy by the food and marketing industries when a government tries to regulate food (ibid) are not rejected but are greeted with little if any resistance by a public that largely agrees that obesity is a problem to be solved by the individual (Olds et al 2013; Brownell & Warner 2009, p.265, Hoek 2008). This thinking is clear in Callahan's (2013, p.37) suggestion for future obesity policy to have an individual behaviour focus when he includes the proviso that industry could have a voluntary role that does not affect profits, and that any government activity will be politically difficult.

An Australian example of industry efforts to promote the problem as obesity is the establishment of an NGO, Obesity Australia, that in its board composition combines biomedical experts, John Funder, Peter Gluckman, and Paul Zimmet, with specialists in policy and politics, Helen Coonan, and Geoffrey Walsh, and industry experts, Christine Faulks (business), and Harold Mitchell (media industry) (Obesity Australia 2012a). The mission of Obesity Australia is provided below in Box 8.1 and speaks openly

#### Box 8.1: Obesity Australia: Extract of Mission Statement

The mission of Obesity Australia is to drive change in the public perceptions of obesity, its prevention and its treatment. We will do this by:

- Providing **leadership** and independent advice to inform sound policy
- Building **recognition** of the personal, social and economic effects of obesity
- Changing entrenched attitudes
- Independently evaluating **what works and what doesn't work** in the Australian context
- Showcasing the best science on how and why obesity occurs so it provides a base for effective community response and government funding

We will highlight current knowledge of obesity, drawing on a wealth of scientific and medical knowledge, based on research reviewed by our Scientific Advisory Council, experts in their field around Australia & New Zealand.

Obesity Australia is served by a Board who have demonstrated leadership in their field – public affairs, politics, health, public policy.

Source: Obesity Australia (2012b, emphasis in original)

The social construction of obesity in an Australian preventive health policy of influencing policy by, 'drawing on a wealth of scientific and medical knowledge', and constructs biomedical expertise, that is expertise in clinical research, therapeutic practices, drugs and techniques, as expertise in 'health' (Obesity Australia 2012b). Social health or psychosocial health experts are missing and preventive health is narrowly constructed around individual behaviours, causes and solutions.

By comparison when the tobacco industry sought to influence policy from the 1960s onwards it became clear over time that their role was to slow or stop any progress in policy that would impact on profits (Chapman & Carter 2003). As Chapman and Freeman (2014, p.12) suggest 'effective tobacco control unavoidably means reduced sales of tobacco'. Brownell (2012) makes the same point about the food industry and obesity in suggesting the job of any corporation executive is to make a profit to strengthen their organisation and reward their shareholders and big tobacco leaders did this in several unethical ways including lying to the United States Congress, withholding, for years, adverse primary research findings on nicotine addiction and lying to consumers by advertising some cigarettes as healthier than others. The Framework Convention on Tobacco Control recognises the tobacco industry's drive for profit as a danger to population health by including guidelines that require governments to refuse industry a role in tobacco control policy (World Health Organisation 2008). The Australian government exemplified compliance with this requirement in the development of the PPC (Interview 114). A tobacco organisation equivalent to Obesity Australia would be an anathema to the FCTC.

Hastings (2012, p.e5124) suggests the work of tobacco research offered two key lessons for public health including 'to the other two 'industrial epidemics'...alcohol misuse and obesity' '...that we must do all we can to eradicate the use of tobacco (and) that our economic system has deep flaws'. With regard to economic system flaws, a range of literature notes the role of obesity-related industries, such as the food industry as being similar to that of the tobacco industry that is to make a profit given the tools available including slowing and stopping government policy that may adversely impact on profits (Freedhof 2014, p.6-8, Stuckler & Nestle 2012; Brownell & Warner 2009; Brownell 2012).

For example, Freedhof (2014, p.8) suggests a formal partnership between public health and the food industry, 'necessitates weakened public health messaging, (involves)

The social construction of obesity in an Australian preventive health policy positional compromises and provides the industry with opportunities to parlay their involvement to increase sales, decrease scrutiny, obfuscate corporate culpability, forestall industry unfriendly legislative efforts, personalize the by definition impersonal, and protect against brand and sale erosions'. Such an assessment rings true for the Australian experience of public-private partnership around food that brought forth the short-lived, stalled, and then weakened Health Star Rating initiative from the Department of Health in 2014 (Nash 2014).

Obesity is rarely radically doubted as a policy problem in social health literature grappling with the lack of social/systemic policy and with the lack of other alternative representations of the problem being used in policy. Townend (ibid, p.176) argues that replacing obesity as a risk factor with food and physical activity cannot work as these are also individualistic problem constructions but does not consider the moral and aesthetic context of any social construction of body size and shape. Brownell (2012, p.e1001254) fails to interrogate the construction of the problem when he writes, based on his 30 years of experience in obesity research, 'when the history of the world's attempt to address obesity is written, the greatest failure may be collaboration with and appeasement of the food industry'.

The reason that tobacco control advocates and policy makers were able to break free from industry whereas obesity experts and policy makers have failed should be understood as importantly stemming from the inherently individualistic construction of the problem as an embodiment. Obesity as the central problem therefore weakens public and political support for social/systemic policy around all other secondary problem constructions, including food and physical activity. The role of the dominant construction of the problem as obesity in creating unproductive policy relationships between industry and government requires further attention in policy analysis research.

## 8.6 Different effects of the social health constructions of tobacco and obesity

Novak and Brownell (2012) investigate the role of policy and government in the obesity epidemic and conclude with the usual social health entreaty for more social/systemic and less individualistic policy solutions. Tellingly they list two social/systemic solutions as 'potentially powerful policies' being 'taxes on sugary drinks' and 'reducing

The social construction of obesity in an Australian preventive health policy food and beverage marketing to children' (ibid, p.2349). Both these problem constructions are around food (a substance) rather than obesity (a body characteristic). The parallel with tobacco is striking. Taxes and ad bans were the most effective policies implemented in Australia and they began in the early 1970s just a few years after governments began to construct tobacco as a public policy problem. The switch in tobacco control from a biomedical construction of the problem to a social health problem was swift. For obesity these same policy initiatives have been discussed, researched and advocated for around thirty years in health research and government documents with little resulting social health policy. It is even longer if we begin this history with the thorough review in 1979 by A.J. Stunkard of the 'social and environmental influences on obesity' for the U.S.A. National Institutes of Health (Nestle & Jacobson 2000, p.15).

Despite the consistent failure to promote or transform social health representations of obesity into policy problems, Novak and Brownell (2012) express no radical doubt around the problem representation itself. I argue the effect of the continued expression and promotion of social health representations of obesity as the 'best but unfortunately unviable alternative' acts to support the dominant biomedical representation which is then left as the only practical option for policy. This is expressed by Callahan (2013, p.34) who suggests a biomedical, individualistic, stigmatising representation of obesity is fine as 'obesity in America is so widespread and such a product of our culture that combating it is nearly impossible. We need to change almost everything about the way we live, more or less simultaneously'. Callahan (ibid) is explaining why the best alternative (changing social aspects) is unviable so a return to a heavier focus on the individual (the biomedical model) is warranted. By playing the role of the best but unfortunately impractical alternative (see Townend 2009, p.177) social health representations join with biomedical representations in silencing alternative representations that reject obesity as a viable problem representation for policy (see Bacon 2010 on the Health at Every Size (HAES) movement).

These more radical alternative representations work toward the same ultimate aim of reducing and preventing chronic disease at the population level (Butland et al 2007, p.74, Campbell & Campbell 2005; Campbell 2013). The North Karelia Project in Finland is an example of a problem representation that put food and tobacco at the centre of the problem to reduce CVD and subsumed obesity in a matrix of other risk

The social construction of obesity in an Australian preventive health policy factors such as physical activity (Butland et al 2007, p.74; Oppenheimer, Blackburn & Puska 2011, p.474). In this project solutions were limited and practical such as switching from butter to margarines, choosing low or non-fat milk and lean meat, increasing the consumption of vegetables, reducing salt intake and smoking cessation (ibid, p.475). This was a community-based intervention with strong public, health field and political support and was undertaken in a community with high risk for CHD (ibid). I argue an important factor was the extrinsic problem constructions, that is, food and tobacco rather than obesity. Over the 35 years from 1972 to 2007 there was an 80 per cent decline in coronary mortality with risk factor changes explaining 60 per cent of that reduction (for middle-aged men) (Vartiainen et al 2010, p504). Over this time, overall obesity rates rose steadily (ibid).

Smoking as a behaviour is strongly associated with disease but tobacco as a substance is now predominantly constructed as productive of that behaviour and that disease. Constructions of food as a dangerous substance have proven to be politically and economically difficult however these representations are beginning to appear in preventive health literature for example, in the grouping of disease-promoting or ultra-processed food (soft drink) with alcohol and tobacco (Moodie et al 2013) and in some foods being promoted as reducing chronic disease risk (Campbell & Campbell 2005; Esselstyn 2007). Such alternative problem constructions are moving away from the weakening effect of tying policy outcomes to changes in the prevalence of obesity.

#### 8.7 Radical alternative representations

Radical alternatives re-construct body fat away from obesity as a medicalised health problem in need of self-management toward body fat, shape and size as positive and private body characteristics to be regarded with respect by the individual and others. Other alternative representations embed obesity as a sub-problem in a matrix of other, and more dominant, risk factors. Public and health field resistance to the biomedical construction of obesity and to the negative body culture around shape and size is stronger now than it has been in past decades, with more celebration of larger bodies in mass media and marketing (Wolf 2002), open resistance to negative constructions of bigger/fatter bodies (De Brún et al 2014; Bacon & Aphramor 2014), the rise of both the fat acceptance movement and the sub-discipline, fat studies (Bacon 2010; Pause 2013), and the adoption of HAES principles and practices by growing numbers of health

The social construction of obesity in an Australian preventive health policy practitioners (Bacon 2010; Kausman 2012). Such positive constructions of body fat, shape and size are associated with better health behaviours and physical and psychosocial health outcomes as previously detailed.

These positive constructions and signs of resistance remain marginal compared to the negative body constructions by the media, marketing and industries in Australia. The role of obesity policy such as the Measure Up, Shape Up Australia, and LiveLighter campaigns in driving negative constructions of the body, and the ill-health effects that flow from those constructions, remain underexplored. Imagining how obesity could cease to be a preventive health problem is difficult given the entrenched position of this problem construction in research, practice and policy in most developed countries. However such imagining continues to exist, even in the most prestigious and formal government reports and literature. The British Foresight project report, *Tackling Obesities*, (Foresight 2006, emphasis and brackets in original) offers this 'wildcard' in a literature review, '...changes in 'fashions' might also include doctors/science losing credibility, fat being the new slim (over 50% of the developed world is overweight; when will we come out of the closet about liking the 'fuller figure'?)...'

Future research on 'weightless' preventive health policy aimed at preventing chronic disease could be modelled on extrinsic problem constructions in the manner of tobacco. Such representations could then be based on the social health concept of wholistic health and include both social/systemic and individualistic solutions. Just as important as this will be the work of building public support as occurred in tobacco control. The turn toward body positive constructions will be an essential part of public acceptance of alternative problem constructions such as food and physical activity. A comprehensive suite of strategies in the manner of tobacco control could include but not be dominated by social marketing, and could include initiatives at the primary health care level, such as programs around the SNAP (smoking, nutrition, alcohol and physical activity) risk factors already identified in GP guidelines (Royal Australian College of General Practitioners 2012). As discussed previously, the current lifestyle counselling approach by GPs is undermined by the focus on obesity and negative body constructions, as well as by the lack of practical, proven solutions for patients seeking to prevent chronic disease by attempting to prevent or reverse obesity.

One way to move towards public support for 'weightless' health is to widely communicate two contributing factors to the success of tobacco control, the link between the newly dominant problem representation (for example, food) and disease (such as DT2), and the effectiveness of practical, proven solutions. Firstly, the direct link between the risk factor as substance or activity, and disease and early death should be communicated, for example, using individuals and their stories, such as testimonials. The PPC is a great example of such communication as suggested earlier in a quote by Chapman and Freeman (2008) and this testimonial style of communication is recognised as effective by the media (Barry, Brescoll & Gollust 2013, p.328). In this way the link between food, physical activity, chronic stress, and disease and early death should be much better established in the wider society.

Secondly, the known practical, effective solutions to reducing those risk factors and reversing chronic disease should be communicated to the public. This would mean using the most successful, body positive, risk reduction programs available today including, the Whole Food Plant Based Diet approach that has been proven to reduce risk and chronic disease, such as DT2 and CVD (Esselstyn 2007; Campbell & Campbell 2005; Ornish 2010; Loomis 2015), body respect programs such as HAES (Bacon 2010), and chronic stress relief approaches, such as Mindfulness (Langer 2014 [1989]; Ornish 2010).

#### 8.8 Recovery by Numbers- An alternative policy proposal

Practical, effective steps and clear targets that are missing from obesity prevention can be provided in primary health care programs that have alternative problem representations. A 'weightless' health program for GPs and patients is suggested here, named for convenience, the Recovery by Numbers program. Such a program would go beyond the current SNAP risk factors and 5As model of chronic disease prevention as these are set out in the Royal Australian College of General Practitioners (2012, p.26) *Guidelines for Preventive Activities in General Practice*. Rather than the current recommendations to discuss lifestyle activities and monitor these such as how much a patient is smoking or drinking it is proposed that GPs could collaborate with patients and set quantitative targets around a fuller range of biomedical and behavioural risk indicators.

A simple patient-owned instrument could be a 'Recovery Diary' for patients to keep in collaboration with their GPs, for recording quantifiable risk indicators that do not include body weight, fat, shape or size measurement. The diary would be structured on the concept of wholistic health and could include, according to patient wishes, pages for recording personal stories and information important to the patient. Non-weight risk indicators such as cholesterol level, fasting blood glucose, glycated haemoglobin, and blood pressure along with cardiopulmonary fitness, lung capacity and muscle strength and psychosocial indicators could provide basic quantitative targets. GPs could add other measures as clinically indicated. These risk indicators would be targets for patients to aim for, could be coloured (traffic lights) according to risk level to produce an effective and simple visual and wholistic map of risk that records changes over time.

The basic idea of the Measure Up campaign to colour code risk to make it more personal for the individual is used here but there are three important differences. The dominant construction of the problem is external to the body (food, physical activity and chronic stress), there are practical, powerful, fast-acting solutions available, and the risk is diagnosed in collaboration with a medical professional, as is suggested by the Measure Up disclaimer and as is required for a valid assessment of chronic disease risk at the individual level (National Health & Medical Research Council 2013a).

Other similar reports and risk evaluation programs exist but are not comprehensive or collaborative enough, do not provide continuity, do not include colour coding or a simple visual map of quantitative risk indicators, or include a focus on weight for example, the Stroke Foundation, Know Your Numbers health check (Stroke Foundation 2014). More importantly such programs offer no direct and fast-acting link between biomedical indicators (such as cholesterol or blood pressure) and everyday activities such as food (where, for example, such indicators have been shown to decrease across a seven day period of consuming a whole food plant based diet – see McDougall et al 2014).

Such a program should be linked to allied health professionals providing weekly sessions and psychosocial support based on the successful risk reduction programs listed in the section above. Such a 'weightless' policy as Recovery by Numbers could be a practical beginning to change the construction of the problem away from body fat and towards more body positive, extrinsic problem constructions. Success in pilot

The social construction of obesity in an Australian preventive health policy programs could be communicated to the public to begin the work of constructing food, physical activity and chronic stress as problems that also have important social/systemic solutions, in the same way that tobacco is constructed in successful tobacco control policy today.

As extrinsic-to-the-body problems there is more likelihood of public acceptance of such problems as amenable to social/structural solutions such as government action on the marketing of disease-promoting food. Other examples include, widespread public understanding that fruit and vegetable consumption is a powerful factor in preventing and reversing DT2 could mean greater public resistance to the current Australian Government proposal to extend the Goods and Services Tax to include such foods. There could be greater public support for proposals to change industrial law to prevent long periods of enforced sedentary behaviour in many occupations such as taxi, bus or truck driving. Workplace bullying could be more widely seen as the health hazard it is and be better monitored and managed. Such social/structural proposals around extrinsic-to-the-body risk factors and wholistic constructions of health will mainly work in favour of health equity by providing most benefit to those with low income, low-level occupations and low education levels as per the examples listed above. Moving toward body positive initiatives will benefit poorer women who as a population cohort have bigger bodies (Australian Bureau of Statistics 2011b) and women in general who suffer more from fat stigma (Puhl & King 2013, p.113,119-120, Schwartz & Brownell 2004, p.43).

#### 8.9 Assumptions and effects of the alternative policy proposal

The CSC approach used in this thesis calls for the critical scrutiny of a specific instance of policy and for the same to be applied to any policy proposal put forward by the author. It is therefore necessary to analyse the presuppositions, assumptions and effects of the policy proposal detailed above. The main assumption underlying the policy proposed is that the utilitarian calculus of public health that weighs the bad against the good of any health activity, strategy or policy does not need to be analysed but simply used to determine a less harmful and more health promoting policy. The utilitarian calculus is a tool created by a political philosophy that privileges the values, as previously discussed, of social democracy, including social equity, social cohesion and social justice. Such underlying assumptions are difficult to support or to refute without

The social construction of obesity in an Australian preventive health policy a full political analysis that is beyond the scope of this thesis. The limited discussion, within the thesis of neo-liberal principles and their clash with social democratic values goes a small way towards supporting this assumption.

A second assumption is that obesity cannot be remodelled or re-constructed as a policy problem to tip the utilitarian calculus toward creating more health than harm. Many experienced social health researchers have argued against this assumption, that obesity could become an effective health policy. I have strived to explore such research thoroughly and argue carefully that it is not possible. This is a subjective argument that cannot be decisively determined. My defence of this assumption lies in the growing body of psychosocial research that concurs with this assumption. Also research and policy that constructs the problem as biomedical obesity is almost always lacking in indicators of psychological and social effects and therefore cannot refute this assumption. It is not possible to understand the harm done by a biomedical construction of obesity where that harm is not acknowledge or measured.

One important, underexplored and possible effect of the alternative policy proposal of weightless health is that it will encourage those who are at a heavier weight and at a higher risk for NCDs not to seek help or to try to change their risk for disease. Breaking the link between weight and health would be an irresponsible strategy if the policy did not promote a wholistic concept of health, a body positive approach, collaboration with medical practitioners, and a pragmatic strategy and have evidence that these constructions of the problem and key concepts and strategies have already been used to reduce NCDs and risk for NCDs.

#### 8.10 Conclusion

Most attempts in the literature to compare tobacco and obesity do not analyse the problem representations, their assumptions or effects. Yet, even a brief history of the social construction of obesity and tobacco exposes the importance of representations when analysing highly contested, conflicting and socially-complex preventive health problems. The social context of obesity around the body, the visual and identity separates this issue as highly visual, an embodied state, and almost immutable and so highly susceptible to stigmatisation. In contrast, tobacco is dominantly represented as a dangerous substance, extrinsic to the body and not highly visual or immutable.

The social construction of obesity in an Australian preventive health policy Therefore less stigma is generated by the secondary construction of smoking as a morally problematic individual behaviour.

Obesity was constructed in the early to mid-2000s as biomedical obesity at the highest level of government strategy that aimed to prevent and manage chronic disease. In tobacco control the dominant problem for policy became the social health construction of tobacco around the late 1970s and early 1980s and remains so today. This analysis reveals the stark differences in the problem representation between tobacco and obesity. The visual is presumed to be of vital, psychosocial importance for a small cigarette box, but is regarded as irrelevant or unimportant for the body, shape and size of individuals. The individualistic construction of obesity is made plain in the policy output of the Measure Up campaign just as the extrinsic-to-the-body representation of the problem is plain to see in the PPC. Tobacco as a dangerous substance is constructed in the total visual object of the plain cigarette packet covered in graphic health warnings.

Perhaps the most important findings from the obesity-tobacco comparison are the major effects. Constructing obesity as the dominant problem for policy to attempt to reduce chronic disease weakens alternative and less individualistic problem constructions. This acts as a barrier to public acceptance and support for more social/systemic policy solutions, for example, around food, and so relieves industry of responsibility and care. The dominant problem of tobacco as a dangerous substance in tobacco control policy has fostered public support for social/systemic policy solutions such as taxation, advertisement bans, marketing restrictions and the plain packaging of cigarettes, in the face of fierce opposition from the tobacco industry. The public, government and media have disconnected from industry constructions of the problem around individual responsibility, freedom and choice. Tobacco policy has been a slow but successful preventive health policy story. Such stark differences call for further research to better theorise the problems of obesity and tobacco, including analysing important underexplored assumptions and effects that impinge on policy outcomes and the examination of radical alternative constructions that decentre obesity.

An alternative policy called Recovery by Numbers is proposed that, like tobacco control, uses a problem construction that is extrinsic-to-the-body. The problem for policy is constructed using the social health model of wholistic health and a collaborative model of patient and health professional relationship somewhat like the

The social construction of obesity in an Australian preventive health policy integrative medicine model. The main problems for policy are three main risk factors, food, physical activity and chronic stress management. Although the program appears to target the individual and individual behaviour it does so within a positive psychological and social context in the same manner as the Health at Every Size program in California. There are several underexplored assumptions in the policy proposal including that, the utilitarian calculus of public health and the government project of decreasing NCDs can be accepted without critical analysis. These remain largely unanswered due to the limitations of the thesis. The most important underexplored, possible effect of the policy proposal is that breaking the link between weight and health will have poor biomedical outcomes at a population level. That is, those in the population who are bigger bodied will feel no need to change their risk for NCDs. Countering this, the policy proposed is set up to encourage people towards more accurate risk assessment, more practical and proven solutions and better psychosocial health outcomes.

## **Chapter 9**

### **Conclusion and future directions**

This thesis has used a critical social constructionism (CSC) methodology based in part on Bacchi's methodology called What's the problem represented to be? (WPR) to analyse the construction of the policy problem of obesity in an Australian government preventive health policy. This approach has encouraged the use of radical doubt as a research tool. This is necessary where largely unchanged policy has failed to deliver social change or better health over a long period of time. The critical social constructionism approach is particularly suited to problems such as obesity where there is a great diversity of, sometimes clashing and competing, problem representations produced within a complex social context. It has allowed a better view of the constraints created by knowledge paradigms, models and frames. This analysis was assisted by a range of methods including expert interviews used as additional expert discourse, the production of a schema of obesity representations as these are produced within academic research, the use of a single case study of obesity policy, the Measure Up campaign (2008-2013) and a brief comparison of tobacco and obesity as preventive health policy problems.

A limitation of this thesis is that the breadth and depth of analysis attempted means that some history, research and ideas have inevitably been excluded. I have attempted to use examples of discourse and lived effects that are of central importance or are typical examples to limit the arbitrariness of the sources of analysis. A criticism could be that I did not thoroughly investigate other interpretive approaches such as functionalism or a political economy approach that are also used in the analysis of health and illness (Lupton 2012a, p.5). My main defence of the choice of a critical social constructionism approach and the use, in part, of the WPR methodology of Bacchi (2009) is that social constructionism is a dominant theoretical perspective in the theorising of health and illness (Lupton 2012a, p.5) and, more subjectively, that the approach fitted so well with the research questions I was asking that I did not look beyond it.

Several limitations spring from the construction of the schema of obesity representations. The lines that delimit each category are fuzzy in the sense that representations often have shared aspects, such as some causes or the centrality of the

The social construction of obesity in an Australian preventive health policy individual. Some representations subsume others within them making the schema appear redundant or at least less useful in clarifying the differences between representations. These problems may be ameliorated if more time and effort is dedicated to refining the schema in the future.

The author's own-frame is always a limitation of any thesis. To reduce this problem I have strived to openly air my own principles of social democracy many of which conflict with neo-liberal principles that are currently dominant in policy development in Australia. For example the concentration on the generation of stigma and the importance of the negative body culture to the preventive health project reveal the value I place on social cohesion, justice and equity. Finally, inadequate space has been given in this thesis to do justice to the exciting alternative problem constructions to obesity that are being produced in health research, practice and policy. These alternative representations are important to the finding that obesity is not the only, nor the best, problem representation available to the project of reducing preventable chronic disease in Australia. On the whole, I argue these limitations may weaken parts of the thesis but do not negate the overall findings.

The obesity field consists of disparate and conflicted groups and views, with the dominant biomedical representation of obesity under constant challenge from other biomedical, social health and alternative representations of the problem. There is evidence that the biomedical construction of obesity as this is produced in the clinic and in health policy does not diminish but rather reifies the strong, negative moral and aesthetic assumptions around body shape and size held by many in the general public. Within this social context, even when taking into account the 'sensitivity' of the practitioner or the policy, representing the problem as obesity generates stigma and iatrogenic effects. Finally and probably most importantly, obesity policy has no record of success in decreasing population levels of obesity. Yet the policy is successful in other respects that are important to neo-liberal governments including that it places the responsibility for action onto individuals, provides commercial liberties and opportunities for industry, relieves government and the health field of responsibility and dovetails with popular public opinion that constructs the individual as central to issues of body fat, shape and size.

Obesity policy reflects the narrow, biomedical construction of the problem set at the strategic level of public policy in the early to mid-2000s. The construction of tobacco as a dangerous substance in the Australian government Plain Packaging of Cigarettes policy (PPC) is the same construction that has dominated since the late 1970s and early 1980s. The power of the PPC initiative to de-glamorise tobacco and prevent the uptake of smoking is founded on several important assumptions including the widespread public acceptance of the dominant construction of tobacco as a dangerous substance and as a legitimate target for social/systemic public policy, and widespread mistrust of the tobacco industry.

This is compared to the embedding of interested industries (as discussed) in obesity policy that has been deepening as the prevalence of obesity has risen. Rather than splitting the health and industry apart, the inherently individualistic construction of the problem as obesity is dominant in both. This, along with obesity, as a policy problem, being almost immutable and at the individual level having strong iatrogenic psychosocial outcomes, means the health field and industry aim for very different effects but actually work in concert to drive down the possibility of social/systemic policy solutions to the prevalence of NCDs. To date, social health research that exposes parallels between big food and big tobacco rarely identifies the construction of the problem as obesity in policy as a major problem.

Radical alternatives to obesity are already being produced by research, policy and practice in the Australian preventive health field. The Health at Every Size movement in the US has over a decade of success in breaking the weight equals health concept and moving towards body respect, more positive food relationships, joy in movement and lower risk for chronic disease. The US based Whole Food Plant Based Diet movement has decades of research findings around dramatic falls in chronic disease risk where food is constructed as the dominant problem, and the North Karelia project in Finland has 35 years of success in this area (Vartiainen et al 2010). I argue that, as public support for social/systemic solutions such as advertising bans is strongly linked to less individualistic problem constructions, a turn away from obesity and toward extrinsic-to-the-body constructions such as food or physical activity is needed to generate public support for these more effective policies.

I have outlined what I call a 'weightless' primary health care initiative for Australia that would use extrinsic problem constructions such as food, physical activity and chronic stress relief, a collaborative relationship between GPs and patients and practical, effective solutions such as clearly defined targets to effect better prevention, and reduce the prevalence of NCDs. A program such as this will have the difficulties inherent in any preventive health project that; seeks to affect the complex and messy, day-to-day, personal activities of people across every aspect of their lives, aims to generate social disapproval (of some behaviours such as over-drinking, eating unhealthy food, smoking) and requires politically difficult social/systemic change (such as bans on advertising, regulation of food labelling). I argue such health practices and policy will avoid the burden of attempting to affect an immutable problem, that is population-levels of body shape and size, and will have a much greater chance of generating less stigma and more social cohesion.

I would like to see researchers, health practitioners and policymakers take up the challenge of 'weightless' practices and programs promoted by this thesis. Such extrinsic-to-the-body problem constructions will be able to take advantage of many of the strategies that have made tobacco control a successful preventive health policy. I suggest the three most important of these advantages will be more effective policies and strategies at the clinical and community level, far less shaming of the individual and a reduction in the psychosocial harm that causes, and greater public support for more effective social/systemic public policy. Aside from tobacco policy, I see this change in what the problem is represented to be as the beginning of effective day-to-day preventive health policy in Australia. Such policy change has the potential to eclipse tobacco control's slow but successful record in reducing major, preventable chronic disease in Australia.

## Appendix 3.1

#### List of 22 expert interviewees

Caterson, Ian Crawford, David

Professor of Human Nutrition, Professor/Head of School and Deputy

Director, Dea

The Boden Institute of Obesity School of Exercise and Nutrition

Nutrition, Exercise & Eating Disorders Sciences

The University of Sydney, NSW Faculty of Health

Deakin University, VIC

Carnell, Kate

Chief Executive Dunford, Elizabeth

Australian Food & Grocery Council The George Institute for Global Health

Canberra, ACT Sydney NSW

Carter, Stacy Friel, Sharon

Senior Lecturer in Qualitative Research Professor

in Health National Centre for Epidemiology and

Centre for Values, Ethics & Law in Population Health

Medicine (VELIM) Australian National University

The University of Sydney, NSW Canberra, ACT

Chapman, Simon Furler, Liz

Professor of Public Health and Director Chief Executive Officer

of Research, Public Health Principals Australia

School of Public Health Canberra, ACT

The University of Sydney

Greenland, Rohan

Government Relations Advisor

**Heart Foundation** 

Canberra, ACT

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## Appendix 3.1 cont...

Kelly, Paul Public Servant

Chief Health Officer Australian National Preventive Health

ACT Health, ACT Agency

Canberra, ACT

Martin, Jane

Senior Policy Advisor Public Servant

Obesity Policy Coalition Department of Health, Victoria

Melbourne, VIC VIC

Moodie, Robert Stanton, Rosemary

Professor Nutritionist

Nossal Institute for Global Health Retired

Melbourne, VIC NSW

Moore, Michael Swinburn, Boyd

President Alfred Deakin Professor of Population

Public Health Association of Australia Health

Canberra, ACT Deakin University, VIC

Director

Public Servant WHO Collaborating Centre for Obesity

Department of Health and Ageing Prevention

Canberra, ACT VIC

Public Servant Williams, Lauren

Australian National Preventive Health Professor, Head of Discipline

Agency Nutrition & Dietetics

Canberra, ACT University of Canberra, ACT

Public Servant Zimmet, Paul

Australian National Preventive Health Professor

Agency Baker IDI Heart and Diabetes Institute

Canberra, ACT Melbourne, VIC

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## Appendix 4.1

Biomedical and social paradigm characteristics relevant to what obesity is represented to be in the health field

Biomedical/Expert	Biomedical/Population	Social Health
(B/E)	(B/P)	(S/H)
Main areas of activity	Main areas of activity	Main areas of activity
Therapeutic - physical	Therapeutic and	Preventive –non-
disease, infectious	preventive- non-	communicable <sup>+</sup> chronic
disease,	communicable <sup>+</sup> chronic	disease
genetic disease	disease	mainly primary and
-mainly acute care	mainly secondary and	secondary prevention
e.g. Surgical intervention	tertiary prevention, acute	e.g. health promotion,
Pharmacology	episodic and long-term	social equity initiatives
	therapeutic management	
	and prevention of chronic	
	disease	
Representation of Health	Representation of Health	Representation of Health
-Health as absence of	Nests BE representations	Nests B/E & B/P
disease;	to varying degrees	representations to varying
-Bodies are like machines	according to the	degrees according to the
- Single causes/single	research/policy	research/policy
cures for separate	Main differences (from B/E)	Main differences (from B/E
diseases	-Health as responsibility of	and B/P)
-Separation of body	individual around	-Health as holistic (WHO)
(physical health) and mind	behaviour, also secondary	wellbeing is physical,
(mental health)	government responsibility	mental & social
-Illness as primarily the	- Main prevention activities,	-Health as primarily
responsibility of health	public policy to educate, up-	responsibility of society inc.
experts and individuals as	skill and urge individuals in	government, industry,
patients	specific or general	health system, NGOs, and
- Main activities focus on	population groups toward	secondarily the
the individual body and	acceptance of the dominant	responsibility of individuals
the aggregation of	biomedical/population	-Main focus of research
individual bodies into	representation of the	and policy is on change at
population groups/bodies	problem and solutions	the social/systemic level

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## Appendix 4.1 cont...

Main research groups of	Main research groups of	Main research groups of
B/E	B/P	S/H
Clinical research	Epidemiology - especially	Social epidemiology -
Epidemiology - especially	chronic disease	especially through
infectious disease	Behavioural science -	qualitative research
	including most weight	Sociology/Anthropology
	intervention research	Behavioural sciences
		Psychology - most
		psychosocial research
		around fat bias, stigma and
		discrimination
Dominant representation	Dominant representation in	Alternative representations
in medical care and	population health research	Social Health, Psychosocial
research	and policy	Health & some Critical
		Studies

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## **Appendix 4.2**

### Schema of representations of obesity in academic research

#### Biomedical -

includes both the biomedical/ expert representation and the biomedical/ population representation described in Appendix 4.1

### **Assumptions**

- Health is represented as most importantly physiological and is an assumed priority for individuals and society.
- Obesity is a disease, a biological risk factor and a population health crisis or epidemic.
- Problem should be expert led (biomedical/clinical/behavioural)
   with the individual as the unit of analysis/patient and individual
   behaviour as the main cause and solution.
- The patient is a rational, autonomous individual with poor knowledge/behaviour or lack of self-discipline.
- Lifestyle is a problem of individual behaviour, choice and responsibility.
- Representations of a biomedical problem do not need to reference the social context.
- As in therapeutic/infectious disease research and care, proximal factors are the most effective and efficient targets in preventive health research. For obesity that is therapeutic reduction of body fat through surgery or drugs and instructions by health professionals on eating and exercising.
- Biomedical research is the only research that meets the standard set by evidence-based policy according to the hierarchy of evidence that begins with randomised controlled trials.
- Evidence-based policy models create policy that is more rational, value-neutral, scientifically objective, and so are more likely to produce the best policy outcomes.
- It is possible to educate populations to adopt the biomedical representation of obesity to the exclusion of other representations as per infectious disease model and practice.
- For best efficiency and effectiveness preventive health policy solutions to biomedical problems such as obesity should be based on medical systems and expertise, and on values of individualism, minimal government regulation and economism.

### Appendix 4.2

**Effects** 

# Biomedical cont...

includes both the biomedical/ expert representation and the biomedical/ population representation described in Appendix 4.1

- This representation of obesity fits with the current structure of bureaucracy, neo-liberal values, does not disrupt commercial interests, and fits with and promotes the wide-spread harsh body culture that represents obesity as a problem of individual behaviour, morality and aesthetics.
- Biomedical representation of obesity excludes other representations such as social health, psychosocial, and critical studies and so locks out other assumptions and effects.
- Biomedical representation of obesity used in preventive health policy produces iatrogenic effects such as weight stigma and discrimination, depression and anxiety, damage to social cohesion and poorer health behaviours in some individuals and population groups.

### Social Health

### **Assumptions**

- Health is represented as physiological but more importantly socially determined.
- Problem should be social health expert led and government actioned.
- Individuals are constructed as citizens with poor access to resources/status/environmental/sociocultural conditions.
- Any representation of obesity in the context of preventive health research or policy must refer to the social context with an emphasis on environment and social determinants of health.
- It is possible to nest the biomedical construction of obesity
  within more dominant social constructions of causes and
  solutions. This will enable more effective and efficient policy
  solutions to a broad range of health and well-being problems
  including the prevention of a range of NCDs.
- Social values such as social and health equity should underpin health research and action.
- A stewardship model of governing is promoted around social equity as a social justice issue and health as a human right.

### Effects

 Representation of obesity as a complex social problem with multifactorial causes and solutions clashes with the biomedical representation of obesity as a disease and a biological risk factor mainly around the assumptions of individual versus

### Appendix 4.2

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# Social Health cont...

social/systemic causes and solutions, and reductionist biological concept of health versus a broader concept of physical, mental and social well-being.

- Social health representations clash with stated neo-liberal political values of government especially individualism and minimal government regulation of the market.
- Social health representations of obesity do not match the current siloed structure of the bureaucracy, narrow, rational models of policy or the requirements of evidence-based policy including the need for measureable short-term outcomes. As such these representations are confined to strategic statements and do not appear in preventive health policy initiatives at the operational level.
- Representation of obesity as a health problem amenable to complex socioenvironmental solutions does not match the wide-spread public and media representation of obesity as a behavioural, moral, and aesthetic problem of individuals, or as not an important health problem.

### Psychosocial Health

### Assumptions

- Health is represented as both physiological and psychosocial
- Obesity is a physiological problem but more importantly a psychosocial problem.
- Problem should be led by psychosocial experts and government actioned.
- Weight, body shape and body size as targets of preventive health policy have under-acknowledged and important iatrogenic psychosocial effects.
- Psychosocial health splits in assumptions as:
- 1. Assumption that it is possible to ameliorate negative psychosocial effects of the representation of the problem as obesity in policy through changing stigmatising culture, or by make obesity policy salutogenic in total effect. That is the negative psychosocial effects do not outweight the positive physiological effects of an obesity focus in policy.

# Appendix 4.2 Psychosocial Health cont...

• 2. Assumption that the overall effect of a focus on obesity is iatrogenic especially through negative psychosocial effects.

### Effects

- Representation of obesity as importantly psychosocial that is both psychological and social and this directly contradicts the representation of obesity as mainly a physiological problem that is importantly biological, behavioural, and individual.
- Psychosocial representation of the problem as a problem for society or government does not match the wide-spread public and media representation of obesity as a moral and aesthetic problem for individuals or not an important health problem.
- Psychosocial effects are sometimes acknowledged then ignored or dismissed in policy constructing a biomedical representation of the problem.
- Representation of the problem as one of social pathology as generating fat bias, stigma and discrimination directly contradicts the biomedical representation of obesity as an important physiological disease/risk factor that assumes no important negative psychosocial effects.

### Critical Studies

### Assumptions

- Any interpretation of the referent reality of body fat and disease, (such as, in the representation of obesity in research and policy) is socially constructed and needs to be analysed for underexplored socio-political assumptions and effects, outcomes and interests.
- A dominant representation and alternative representations exist and need to be explored.
- Dominant constructions are of weight as a government problem and so a governing tool.
- The subjectification of target groups needs analysis.
- Poor science underpins the construction of obesity as a biomedical problem and as an epidemic in terms of population health.
- Alternative representations of obesity such as social health and psychosocial health also have hidden or underexplored assumptions and effects, especially around the governing of populations.
- Indigenous representations of obesity are silenced and need to be researched and understood.

# Appendix 4.2 Critical Studies cont...

### Effects

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- Representations of the problem in critical studies research have important political, economic, social and cultural effects that clash with those of the dominant biomedical representation of obesity.
- Critical studies representations of the problem are unable to be reconciled with biomedical representations but struggle to deny or include the referent reality of body fat and links with disease at the population level.
- Representing the problem as socially constructed is politically dangerous as recognition of alternative representations such as social health and psychosocial health are a major threat to those with vested interests in the individualised problem and biomedical models of health. Those threatened include; biomedical professionals, institutions, and researchers, commercial industries and commercially funded nongovernment interests, independent obesity prevention NGOs, and groups within the population who perceive the problem to be that of the individual rather than a problem shared between the individual and society.

### References

Adler, NE & Stewart, J 2009, 'Reducing obesity: motivating action while not blaming the victim', *Milbank Quarterly*, vol. 87, no. 1, pp. 49-70.

Alberti, K Zimmet, P & Shaw, J 2005, 'The metabolic syndrome - a new worldwide definition', *The Lancet*, vol. 366, no. 9491, pp. 1059-62.

Alexander, H 2014, 'Plunge in smoking attributed to plain packaging', *The Sydney Morning Herald*, 17 July, viewed 20 Aug 2014,

http://www.smh.com.au/federal-politics/political-news/plunge-in-smoking-attributed-to-plain-packaging-20140716-ztqht.html.

Allison, DB Downey, M Atkinson, RL Billington, CJ Bray, GA Eckel, RH Finkelstein, EA Jensen, MD & Tremblay, A 2008, 'Obesity as a disease: a white paper on evidence and arguments commissioned by the Council of the Obesity Society', *Obesity*, vol. 16, no. 6, pp. 1161-77.

Anderson, JW Konz, EC Frederich, RC & Wood, CL 2001, 'Long-term weight-loss maintenance: a meta-analysis of US studies', *The American Journal of Clinical Nutrition*, vol. 74, no. 5, pp. 579-84.

Andreyeva, T Puhl, RM & Brownell, KD 2008, 'Changes in perceived weight discrimination among Americans, 1995–1996 through 2004–2006', *Obesity*, vol. 16, no. 5, pp. 1129-34.

Antonovsky, A 1996, 'The salutogenic model as a theory to guide health promotion', *Health Promotion International*, vol. 11, no. 1, pp. 11-8.

Aphramor, L 2005, 'Is a weight-centred health framework salutogenic? Some thoughts on unhinging certain dietary ideologies', *Social Theory & Health*, vol. 3, no. 4, pp. 315-40.

Apollonio, D & Malone, R 2009, 'Turning negative into positive: public health mass media campaigns and negative advertising', *Health Education Research*, vol. 24, no. 3, pp. 483-95.

Armstrong, T Bauman, A & Davies, J 2000, *Physical activity patterns of Australian adults: Results of the 1999 National Physical Activity Survey, cat. no. CVD 10*, Australian Government, AIHW, Canberra.

American Medical Association 2013, *Resolution 420(A13): Recognition of obesity as a disease*, AMA, Chicago, viewed 25 March 2014, www.npr.org/documents/2013/jun/ama-resolution-obesity.pdf.

Australian Better Health Initiative 2012, *ABHI Measure Up campaign: summary sheet*, Australian Government, Canberra, viewed 12 September 2012, http://www.healthnetworks.health.wa.gov.au/abhi/docs/ABHI\_measureUp\_campaign.p df.

Australian Bureau of Statistics 2006, *Cardiovascular disease in Australia: a snapshot*, 2004-05, cat. no. 4 821.0.55.001, Australian Government, Canberra, viewed 20 November 2014, via AusStats database.

- ---- 2008, *Overweight and Obesity in adults, Australia, 2004-05*, cat. no. 4719.0, Australian Government, Canberra, viewed 20 August 2014, via AusStats database.
- ---- 2011a, *Physical activity in Australia: a snapshot, 2007-08*, cat. no. 4835.0.55.001, Australian Government, Canberra, viewed 3 February 2014, via AusStats database.
- ---- 2011b, *Overweight and obesity, 2011-2012*, cat.no. 4364.0.55.003, Australian Government, Canberra, viewed 6 April 2016, via AusStats database.
- ---- 2013, *Profiles of Health, Australia, 2011-13, overweight and obesity*, cat. no. 4338.0, ABS, Canberra, viewed 19 November 2015, via AusStats database.

Australian Institute of Health and Welfare 2010, *Cardiovascular disease mortality*, *Trends at different ages*, cat. no. CVD 47, AIHW, Canberra, viewed 15 October 2013, www.aihw.gov.au/publication-detail/?id=6442468344.

- ---- 2011, Cardiovascular disease: Australian facts 2011, AIHW, Canberra, viewed 14 August 2013, www.aihw.gov.au/publication-detail/?id=10737418510.
- ---- 2014a, *Trends in cardiovascular disease*, AIHW, Canberra viewed 26 May 2014, http://www.aihw.gov.au/cardiovascular-health/trends/.
- ---- 2014b, *National health priority areas*, AIHW, Canberra, viewed 20 December 2014, http://www.aihw.gov.au/national-health-priority-areas/.

Australian National Preventive Health Agency 2013, *State of Preventive Health 2013*. *Report to the Australian Government Minister for Health*, Australian Government, Canberra, viewed 3 July 2014,

http://www.anpha.gov.au/internet/anpha/publishing.nsf/Content/state-of-prev-health-2013.

---- 2014, *News: Budget outcome for ANPHA*, ANPHA, Canberra, viewed 18 June 2014, http://www.anpha.gov.au/internet/anpha/publishing.nsf/Content/news-20120514.

Australian Senate 2005, Senate Hansard, Tuesday, 8 February 2005, Select committee on the administration of Indigenous affairs, Australian Parliament, Canberra, viewed 23 August 2014,

http://www.aph.gov.au/~/media/wopapub/senate/senate/commttee/S8106\_pdf.ashx.

Bacchi, CL 1999, *Women, policy and politics: The construction of policy problems*, Sage Publications Ltd, London.

---- 2009, *Analysing Policy: What's the problem represented to be?*, Pearson Australia, Sydney.

Bacon, L 2010, *Health at every size: The surprising truth about your weight*, BenBella Books, Dallas.

Bacon, L & Aphramor, L 2011, 'Weight science: evaluating the evidence for a paradigm shift', *Nutrition Journal*, vol. 10, no. 9, pp. 2-13.

---- 2014, Body respect: What conventional health books get wrong, leave out, and just plain fail to understand about weight, BenBella Books, Dallas.

Bacon, L Stern, JS Van Loan, MD & Keim, NL 2005, 'Size acceptance and intuitive eating improve health for obese, female chronic dieters', *Journal of the American Dietetic Association*, vol. 105, no. 6, pp. 929-36.

Banwell, C & Bammer, G 2006, 'Maternal habits: Narratives of mothering, social position and drug use', *International Journal of Drug Policy*, vol. 17, no. 6, pp. 504-13.

Banwell, C Hinde, S Dixon, J & Sibthorpe, B 2005, 'Reflections on expert consensus: a case study of the social trends contributing to obesity', *The European Journal of Public Health*, vol. 15, no. 6, pp. 564-8.

Barlow, J 2012, 'Cleo Magazine: Stop digitally altering images to change appearances', *Change.org blog*, web log post, 26 October 2012, viewed 14 Apr 2014, https://www.change.org/p/cleo-magazine-stop-digitally-altering-images-to-change-appearances-realgirlscleo.

Barry, CL Brescoll, VL Brownell, KD & Schlesinger, M 2009, 'Obesity metaphors: how beliefs about the causes of obesity affect support for public policy', *Milbank Quarterly*, vol. 87, no. 1, pp. 7-47.

Barry, CL Brescoll, VL Gollust, SE 2013, 'Framing Childhood Obesity: How individualizing the problem affects public support for prevention', *Political Psychology*, vol. 34, no. 3, pp. 327-349.

Bastian, A 2011, 'Representations of childhood obesity in Australian newsprint media and academic literature', *Australian and New Zealand Journal of Public Health*, vol. 35, no. 2, pp. 135-9.

Baum, F 2007, 'Cracking the nut of health equity: top down and bottom up pressure for action on the social determinants of health', *Promotion & Education*, vol. 14, no. 2, pp. 90-5.

- ---- 2008a, 'The Commission on the Social Determinants of Health: reinventing health promotion for the twenty-first century?', *Critical Public Health*, vol. 18, no. 4, pp. 457-66.
- ---- 2008b, *The New Public Health*, 3rd edn, Oxford University Press, Melbourne.
- ---- 2009a, 'Reducing health inequities requires a new national health research agenda', *Health Promotion Journal of Australia*, vol. 20, no. 3, pp. 163-4.
- ---- 2009b, 'Prevention: the Commission on the social determinants of health and recasting the debate to focus on health and wellbeing', *Public Health Bulletin SA*, vol. 6, no. 1, pp. 16-20.
- ---- 2010, 'Overcoming barriers to improved research on the social determinants of health', *MEDICC Review*, vol. 12, no. 3, pp. 36-8.

Bauman, A Armstrong, T Davies, J Owen, N Brown, W Bellew, B & Vita, P 2003, 'Trends in physical activity participation and the impact of integrated campaigns among Australian adults, 1997–99', *Australian and New Zealand Journal of Public Health*, vol. 27, no. 1, pp. 76-9.

Bayer, R 2008, 'Stigma and the ethics of public health: not can we but should we', *Social Science & Medicine*, vol. 67, no. 3, pp. 463-72.

Beck, U 1992, Risk Society: Towards a new modernity, Sage Publications London.

Becker, AE Burwell, RA Herzog, DB Hamburg, P & Gilman, SE 2002, 'Eating behaviours and attitudes following prolonged exposure to television among ethnic Fijian adolescent girls', *The British Journal of Psychiatry*, vol. 180, no. 6, pp. 509-14.

Bell, K McNaughton, D & Salmon, A 2011, 'Introduction', in K Bell, D McNaughton & A Salmon (eds), *Alcohol, tobacco, obesity and the new public health*, Routledge, London, pp. 1-16.

Berger, J 1972, Ways of seeing, Penguin Group, London.

Blouin, C & Dubé, L 2010, 'Global health diplomacy for obesity prevention: Lessons from tobacco control', *Journal of Public Health Policy*, vol. 31, no. 2, pp. 244-55.

Blue Moon 2007, Australian better health initiative: Diet, exercise and weight, developmental communications research report, Bluemoon Research & Planning Pty Ltd, Sydney.

Boero, N 2007, 'All the news that's fat to print: the American "obesity epidemic" and the media', *Qualitative Sociology*, vol. 30, no. 1, pp. 41-60.

---- 2013, 'Obesity in the media: social science weighs in', *Critical Public Health*, vol. 23, no. 3, pp. 371-80.

Bonfiglioli, CM Smith, BJ King, LA Chapman, SF & Holding, SJ 2007, 'Choice and voice: obesity debates in television news', *Medical Journal of Australia*, vol. 187, no. 8, pp. 442-5.

Booth, AO & Nowson, CA 2010, 'Patient recall of receiving lifestyle advice for overweight and hypertension from their general practitioner', *BMC Family Practice*, vol. 11, no. 1, pp. 8.

Bordo, S 1993, *Unbearable weight: Feminism, Western culture and the body*, University of California Press, Berkeley.

---- 2003, *Unbearable weight: Feminism, Western culture, and the body*, 2nd edn, University of California Press, Berkeley.

Brennan, L & Binney, W 2010, 'Fear, guilt, and shame appeals in social marketing', *Journal of Business Research*, vol. 63, no. 2, pp. 140-6.

Brewis, AA Wutich, A Falletta-Cowden, A & Rodriguez-Soto, I 2011, 'Body norms and fat stigma in global perspective', *Current Anthropology*, vol. 52, no. 2, pp. 269-76.

Broom, D 2008, 'Hazardous good intentions? Unintended consequences of the project of prevention', *Health Sociology Review*, vol. 17, no. 2, pp. 129-40.

Broom, DH & Dixon, J 2007, 'Introduction: Seven modern environmental sins of obesity', in J Dixon & DH Broom (eds), *The seven deadly sins of obesity: how the modern world is making us fat*, UNSW Press, Sydney, pp. 1-19.

Brownell, KD 1991, 'Dieting and the search for the perfect body: Where physiology and culture collide', *Behavior Therapy*, vol. 22, no. 1, pp. 1-12.

---- 2012, 'Thinking forward: the quicksand of appeasing the food industry', *PLoS Medicine*, vol. 9, no. 7, pp. e1001254.

Brownell, KD & Frieden, TR 2009, 'Ounces of prevention-the public policy case for taxes on sugared beverages', *New England Journal of Medicine*, vol. 360, no. 18, pp. 1805-8.

Brownell, KD Kersh, R Ludwig, DS Post, RC Puhl, RM Schwartz, MB & Willett, WC 2010, 'Personal responsibility and obesity: a constructive approach to a controversial issue', *Health Affairs*, vol. 29, no. 3, pp. 379-87.

Brownell, KD & Warner, KE 2009, 'The perils of ignoring history: Big tobacco played dirty and millions died. How similar is big food?', *Milbank Quarterly*, vol. 87, no. 1, pp. 259-94.

Bunton, R ows, R & Nettleton, S 2003, *The sociology of health promotion: critical analyses of consumption, lifestyle and risk*, Routledge, London.

Burgard, D 2009, 'What is "Health at Every Size"?', in ED Rothblum & S Solovay (eds), *The Fat Studies Reader*, New York University Press, New York, pp. 42-53.

Burr, V 2003, Social Constructionism, 2nd edn, Routledge, New York.

Burris, S 2008, 'Stigma, ethics and policy: A commentary on Bayer's "Stigma and the ethics of public health: Not can we but should we", *Social Science & Medicine*, vol. 67, no. 3, pp. 473-5.

Butland, B Jebb, S Kopelman, P McPherson, K Thomas, S Mardell, J & Parry, V 2007, *Foresight. Tackling obesities: Future choices*, Government Office for Sciences London, viewed 26 September 2012, http://www.foresight.gov.uk.

Byers, T & Sedjo, RL 2007, 'Public health response to the obesity epidemic: too soon or too late?', *The Journal of Nutrition*, vol. 137, no. 2, pp. 488-92.

Caldwell, J 2001, 'Population health in transition', *Bulletin of the World Health Organization*, vol. 79, pp. 159-60.

Callahan, D 2013, 'Obesity: chasing an elusive epidemic', *Hastings Center Report*, vol. 43, no. 1, pp. 34-40.

Callahan, LF & Pincus, T 1997, 'Education, self-care, and outcomes of rheumatic diseases: Further challenges to the "biomedical model" paradigm', *Arthritis & Rheumatism*, vol. 10, no. 5, pp. 283-8.

Campbell, TC 2013, Whole: rethinking the science of nutrition, BenBella Books, Dallas.

Campbell, TC & Campbell, TM 2005, The China Study, BenBella Books, Dallas.

Campbell, K Engel, H Timperio, A Cooper, C & Crawford, D 2000, 'Obesity management: Australian general practitioners' attitudes and practices', *Obesity Research*, vol. 8, no. 6, pp. 459-66.

Campos, P Saguy, A Ernsberger, P Oliver, E & Gaesser, G 2006, 'The epidemiology of overweight and obesity: public health crisis or moral panic?', *International Journal of epidemiology*, vol. 35, no. 1, pp. 55-60.

Cancer Council Victoria 2007, *Why did the Cancer Council develop an obesity prevention campaign?*, media release, 31 May 2007, viewed 27 October 2014, http://www.cancervic.org.au/about/media-releases/2007\_media\_releases/media\_releases\_may\_2007/obesity\_prevention\_media.html.

Caprio, S Daniels, SR Drewnowski, A Kaufman, FR Palinkas, LA Rosenbloom, AL & Schwimmer, JB 2008, 'Influence of Race, ethnicity, and culture on childhood obesity: implications for prevention and treatment', *Diabetes Care*, vol. 31, no. 11, pp. 2211-21.

Carr, D & Friedman, MA 2005, 'Is obesity stigmatizing? Body weight, perceived discrimination, and psychological well-being in the United States', *Journal of Health and Social Behavior*, vol. 46, no. 3, pp. 244-59.

Carter, P Gray, LJ Troughton, J Khunti, K & Davies, MJ 2010, 'Fruit and vegetable intake and incidence of type 2 diabetes mellitus: systematic review and meta-analysis', *BMJ*, vol. 341, pp. c4229.

Carter, SM Rychetnik, L Lloyd, B Kerridge, IH Baur, L Bauman, A Hooker, C & Zask, A 2011, 'Evidence, ethics, and values: a framework for health promotion', *American Journal of Public Health*, vol. 101, no. 3, pp. 465-72.

Chapman, S 2007, *Public Health Advocacy and Tobacco Control: Making Smoking History*, Blackwell Publishing, Oxford.

Chapman, S & Carter, S 2003, "'Avoid health warnings on all tobacco products for just as long as we can": a history of Australian tobacco industry efforts to avoid, delay and dilute health warnings on cigarettes', *Tobacco Control*, vol. 12, no. S3, pp. iii13-iii22.

Chapman, S & Freeman, B 2008, 'Markers of the denormalisation of smoking and the tobacco industry', *Tobacco Control*, vol. 17, no. 1, pp. 25-31.

---- 2014, 'Removing the emperor's clothes: Australia and tobacco plain packaging', *Sydney University Press*, viewed 12 December 2014, http://purl.library.usyd.edu.au/sup/9781743323977

Chapman, S Haynes, A Derrick, G Sturk, H Hall, WD & St. George, A 2014, 'Reaching "an audience that you would never dream of speaking to": influential public health researchers' views on the role of news media in influencing policy and public understanding', *Journal of Health Communication*, vol. 19, no. 2, pp. 260-73.

Chopra, M & Darnton-Hill, I 2004, 'Tobacco and obesity epidemics: not so different after all?', *BMJ*, vol. 328, no. 7455, pp. 1558-60.

Coalition of Australian Governments Reform Council 2007, *Communique: 20 December 2007*, viewed 8 December 2015,

https://www.coag.gov.au/sites/default/files/Communique%2020%20December%202007.pdf

Coalition of Australian Governments Reform Council 2012, *National Healthcare Agreement 2012*, COAG, Canberra.

Coalition of Australian Governments Reform Council 2014, *Healthcare in Australia* 2012-13: five years of performance, COAG, Canberra.

Cockerham, WC 2005, 'Health lifestyle theory and the convergence of agency and structure', *Journal of Health and Social Behavior*, vol. 46, no. 1, pp. 51-67.

---- 2007, Social causes of health and disease, Polity Press, Cambridge.

Concato, J Shah, N & Horwitz, RI 2000, 'Randomized, controlled trials, observational studies, and the hierarchy of research designs', *New England Journal of Medicine*, vol. 342, no. 25, pp. 1887-92.

Coveney, J 2006, Food, morals and meaning: The pleasure and anxiety of eating, 2nd edn, Routledge, London.

Creagh, S 2013, 'Anti-obesity app shows user their overweight future', *The Conversation*, 11 August 2013, viewed 21 April 2014, http://theconversation.com/anti-obesity-app-shows-users-their-overweight-future-16943

Cuban fury 2014, movie, StudioCanal, United Kingdom.

Daube, M 2012, 'In praise of Australia's best minister for prevention', *The Conversation*, 6 July, viewed 31 Jul 2012,

http://theconversation.com/in-praise-of-australias-best-minister-for-prevention-8051

De Brún, A McCarthy, M McKenzie, K & McGloin, A 2014, 'Weight stigma and narrative resistance evident in online discussions of obesity', *Appetite*, vol. 72, pp. 73-81.

Department of Agriculture, Fisheries & Forestry 2012, *National food plan green paper 2012*, Australian Government, Canberra.

Department of Health & Ageing 2006, *Budget 2006: COAG health services, promoting good health, prevention and early intervention*, viewed 15 October 2014, http://www.health.gov.au/internet/budget/publishing.nsf/Content/budget2006-hfact37.htm

---- 2010a, Taking Preventative Action - a response to: Australia the healthiest country by 2020, viewed 12 April 2013,

http://www.preventativehealth.org.au/internet/preventativehealth/publishing.nsf/Content/taking-preventative-action

---- 2010b, Portfolio budget statements: Department outcome 1 - Population Health, viewed 31 March 2013,

 $http://www.health.gov.au/internet/budget/publishing.nsf/Content/2010-2011\_Health\_PBS$ 

Dickins, M Thomas, SL King, B Lewis, S & Holland, K 2011, 'The role of the fatosphere in fat adults' responses to obesity stigma: A model of empowerment without a focus on weight loss', *Qualitative Health Research*, vol. 21, no. 12, pp. 1679-91.

Dietz, WH 1996, 'The role of lifestyle in health: the epidemiology and consequences of inactivity', *Proceedings of the Nutrition Society*, vol. 55, no. 03, pp. 829-40.

Dixon, J 2002, *The changing chicken: chooks, cooks and culinary culture*, UNSW Press, Sydney.

Dixon, J & Broom, DH 2007, 'Conclusion: Multiple sins, multiple saviours', in J Dixon & DH Broom (eds), *The seven deadly sins of obesity: How the modern world is making us fat*, UNSW Press, Sydney, pp. 172-87.

Dixon, J Woodman, D Strazdins, L Banwell, C Broom, D & Burgess, J 2014, 'Flexible employment, flexible eating and health risks', *Critical Public Health*, vol. 24, no. 4, pp. 461-75.

Doll, R Peto, R Boreham, J & Sutherland, I 2004, 'Mortality in relation to smoking: 50 years' observations on male British doctors', *BMJ*, vol. 328:1519-10.1136/bmj.38142.554479.AE.

Dwyer, T & Hetzel, BS 1980, 'A comparison of trends of coronary heart disease mortality in Australia, USA and England and Wales with reference to three major risk factors-hypertension, cigarette smoking and diet', *International Journal of Epidemiology*, vol. 9, no. 1, pp. 65-71.

Eckel, RH & Krauss, RM 1998, 'American Heart Association call to action: obesity as a major risk factor for coronary heart disease', *Circulation*, vol. 97, no. 21, pp. 2099-100.

Eckersley, R 2001, 'Culture, health and well-being', in R Eckersley, J Dixon & B Douglas (eds), *The social origins of health and well-being*, Cambridge University Press, Cambridge, pp. 51-70.

Edwards, K 2012, *Shaming the overweight*, Dailylife blog, web blog post, 12 July 2012, viewed 6 November 2014,

http://www.dailylife.com.au/health-and-fitness/shaming-the-overweight-20120711-21vdk.html

Egger, G & Dixon, J 2009, 'Obesity and chronic disease: always offender or often just accomplice?', *British Journal of Nutrition*, vol. 102, no. 08, pp. 1238-42.

Egger, G Spark, R & Donovan, R 2005, *Health Promotion Strategies and Methods*, 2nd edn, McGraw-Hill, Sydney.

Egger, G & Swinburn, B 1997, 'An" ecological" approach to the obesity pandemic', *British Medical Journal*, vol. 315, no. 7106, pp. 477-480.

Elder-Vass, D 2012, 'Towards a realist social constructionism', *Sociologica, Problemas E Practicas*, vol. 70, pp. 9-24.

Elfhag, K & Rössner, S 2005, 'Who succeeds in maintaining weight loss? A conceptual review of factors associated with weight loss maintenance and weight regain', *Obesity Reviews*, vol. 6, no. 1, pp. 67-85.

Eliot, G 1999 [1861], Silas Marner, Claremont Classics, Australia.

Esselstyn Jr, CB 2007, Prevent and Reverse Heart Disease: the revolutionary, scientifically proven, nutrition-based cure, Penguin Group, New York.

Evans, B 2006, "Gluttony or sloth": critical geographies of bodies and morality in (anti) obesity policy, *Area*, vol. 38, no. 3, pp. 259-67.

Fairclough, N Mulderrig, J Wodak, R 2011, 'Critical discourse analysis', in TA Van Dijk (ed.), *Discourse Studies: A Multidisciplinary Introduction*, Sage, London, pp. 357-378.

Fat kid rules the world 2012, Movie, Outsider Pictures, USA.

Fischer, F 2003, *Reframing public policy: discursive politics and deliberative practices*, OUP Oxford, Oxford.

Flyvbjerg, B 2006, 'Five misunderstandings about case-study research', *Qualitative Inquiry*, vol. 12, no. 2, pp. 219-45.

Foresight 2006, *Trends and drivers of obesity: A literature review for the Foresight project on obesity*, UK Government, Office of Science and Technology, London, viewed 1 July 2014,

https://www.gov.uk/government/publications/reducing-obesity-drivers-and-trends-literature-review

Foucault, M 1972, The Archaeology of Knowledge, Routledge, London.

- ---- 1979, Discipline and punish: the birth of the prison, Penguin Books, London.
- ---- 1982, 'Afterword: the subject and power', in HL Dreyfus & P Rabinow (eds), *Michel Foucault:Beyond Structuralism and Hermeneutics*, Harvester Wheatsheaf, New York, pp. 208-26.
- ---- 2001 (1961), Madness and civilization: a history of insanity in the age of reason, Routledge, London.

Freedhof, Y 2014, 'The food industry is neither friend, nor foe, nor partner', *Obesity Reviews*, vol.15, no.1, pp.6-8.

Friel, S 2009, *Health equity in Australia: A policy framework based on action on the social determinants of obesity, alcohol and tobacco*, Australian National Preventative Health Taskforce, Canberra, viewed 12 December 2012,

http://www.preventative health.org. au/internet/preventative health/publishing.nsf/Content/0FBE203C1C547A82CA257529000231BF/\$File/commpaper-hlth-equity-friel.pdf

Friel, S & Broom, D 2007, 'Unequal society, unhealthy weight: the social distribution of obesity', in J Dixon & D Broom (eds), *The Seven Deadly Sins of Obesity: How the modern world is making us fat*, UNSW Press, Sydney.

Fullagar, S 2003, 'Governing women's active leisure: The gendered effects of calculative rationalities within Australian health policy', *Critical Public Health*, vol. 13, no. 1, pp. 47-60.

Gaesser, G 2009, 'Is "permanent weight loss" an oxymoron? The statistics on weight loss and the national weight control registry', in ED Rothblum & S Solovay (eds), *The Fat Studies Reader*, New York University Press, New York, pp. 37-40.

Gard, M 2011, 'Between alarmists and sceptics: on the cultural politics of obesity scholarship and public policy', in K Bell, D McNaughton, and A Salmon (eds), *Alcohol, Tobacco and Obesity*, Routledge, London, pp. 59-72.

Gard, M & Wright, J 2005, *The obesity epidemic: Science, morality and ideology*, Routledge, Oxon.

Garner, DM 1997, 'The 1997 body image survey results', *Psychology Today*, vol. 30, no. 1, pp. 30-44.

Gfk bluemoon 2009, Australian Better Health Initiative, Measure Up, Phase one campaign evaluation, Gfk bluemoon, Melbourne.

---- 2010, Measure Up, Phase two qualitative formative research report, Gfk bluemoon, Melbourne.

Gibson, B 2003, 'From Transfer to Transformation: Rethinking the Relationship between Research and Policy', PhD thesis, Australian National University, viewed 12 October 2013, https://digitalcollections.anu.edu.au/handle/1885/47083

Gibson, D 2010, 'Beyond life expectancy', *Occasional Paper 4/2010: Census Series # 5*, The Academy of the Social Sciences in Australia, Canberra.

Gleeson, DH Legge, DG & O'Neill, D 2009, 'Evaluating health policy capacity: Learning from international and Australian experience', *Australia and New Zealand Health Policy*, vol. 6, no. 3, pp. 1-15.

Gluckman, PD Hanson, M Zimmet, P & Forrester, T 2011, 'Losing the war against obesity: the need for a developmental perspective', *Science Translational Medicine*, vol. 3, no. 93, pp. 1-4.

Goffman, E 1986 [1963], *Stigma: notes on the management of spoiled identity*, Simon & Schuster, Inc., New York.

Goodwin, S, 2012, 'Women, Policy and Politics: Recasting policy studies', in A Bletsas & C Beasley (eds), *Engaging with Carol Bacchi*, University of Adelaide Press, Adelaide, pp. 25-36.

Gore, J 1993, The struggle for pedagogies: critical and feminist discourses as regimes of truth, Routledge, New York.

Gortmaker, SL Swinburn, BA Levy, D Carter, R Mabry, PL Finegood, DT Huang, T Marsh, T & Moodie, ML 2011, 'Changing the future of obesity: science, policy, and action', *The Lancet*, vol. 378, no. 9793, pp. 838-47.

Gostin, LO 2014, 'Healthy living needs global governance', *Nature*, vol. 511, pp. 147-50.

Graham, D & Edwards, A 2013, 'The psychological burden of obesity: the potential harmful impact of health promotion and education programmes targeting obese individuals', *International Journal of Health Promotion and Education*, vol. 51, no. 3, pp. 124-33.

Grogan, S (ed.) 2007, Body image: Understanding body dissatisfaction in men, women and children, Routledge, Taylor & Francis e-Library.

Gurrieri, L & Brown, I 2012, 'Showing it like it is: a library to fight fatist images in the media', *The Conversation*, 7 February, viewed 28 July 2012,

http://the conversation.edu. au/showing-it-like-it-is-a-library-to-fight-fatist-images-in-the-media-4252

Guthman, J & DuPuis, M 2006, 'Embodying neoliberalism: economy, culture, and the politics of fat', *Environment and Planning D*, vol. 24, no. 3, pp. 427-48.

Hacking, I 1999, *The Social Construction of What?*, Harvard University Press, Cambridge, USA.

Hacking, I 2005, 'Why race still matters', *Daedalus*, vol. 134, no. 1, pp. 102-116.

Halton, J 2012, 'Global Issues in Public Health: Australia's Preventative Health in Context', paper presented to the *Centre for Research and Action in Public Health*, University of Canberra, 3 May 2012.

Hamer, M & Stamatakis, E 2012, 'Metabolically healthy obesity and risk of all-cause and cardiovascular disease mortality', *The Journal of Clinical Endocrinology & Metabolism*, vol. 97, no. 7, pp. 2482-8.

Hastings, G 2012, 'Why corporate power is a public health priority', *BMJ*, vol. 345, pp. e5124.

Hastings, G & MacFadyen, L 2002, 'The limitations of fear messages', *Tobacco Control*, vol. 11, no. 1, pp. 73-5.

Hayes, L Wakefield, MA & Scollo, MM 2014, 'Public opinion about ending the sale of tobacco in Australia', *Tobacco Control*, vol. 23, no. 2, pp. 183-4.

Heart Foundation (QLD) 2013, 'Queensland prepares to LiveLighter', *media release*, 14 February 2013, viewed 20 September 2014,

http://livelighter.com.au/news/queensland-prepares-to-livelighter

Hebl, MR & Xu, J 2001, 'Weighing the care: physicians' reactions to the size of a patient', *International Journal of Obesity*, vol. 25, no. 8, pp. 1246-52.

Heshka, S & Allison, DB 2001, 'Is obesity a disease?', *International Journal of Obesity*, vol. 25, no. 10, pp. 1401-4.

Hetzel, BS Charnock, JS Dwyer, T & McLennan, PL 1989, 'Fall in coronary heart disease mortality in USA and Australia due to sudden death: evidence for the role of polyunsaturated fat', *Journal of Clinical Epidemiology*, vol. 42, no. 9, pp. 885-93.

Heymann, EP & Goldsmith, D 2011, 'Letters: The battle against obesity: lessons from tobacco', *Lancet*, vol. 378, no. 9809, pp. 2069.

Heymsfield, SB & Cefalu, WT 2013, 'Editorial: Does Body Mass Index adequately convey a patient's mortality risk?', *Journal of the American Medical Association*, vol. 309, no. 1, pp. 87-8.

Hoek, J 2008, 'The Wicked Witch of Anti-Marketing? Myths, Metaphors and "Nanny State", *Proceedings of the Australian and New Zealand Marketing Academy Conference*, Sydney, 1 December 2008, pp. 1-8.

Hooper, L Summerbell, CD Higgins, J Thompson, RL Capps, NE Smith, GD Riemersma, RA & Ebrahim, S 2001, 'Dietary fat intake and prevention of cardiovascular disease: systematic review', *BMJ*, vol. 322, no. 7289, pp. 757-63.

Hu, FB 2011, 'Globalization of diabetes, The role of diet, lifestyle, and genes', *Diabetes Care*, vol. 34, no. 6, pp. 1249-57.

Huber, M Knottnerus, JA Green, L van der Horst, H Jadad, AR Kromhout, D Leonard, B Lorig, K Loureiro, MI van der Meer, JWM Schnabel, P Smith, R van Weel, C & Smid, H 2011, 'How should we define health?', *BMJ* vol. 343, no. 6, pp. d4163.

Ingram, H Schneider, AL & DeLeon, P 2007, 'Social construction and policy design', in PA Sabatier (ed.), *Theories of the policy process*, 2nd edn, Westview Press, Cambridge, MA, pp. 93-126.

James, W 2008, 'WHO recognition of the global obesity epidemic', *International Journal of Obesity*, vol. 32, pp. S120-6.

Jean, N Somers, VK Sochor, O Medina-Inojosa, J Llano, EM & Lopez-Jimenez, F 2014, 'Normal-Weight Obesity: Implications for Cardiovascular Health', *Current Atherosclerosis Reports*, vol. 16, no. 12, pp. 1-8.

Jenkin, G Signal, L & Thomson, G 2011, 'Framing obesity: the framing contest between industry and public health at the New Zealand inquiry into obesity', *Obesity Reviews*, vol. 12, no. 12, pp. 1022-30.

Jorm, L Gruszin, S & Churches, T 2009, 'A multidimensional classification of public health activity in Australia', *Australia and New Zealand Health Policy*, vol. 6:9-10.1186/1743-8462-6-9.

Jutel, A 2005, 'Weighing Health: The Moral Burden of Obesity', *Social Semiotics*, vol. 15, no. 2, pp. 113-25.

Kass, NE 2001, 'An ethics framework for public health', *American Journal of Public Health*, vol. 91, no. 11, pp. 1776-82.

Kausman, R 2012, *The get real campaign*, If not dieting, Melbourne, viewed 7 December 2014, http://www.ifnotdieting.com.au/cpa/htm/htm\_article\_view.asp?id=138

Keane, H 2002, What's wrong with addiction?, Melbourne University Press, Melbourne.

Kersh, R 2009, 'The politics of obesity: a current assessment and look ahead', *Milbank Quarterly*, vol. 87, no. 1, pp. 295-316.

Kersh, R & Morone, JA 2005, 'Obesity, courts, and the new politics of public health', *Journal of Health Politics, Policy and Law*, vol. 30, no. 5, pp. 839-68.

Kickbusch, I 2008a, 'Guest editorial: health in all policies', *Public Health Bulletin SA*, vol. 5, no. 5, pp. 1-3.

---- 2008b, 'Health in all policies: Setting the scene', *Public Health Bulletin SA*, vol. 5, no. 5, pp. 3-5.

King, E Grunseit, A O'Hara, B & Bauman, A 2013, 'Evaluating the effectiveness of an Australian obesity mass-media campaign: how did the 'Measure-Up' campaign measure up in New South Wales?', *Health Education Research*, vol. 28, no. 6, pp. 1029-39.

King, L Loss, J Wilkenfeld, R Pagnini, D Booth, M & Booth, S 2007, *The weight of opinion: General Practitioners' perceptions about child and adolescent overweight and obesity*, NSW Centre for Overweight and Obesity, Sydney, viewed 11 April 2013, http://sydney.edu.au/medicine/public-health/coo/pdf/2007\_WOO\_GP.pdf

Kingdon, JW 1995, Agendas, alternatives, and public policies, Longman, New York.

---- 2011, Agendas, alternatives, and public policies, 2nd edn, Longman, New York.

Kirk, D & Tinning, R 1994, 'Embodied self-identity, healthy lifestyles and school physical education', *Sociology of Health & Illness*, vol. 16, no. 5, pp. 600-25.

Kitahara, CM Flint, AJ de Gonzalez, AB Bernstein, L Brotzman, M MacInnis, RJ Moore, SC Robien, K Rosenberg, PS Singh, PN Weiderpass, E Adami, HO Anton-Culver, H Ballard-Barbash, R Buring, JE Freedman, DM Fraser, GE Beane Freeman, LE Gapstur, SM Gaziano, JM Giles, GG Hakansson, N Hoppin, JA Hu, FB Koenig, K Linet, MS Park, Y Patel, AV Purdue, MP Shairer, C Sesso, HD Visvanatha, K White, E Wolk, A Zeleniuch-Jacquotte, A & Hartge, P 2014, 'Association between class III obesity (BMI of 40–59 kg/m2) and mortality: a pooled analysis of 20 prospective studies', *PLoS medicine*, vol. 11, no. 7:e1001673.

Klaczynski, PA Goold, KW & Mudry, JJ 2004, 'Culture, obesity stereotypes, self-esteem, and the "thin ideal": A social identity perspective', *Journal of Youth and Adolescence*, vol. 33, no. 4, pp. 307-17.

Klein, S Allison, DB Heymsfield, SB Kelley, DE Leibel, RL Nonas, C Kahn, R 2007, 'Waist circumference and cardiometabolic risk: A consensus statement from shaping America's health: Association for Weight Management and Obesity Prevention; NAASO, The Obesity Society; the American Society for Nutrition; and the American Diabetes Association', *Obesity*, vol. 15, no. 5, pp.1061-1067.

Klein, T 2012, *People of normal weight with belly fat at highest death risk, Mayo Clinic study finds*, Mayo Clinic, USA, 27 August 2012, viewed 6 November 2014, http://newsnetwork.mayoclinic.org/discussion/people-of-normal-weight-with-belly-fat-at-highest-death-risk-mayo-clinic-study-finds/

Klein, JD & Dietz, W 2010, 'Childhood obesity: the new tobacco', *Health Affairs*, vol. 29, no. 3, pp. 388.

Klem, ML Wing, RR McGuire, MT Seagle, HM & Hill, JO 1997, 'A descriptive study of individuals successful at long-term maintenance of substantial weight loss', *The American Journal of Clinical Nutrition*, vol. 66, no. 2, pp. 239-46.

Korp, P 2008, 'The symbolic power of 'healthy lifestyles'', *Health Sociology Review*, vol. 17, no. 1, pp. 18-26.

Kowalewski, M Henson, K & Longshore, D 1997, 'Rethinking perceived risk and health behavior: A critical review of HIV prevention research', *Health Education and Behavior*, vol. 24, pp. 313-25.

Krieger, N 1994, 'Epidemiology and the web of causation: has anyone seen the spider?', *Social Science & Medicine*, vol. 39, no. 7, pp. 887-903.

Langer, EJ 2014 [1989], Mindfulness, Da Capo Press, Boston, MA.

Lawrence, RG 2004, 'Framing obesity: the evolution of news discourse on a public health issue', *The Harvard International Journal of Press/Politics*, vol. 9, no. 3, pp. 56-75.

Laws, RA Kemp, LA Harris, MF Davies, GP Williams, AM & Eames-Brown, R 2009, 'An exploration of how clinician attitudes and beliefs influence the implementation of lifestyle risk factor management in primary healthcare: a grounded theory study', *Implementation Science*, vol. 4:66- 10.1186/1748-5908-4-66.

Le Besco, K 2011, 'Neoliberalism, public health and the moral perils of fatness', in K Bell, D McNaughton & A Salmon (eds), *Alcohol, Tobacco and Obesity*, Routledge, London, pp. 33-46.

Le Grand, C 2011, 'Star of Life.Be In It campaign to spur kids to get off the couch', *The Australian*, 22 August 2011, viewed 20 July 2014, http://www.theaustralian.com.au/news/star-of-life-be-in-it-campaign-to-spur-kids-to-get-off-the-couch/story-e6frg6n6-1226119233523

Lemke, T 2001, "The birth of bio-politics": Michel Foucault's lecture at the Collège de France on neo-liberal governmentality, *Economy and Society*, vol. 30, no. 2, pp. 190-207.

Levi, M 1997, 'A model, a method, and a map: Rational choice in comparative and historical analysis', in M Irving Lichbach & AS Zuckerman, *Comparative politics: Rationality, culture and structure*, Cambridge University Press, Cambridge.

Lewis, S Thomas, SL Blood, RW Castle, DJ Hyde, J & Komesaroff, PA 2011, 'How do obese individuals perceive and respond to the different types of obesity stigma that they encounter in their daily lives? A qualitative study', *Social Science & Medicine*, vol. 73, no. 9, pp. 1349-56.

Lewis, S Thomas, SL Hyde, J Castle, D Blood, RW & Komesaroff, PA 2010, 'I don't eat a hamburger and large chips every day!" A qualitative study of the impact of public health messages about obesity on obese adults', *BMC Public Health*, vol. 10, no. 1, pp. 309.

Lewis, V & Donaghue, N 1999, 'Self-deprecation and estimates of body size in women', *Perceptual and Motor Skills*, vol. 89, no. 1, pp. 165-71.

Life: Be in it 2014, *Our History*, Life.Be in it. International Pty Ltd, Darwin, viewed 19 December 2014, http://nt.lifebeinit.org/standard.php?id=1979

Link, BG & Phelan, JC 2001, 'Conceptualizing stigma', *Annual Review of Sociology*, vol. 27, pp. 363-85.

LiveLighter 2014a, *LiveLighter Campaign*, *Main page*, LiveLighter, viewed 15 November 2014, http://www.livelighter.com.au/

---- 2014b, *LiveLighter Campaign*, *About toxic fat*, LiveLighter, viewed 20 November 2014, https://livelighter.com.au/the-facts/about-toxic-fat

---- 2014c, *LiveLighter Campaign*, *Background*, LiveLighter, viewed 20 November 2014, http://livelighter.com.au/about/background

---- 2014d, *LiveLighter Campaign*, *LiveLighter advisers*, LiveLighter, viewed 20 November 2014, https://livelighter.com.au/supporters/act-advisers

Lloyd, BL 1994, 'Declining cardiovascular disease incidence and environmental components', *Australian and New Zealand Journal of Medicine*, vol. 24, no. 1, pp. 124-32.

Lockie, F 2012, 'Showing it like it is: a library to fight fatist images in the media: comments', *The Conversation*, 7 February, viewed 21 July 2012, http://theconversation.edu.au/showing-it-like-it-is-a-library-to-fight-fatist-images-in-the-media-4252

Loomis, JF 2015, *Doctor prescribes plants for health and weight loss*, T. Colin Campbell Centre for Nutrition Studies, 31 January, viewed 5 Feb 2015, http://nutritionstudies.org/search/doctor+prescribes+plants+for+health

Lund, TB Sandøe, P & Lassen, J 2011, 'Attitudes to publicly funded obesity treatment and prevention', *Obesity*, vol. 19, no. 8, pp. 1580-5.

Lupton, D 1992, 'Discourse analysis: a new methodology for understanding the ideologies of health and illness', *Australian Journal of Public Health*, vol. 16, no. 2, pp. 145-50.

- ---- 1994a, *Medicine as culture: Illness, disease and the body in western societies*, Sage Publications Ltd, London.
- ---- 1994b, 'Consumerism, commodity culture and health promotion', *Health Promotion International*, vol. 9, no. 2, pp. 111-8.
- ---- 1995, *The imperative of health: Public health and the regulated body*, vol. 90, Taylor & Francis, London.
- ---- 2003, 'The Social Construction of Medicine and the Body', in RF Gary L Albrecht, Susan C. Scrimshaw (ed.), *The Handbook of Social Studies in Health and Medicine*, Sage Publications Ltd, London, pp. 50-8.
- ---- 2012a, Medicine as culture: illness, disease and the body, Sage, London.
- ---- 2012b, 'What does the yuck factor achieve in anti-obesity campaigns?', *The Conversation*, 30 July, viewed 2 August 2012, http://theconversation.com/what-does-the-yuck-factor-achieve-in-anti-obesity-campaigns-8451
- ---- 2013, Fat, Routledge, Oxon, Great Britain.
- ---- 2014, "How do you Measure up?" Assumptions about "obesity" and health-related behaviors and beliefs in two Australian "obesity" prevention campaigns', *Fat Studies*, vol. 3, no. 1, pp. 32-44.

Lustig, RH 2011, *Obesity before birth: maternal and prenatal influences on the offspring*, vol. 30, Springer, New York.

Maddox, GL & Liederman, V 1969, 'Overweight as a social disability with medical implications', *Journal of Medical Education*, vol. 44, no. 3, pp. 214-20.

Mair, M 2011, 'Deconstructing behavioural classifications: tobacco control, 'professional vision' and the tobacco user as a site of governmental intervention', in K Bell, McNaughton, D and Salmon, A. (ed.), *Alcohol, Tobacco and Obesity: Morality, mortality and the new public health*, Routledge, London, pp. 19-32.

Mann, T Tomiyama, AJ Westling, E Lew, A-M Samuels, B & Chatman, J 2007, 'Medicare's search for effective obesity treatments: diets are not the answer', *American Psychologist*, vol. 62, no. 3, pp. 220-33.

Marmot, MG Stansfeld, S Patel, C North, F Head, J White, I Brunner, E Feeney, A Marmot, M & Smith, GD 1991, 'Health inequalities among British civil servants: the Whitehall II study', *The Lancet*, vol. 337, no. 8754, pp. 1387-93.

McDougall, J Thomas, LE McDougall, C Moloney, G Saul, B Finnell, JS Richardson, K Petersen, KM 2014, 'Effects of 7 days on an ad libitum low-fat vegan diet: the McDougall Program cohort', *Nutrition Journal*, vol 13:99- 10.1186/1475-2891-13-99.

McLeod, K Wakefield, M Chapman, S Smith, KC & Durkin, S 2009, 'Changes in the news representation of smokers and tobacco-related media advocacy from 1995 to 2005 in Australia', *Journal of Epidemiology and Community Health*, vol. 63, no. 3, pp. 215-20.

McNaughton, D 2011, 'From the womb to the tomb', in K Bell, D McNaughton & A Salmon (eds), *Alcohol, tobacco, obesity: Morality, mortality and the new public health*, Routledge, London, pp. 163-76.

MeasureUp 2013a, *Measure Up, Why measure up?*, Department of Health & Ageing, Canberra, viewed 14 Aug2013,

http://pandora.nla.gov.au/pan/133236/20120418-1003/www.measureup.gov.au/internet/abhi/publishing.nsf/content/Why%2bmeasure%2bup-lp.html

---- 2013b, *Measure Up, About the Measure Up campaign*, Department of Health & Ageing, Canberra, viewed 23 August 2013,

http://pandora.nla.gov.au/pan/133236/20120418-1003/www.measureup.gov.au/internet/abhi/publishing.nsf/content/About%2bthe%2bcampaign-lp.html

---- *Measure Up banner*, n.d., image, Department of Health & Ageing, Canberra, viewed 22 August 2013,

http://pandora.nla.gov.au/pan/133236/20120418-1003/www.measureup.gov.au/internet/abhi/publishing.nsf/content/Why%2bmeasure%2bup-lp.html

---- *Time to take some healthy measures*, n.d., image, Department of Health & Ageing, Canberra, viewed 14 August 2013,

http://pandora.nla.gov.au/pan/133236/20120418-1003/www.measureup.gov.au/internet/abhi/publishing.nsf/content/OrderGP.html

---- How to measure yourself, n.d., image, Department of Health & Ageing, Canberra, viewed 31 October 2014,

http://pandora.nla.gov.au/pan/133236/20120418-1003/www.measureup.gov.au/internet/abhi/publishing.nsf/content/How%2bdo%2bI%2bmeasure%2bmyself-lp.html

---- Kick start your healthy life, n.d., image, Department of Health & Ageing, Canberra, viewed 30 October 2014,

http://pandora.nla.gov.au/pan/133236/20120418-1003/www.measureup.gov.au/internet/abhi/publishing.nsf/content/ABECA6B5A4CC4272CA2578500000AEE9/%24File/GettingStarted.pdf

---- Man, Woman and tape measure, n.d., image, Department of Health & Ageing, Canberra, viewed 26 October 2014,

http://pandora.nla.gov.au/pan/133236/20120418-1003/www.measureup.gov.au/internet/abhi/publishing.nsf/content/home-2.html

Meigs, JB Wilson, PW Fox, CS Vasan, RS Nathan, DM Sullivan, LM & D'Agostino, RB 2006, 'Body mass index, metabolic syndrome, and risk of type 2 diabetes or cardiovascular disease', *The Journal of Clinical Endocrinology & Metabolism*, vol. 91, no. 8, pp. 2906-12.

Minister for Ageing 2001, *National Strategy for an Ageing Australia*, Commonwealth of Australia, Canberra.

Monaghan, LF 2005, 'Discussion piece: A critical take on the obesity debate', *Social Theory & Health*, vol. 3, no. 4, pp. 302-14.

Monaghan, LF Colls, R & Evans, B 2013, 'Obesity discourse and fat politics: research, critique and interventions', *Critical Public Health*, vol. 23, no. 3, pp. 249-62.

Moodie, R 2009, 'Preventative health and the nanny state: fairy godmother or the wicked witch?', paper presented to the 23rd Lionel Murphy Memorial Lecture, NSW Parliament House, 2 Dec 2009.

Moodie, R Stuckler, D Monteiro, C Sheron, N Neal, B Thamarangsi, T Lincoln, P & Casswell, S 2013, 'Profits and pandemics: prevention of harmful effects of tobacco, alcohol, and ultra-processed food and drink industries', *The Lancet*, vol. 381, no. 9867, pp. 670-9.

Moore, CJ & Cunningham, SA 2012, 'Social position, psychological stress, and obesity: a systematic review', *Journal of the Academy of Nutrition and Dietetics*, vol. 112, no. 4, pp. 518-26.

Morriss-Kay, GM 2010, 'The evolution of human artistic creativity', *Journal of Anatomy*, vol. 216, no. 2, pp. 158-76.

Murray, S 2007, 'Corporeal knowledges and deviant bodies: Perceiving the fat body', *Social Semiotics*, vol. 17, no. 3, pp. 361-73.

Muskett, PE 1903, *The illustrated Australian medical guide*, vol. 2, 2 vols., Brooks, Sydney.

Nash, F 2014, 'Health star rating: making healthier choices at a glance', *media release*, 6 December 2014, viewed 12 Dec 2014,

http://www.health.gov.au/internet/ministers/publishing.nsf/Content/health-mediarel-yr2014-nash072.htm

National Health and Medical Research Council 1996, *Promoting the Health of Australians*, Australian Government, NHMRC, Canberra.

- ---- 1997, Acting on Australia's weight: A strategic plan for the prevention of overweight and obesity, Australian Government, NHMRC, Canberra.
- ---- 2003, Overweight and Obesity in Adults- A Guide for General Practitioners, Australian Government, NHMRC, Canberra.
- ---- 2013a, Clinical practice guidelines for the management of overweight and obesity in adults, adolescents and children in Australia, Australian Government, NHMRC, Canberra.
- ---- 2013b, Australian Dietary Guidelines, Australian Government, NHMRC, Canberra.
- ---- 2014, *NHMRC funded research into obesity 2000-2014*, viewed 24 March 2015, https://www.nhmrc.gov.au/grants-funding/research-funding-statistics-and-data/funding-statistics-grants-and-funding-data/obesity

National Health Priority Action Council 2006, *National Chronic Disease Strategy*, Australian Government, NHPAC, Canberra.

National Partnership Agreement on Preventive Health 2010, *Initiative Summary*, Australian Government, Australian National Preventive Health Agency, Canberra.

National Preventative Health Taskforce 2009a, *Australia: The healthiest country by 2020*, Australian Government, Canberra.

---- 2009b, *Technical report 1: Obesity in Australia: a need for urgent action*, Australian Government, Canberra.

National Public Health Partnership 2000, *Public health practice in Australia today: a statement of core functions*, National Public Health Partnership Secretariat, Melbourne, viewed 1 April 2014,

http://www.health.vic.gov.au/archive/archive2014/nphp/about/index.htm

---- 2001, *Preventing chronic disease: a strategic framework, background paper*, National Public Health Partnership Secretariat, Melbourne, viewed 20 Dec 2014, http://www.health.vic.gov.au/archive/archive2014/nphp/publications/wa\_index.htm

Navarro, V 1986, *Crisis, Health, and Medicine: A Social Critique*, Tavistock, New York.

Nestle, M & Jacobson, MF 2000, 'Halting the obesity epidemic: a public health policy approach', *Public Health Reports*, vol. 115, no. 1, pp. 12-24.

Nestle, M 2013, 'Food politics: How the food industry influences nutrition and health', University of California Press, Berkeley.

Novak, NL & Brownell, KD 2012, 'Role of policy and government in the obesity epidemic', *Circulation*, vol. 126, no. 19, pp. 2345-52.

O'Hara, BJ Bauman, AE & Phongsavan, P 2012, 'Using mass-media communications to increase population usage of Australia's Get Healthy Information and Coaching Service', *BMC Public Health*, vol. 12:762- 10.1186/1471-2458-12-762.

Obesity Australia 2012a, *Obesity Australia: support*, Obesity Australia, Sydney, viewed 20 Jun 2014, http://www.obesityaustralia.org/about-oa

---- 2012b, *Our Mission*, Obesity Australia, Sydney, viewed 30 October 2014, http://www.obesityaustralia.org/about-oa

Obesity Policy Coalition 2009, 'Fat chance to fix obesity without government keeping the pressure on industry', *media release*, 1 September 2009, viewed 5 March 2011, http://www.opc.org.au/article.asp?ContentID=mr20090901b

O'Kane, G Craig, P & Sutherland, D 2008, 'Riverina men's study: An exploration of rural men's attitudes to health and body image', *Nutrition & Dietetics*, vol. 65, no. 1, pp. 66-71.

Olds, T Thomas, S Lewis, S & Petkov, J 2013, 'Clustering of attitudes towards obesity: a mixed methods study of Australian parents and children', *International Journal of Behavioral Nutrition and Physical Activity*, vol. 10:117- 10.1186/1479-5868-10-117.

Oliver, JE & Lee, T 2005, 'Public opinion and the politics of obesity in America', *Journal of Health Politics, Policy and Law*, vol. 30, no. 5, pp. 923-54.

Oliveros, E Somers, VK Sochor, O Goel, K & Lopez-Jimenez, F 2014, 'The concept of normal weight obesity', *Progress in Cardiovascular Diseases*, vol. 56, no. 4, pp. 426-33.

Olsen, A Dixon, J Banwell, C & Baker, P 2009, 'Weighing it up: the missing social inequalities dimension in Australian obesity policy discourse', *Health Promotion Journal of Australia*, vol. 20, no. 3, pp. 167-71.

Oppenheimer, GM Blackburn, H & Puska, P 2011, 'From Framingham to North Karelia to US community-based prevention programs: negotiating research agenda for coronary heart disease in the second half of the 20th century', *Public Health Reviews*, vol. 33, no. 2, pp. 450-83.

Orbach, S 2006 (1978), Fat is a feminist issue, Arrow Books, London.

Ornish, D 2010, *Dr. Dean Ornish's program for reversing heart disease*, Ivy Books, New York.

Owen, N Bauman, A Booth, M Oldenburg, B & Magnus, P 1995, 'Serial mass-media campaigns to promote physical activity: reinforcing or redundant?', *American Journal of Public Health*, vol. 85, no. 2, pp. 244-8.

Pause, C 2013, 'Media's faceless fatties fuel society's growing sizeism', *The Conversation*, 8 April, viewed 16 December 2013,

https://theconversation.com/medias-faceless-fatties-fuel-societys-growing-sizeism-7844

Petersen, A & Lupton, D 1996, *The new public health: Health and self in the age of risk*, Sage Publications Inc, London.

Phelan, SM Burgess, DJ Yeazel, MW Hellerstedt, WL Griffin, JM 2015, 'Impact of weight bias and stigma on quality of care and outcomes for patients with obesity', *Obesity Reviews*, vol. 16, no. 4, pp. 319-326.

Pocock, B 2003, *The work/life collision: What work is doing to Australians and what to do about it*, The Federation Press, Sydney.

Powles, J 1992, 'Changes in disease patterns and related social trends', *Social Science & Medicine*, vol. 35, no. 4, pp. 377-87.

Prentice, AM 2006, 'The emerging epidemic of obesity in developing countries', *International Journal of Epidemiology*, vol. 35, no. 1, pp. 93-9.

Prentice, AM & Jebb, SA 1995, 'Obesity in Britain: gluttony or sloth?', *BMJ*, vol. 311, no. 7002, pp. 437-9.

Prevention Research Collaboration 2011, *How did Measure-Up measure up?*, University of Sydney, viewed 24 Aug 2014, http://sydney.edu.au/medicine/public-health/prevention-research/pdf/PRCNews\_Apr11.pdf

Prospective Studies Collaboration 2009, 'Body-mass index and cause-specific mortality in 900 000 adults: collaborative analyses of 57 prospective studies.', *The Lancet*, 28 March 2009, viewed 27 Nov 2014,

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2662372/#!po=32.6087

Provencher, V Bégin, C Tremblay, A Mongeau, L Boivin, S & Lemieux, S 2007, 'Short-term effects of a "Health-At-Every-Size" approach on eating behaviors and appetite ratings', *Obesity*, vol. 15, no. 4, pp. 957-66.

Public Health Association Australia 2012, *Public health association of Australia incorporated: constitution and rules: as amended: September 2012*, PHAA, Canberra, viewed 13 March 2013, http://www.phaa.net.au/documents/130525Constitution.pdf

Puhl, RM Andreyeva, T & Brownell, KD 2008, 'Perceptions of weight discrimination: prevalence and comparison to race and gender discrimination in America', *International Journal of Obesity*, vol. 32, no. 6, pp. 992-1000.

Puhl, RM & Brownell, KD 2001, 'Bias, discrimination, and obesity', *Obesity Research*, vol. 9, no. 12, pp. 788-805.

- ---- 2003a, 'Ways of coping with obesity stigma: review and conceptual analysis', *Eating Behaviors*, vol. 4, no. 1, pp. 53-78.
- ---- 2003b, 'Psychosocial origins of obesity stigma: toward changing a powerful and pervasive bias', *Obesity Reviews*, vol. 4, no. 4, pp. 213-27.
- ---- 2006, 'Confronting and coping with weight stigma: an investigation of overweight and obese adults', *Obesity*, vol. 14, no. 10, pp. 1802-15.

Puhl, RM & Heuer, CA 2009, 'The stigma of obesity: a review and update', *Obesity*, vol. 17, no. 5, pp. 941-64.

- ---- 2010, 'Obesity stigma: important considerations for public health', *American Journal of Public Health*, vol. 100, no. 6, pp. 1019-28.
- ---- 2011, 'Public opinion about laws to prohibit weight discrimination in the United States', *Obesity*, vol. 19, no. 1, pp. 74-82.

Puhl, RM & King, KM 2013, 'Weight discrimination and bullying', *Best Practice & Research Clinical Endocrinology & Metabolism*, vol. 27, no. 2, pp. 117-27.

Puhl, RM & Latner, JD 2007, 'Stigma, obesity, and the health of the nation's children', *Psychological Bulletin*, vol. 133, no. 4, pp. 557-80.

Puhl, R Peterson, J & Luedicke, J 2013, 'Fighting obesity or obese persons? Public perceptions of obesity-related health messages', *International Journal of Obesity*, vol. 37, no. 6, pp. 774-82.

Putnam, RD Campbell, DE Garrett, SR 2012, *American grace: How religion divides and unites us*, Simon and Schuster, New York.

Quit 2014, QUIT, Melbourne, viewed 1 January 2015, http://www.quit.org.au/about/our-beginnings.html

Rabinow, P 1984, *The Foucault Reader: An introduction to Foucault's thought*, Penguin Books, London, Great Britain.

Randolph, W & Viswanath, K 2004, 'Lessons learned from public health mass media campaigns: Marketing health in a crowded media world', *Annual Review of Public Health*, vol. 25, pp. 419-37.

Rasmussen, N 2012, 'Weight stigma, addiction, science, and the medication of fatness in mid-twentieth century America', *Sociology of Health & Illness*, vol. 34, no. 6, pp. 880-95.

Reaven, G 2005, 'All obese individuals are not created equal: insulin resistance is the major determinant of cardiovascular disease in overweight/obese individuals', *Diabetes and Vascular Disease Research*, vol. 2, no. 3, pp. 105-12.

Reynolds, SJ & Ceranic, TL 2007, 'The effects of moral judgment and moral identity on moral behavior: an empirical examination of the moral individual', *Journal of Applied Psychology*, vol. 92, no. 6, pp. 1610-24.

Rice, PL & Ezzy, D 1999, *Qualitative research methods: A health focus* Oxford University Press, Melbourne, Australia.

Rich, E & Evans, J 2005, "Fat ethics'—the obesity discourse and body politics', *Social Theory & Health*, vol. 3, no. 4, pp. 341-58.

Robbins, A & Nestle, M 2011, 'Obesity as collateral damage: A call for papers on the obesity epidemic', *Journal of Public Health Policy*, vol. 32, pp. 143-5.

Roberson, LL Aneni, EC Maziak, W Agatston, A Feldman, T Rouseff, M Tran, T Blaha, MJ Santos, RD Sposito, A Al-Mallah, MH Blankstein, R J, BM & Nasir, K 2014, 'Beyond BMI: The "Metabolically healthy obese" phenotype & its association with clinical/subclinical cardiovascular disease and all-cause mortality-a systematic review', *BMC Public Health*, vol. 14, no. 1, pp. 14.

Rosen, RS & Smith, E 2008, 'Health' at any cost: Popular press comparison of the risks of obesity and tobacco use, American Public Health Association, viewed 24 October 2014, http://apha.confex.com/apha/136am/webprogram/Paper173214.html

Roxon, N 2008, 'Australia measures up – national obesity campaign', *media release*, 17 October 2008, viewed 15 March 2011, http://pandora.nla.gov.au/pan/37831/20111215-0833/www.health.gov.au/internet/ministers/publishing.nsf/content/mr-yr08-nr-nr137f99e.html

---- 2009, 'Tread the path to a healthier life', *media release*, 2 October 2009, viewed 19 April 2014, http://pandora.nla.gov.au/pan/80093/20100722-0823/www.health.gov.au/internet/ministers/publishing.nsf/content/mr-yr09-nr-nr170fd38.html

---- 2011a, 'New year's resolutions get a helping hand', *media release*, 5 January 2011, viewed 15 March 2012, http://pandora.nla.gov.au/pan/131355/20120104-0822/www.health.gov.au/internet/ministers/publishing.nsf/content/mr-yr11-nr-nr002.html

---- 2011b, 'Swap It: Don't Stop it', *media release*, 13 March 2011, viewed 3 March 2013, http://pandora.nla.gov.au/pan/122666/20111212-1505/www.health.gov.au/internet/ministers/publishing.nsf/content/mr-yr11-nr-nr042.html

Royal Australian College of General Practitioners 2012, *Guidelines for preventive activities in general practice*, RACGP, Melbourne, viewed 9 November 2014, http://www.racgp.org.au/your-practice/guidelines/redbook/prevention-of-chronic-disease/overweight/

Rumsey, N & Harcourt, D 2012, 'Introduction', in N Rumsey & D Harcourt (eds), *Oxford handbook of the psychology of appearance*, Oxford University Press, Oxford, pp. 1-4.

Sabatier, PA 2007, 'The need for better theories', in PA Sabatier (ed.), *Theories of the Policy Process*, Westview Press Boulder, Cambridge, MA, pp. 1-17.

Saguy, AC 2013, What's wrong with fat?, Oxford University Press, Oxford.

Saguy, AC & Almeling, R 2008, 'Fat in the fire? Science, the news media, and the 'obesity epidemic', *Sociological Forum*, vol. 23, no. 1, pp. 53-83.

Saguy, AC & Riley, KW 2005, 'Weighing both sides: Morality, mortality, and framing contests over obesity', *Journal of Health Politics, Policy and Law*, vol. 30, no. 5, pp. 869-923.

Salmon, J Timperio, A Cleland, V & Venn, A 2005, 'Trends in children's physical activity and weight status in high and low socio-economic status areas of Melbourne, Victoria, 1985–2001', *Australian and New Zealand Journal of Public Health*, vol. 29, no. 4, pp. 337-42.

Saltman, RB & Ferroussier-Davis, O 2000, 'The concept of stewardship in health policy', *Bulletin of the World Health Organization*, vol. 78, no. 6, pp. 732-9.

Schwandt, T 2003, 'Three epistemological stances for qualitative inquiry: Interpretivism, hermeneutics, and social constructionism', in NK Denzin & YS Lincoln (eds), *The Landscape of Qualitative Research: Theories and Issues*, 2nd edn, Sage Publications, Inc., Thousand Oaks, California, pp. 292-331.

Schwartz, MB & Brownell, KD 2004, 'Obesity and body image', *Body Image*, vol. 1, no. 1, pp. 43-56.

Schwartz, MB Chambliss, HON Brownell, KD Blair, SN & Billington, C 2003, 'Weight bias among health professionals specializing in obesity', *Obesity Research*, vol. 11, no. 9, pp. 1033-9.

Schwartz, S Susser, E & Susser, M 1999, 'A future for epidemiology?', *Annual Review of Public Health*, vol. 20, no. 1, pp. 15-33.

Scollo, M & Winstanley, M 2012, *Tobacco in Australia: Facts and issues-Introduction,* 4th ed., Cancer Council Victoria, viewed 18 January 2013, http://www.tobaccoinaustralia.org.au/

Searle, SD 2014, *How do Australians engage with science? Preliminary results from a national survey*, Australian National University: Australian National Centre for the Public Awareness of Science (CPAS), Canberra, viewed 21 December 2014, https://researchers.anu.edu.au/publications/90284

*Shape Up Australia* n.d., image, Australian National Preventive Health Agency, Canberra viewed 2 November 2014,

http://www.anpha.gov.au/internet/anpha/publishing.nsf/Content/shape-up

Shengyan, SY 2009, *Shattering the great doubt: the chan practice of Huatou*, Shambhala Publications, Massachusetts.

Shill, J Mavoa, H Allender, S Lawrence, M Sacks, G Peeters, A Crammond, B & Swinburn, B 2012, 'Government regulation to promote healthy food environments—a view from inside state governments', *Obesity Reviews*, vol. 13, no. 2, pp. 162-73.

Silverman, D 2006, *Interpreting qualitative data*, 3rd edn, Sage Publications Ltd, London.

Skatssoon, J 2005, 'CSIRO diet gets a grilling', *Australian Broadcasting Corporation*, 29 August 2005, viewed 14 December 2013,

http://www.abc.net.au/science/articles/2005/08/29/1448136.htm

Smith, E & Rieger, E 2010, 'An investigation of the effect of body dissatisfaction on selective attention toward negative shape and weight-related information', *International Journal of Eating Disorders*, vol. 43, no. 4, pp. 358-64.

Sobo, E 1994, 'The sweetness of fat: health, procreation, and sociability in rural Jamaica', in N Landry Sault (ed.), *Many mirrors: body image and social relations*, Rutgers, The State University, USA, pp. 132-54.

Social Research Centre 2010, Evaluation of the Australian Better Health Intitiative Measure Up social marketing campaign, Phase 1, The Social Research Centre, Melbourne.

---- 2012, Evaluation of the Swap It, Don't Stop It social marketing campaign, evaluation report wave 6 final, The Social Research Centre, Melbourne.

Sontag, S 1977, On photography, Picador, New York.

---- 2003, Regarding the Pain of Others, Hamish Hamilton, London.

South Australia Health 2013, *Health in All Policies*, SA Government, Adelaide, viewed 6 August 2013,

http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/health+reform/health+in+all+policies

Spitzer, WO 1996, 'The future of epidemiology', *Journal of Clinical Epidemiology*, vol. 49, no. 7, pp. 705-9.

Stark, J 2014, 'Bigger can be better for health', *The Canberra Times*, 30 March 2014, pp. 15.

Stearns, PN 2002, Fat history: Bodies and beauty in the modern west, NYU Press, New York.

Stevens, VL Jacobs, EJ Sun, J Patel, AV McCullough, ML Teras, LR & Gapstur, SM 2012, 'Weight cycling and mortality in a large prospective US study', *American Journal of Epidemiology*, vol. 175, no. 8, pp. 785-92.

Stoneman, S 2012, 'Ending fat stigma: Precious, visual culture, and anti-obesity in the "Fat Moment", *Review of Education, Pedagogy, and Cultural Studies*, vol. 34, no. 3-4, pp. 197-207.

Strawbridge, WJ Wallhagen, MI & Shema, SJ 2000, 'New NHLBI clinical guidelines for obesity and overweight: will they promote health?', *American Journal of Public Health*, vol. 90, no. 3, pp. 340-3.

Stroke Foundation 2014, *Know your numbers health check*, Stroke Foundation, viewed 25 November 2014, http://strokefoundation.com.au/knowyournumbers/

Stuber, J Galea, S & Link, BG 2008, 'Smoking and the emergence of a stigmatized social status', *Social Science & Medicine*, vol. 67, no. 3, pp. 420-30.

Stuckler, D & Nestle, M 2012, 'Big food, food systems, and global health', *PLoS Medicine*, vol. 9, no. 6, e1001242.

Sugovic, M & Witt, J 2013, 'Perceived hill slant and obesity: Perception does not care about how you feel', *Journal of Vision*, vol. 13:961- 10.1167/13.9.961.

Sutin, AR & Terracciano, A 2013, 'Perceived weight discrimination and obesity', *PLoS One*, vol. 8, no. 7, pp. e70048.

Swap it:Don't stop it 2013, Measure Up: Swap it Don't stop it, Canberra, viewed 30 November 2013,

http://pandora.nla.gov.au/pan/130297/20131128-0000/swapit.gov.au/index.html

Swerissen, H & Crisp, BR 2004, 'The sustainability of health promotion interventions for different levels of social organization', *Health Promotion International*, vol. 19, no. 1, pp. 123-30.

Swinburn, B & Egger, G 2002, 'Preventive strategies against weight gain and obesity', *Obesity Reviews*, vol. 3, no. 4, pp. 289-301.

Swinburn, B Egger, G & Raza, F 1999, 'Dissecting obesogenic environments: the development and application of a framework for identifying and prioritizing environmental interventions for obesity', *Preventive Medicine*, vol. 29, no. 6, pp. 563-70.

Teixeira, PJ Going, SB Houtkooper, LB Cussler, EC Martin, CJ Metcalfe, LL Finkenthal, NR Blew, RM Sardinha, LB & Lohman, TG 2002, 'Weight loss readiness in middle-aged women: psychosocial predictors of success for behavioral weight reduction', *Journal of Behavioral Medicine*, vol. 25, no. 6, pp. 499-523.

Terry, J & Urla, J 1995, Deviant bodies, Indiana University Press, USA.

Tesh, SN 1988, *Hidden arguments: Political ideology and disease prevention policy*, Rutgers University Press, New Brunswick, New Jersey.

The National Obesity Taskforce 2003, *Healthy weight 2008, Australia's future: the national action agenda for children and young people and their families*, viewed 20 December 2014,

http://www.health.gov.au/internet/healthyactive/publishing.nsf/content/healthy\_weight0 8.pdf/\$File/healthy\_weight08.pdf

---- 2006, Health weight for adults and older Australians: a national action agenda to address overweight & obesity in adults & older Australians, Commonwealth of Australia, The National Obesity Taskforce, Canberra.

Therapeutic Goods Administration 2007, *Labelling drugs and poisons*, Australian Government, TGA, Canberra.

Thomas, SL Hyde, J Karunaratne, A Herbert, D & Komesaroff, PA 2008, 'Being 'fat'in today's world: a qualitative study of the lived experiences of people with obesity in Australia', *Health Expectations*, vol. 11, no. 4, pp. 321-30.

Thomas, S Karunaratne, A Lewis, S Castle, D Knoesen, N Honigman, R Hyde, J Kausman, R & Komesaroff, P 2010a, "Just Bloody Fat!': A Qualitative Study of Body Image, Self-Esteem and Coping in Obese Adults', *The International Journal of Mental Health Promotion*, vol. 12, no. 1, pp. 39-49.

Thomas, SL Lewis, S Hyde, J Castle, D & Komesaroff, P 2010b, 'The solution needs to be complex. Obese adults' attitudes about the effectiveness of individual and population based interventions for obesity', *BMC Public Health*, vol. 10, no. 420, pp. 1-9.

Thomas, SL Olds, T Pettigrew, S Yeatman, H Hyde, J & Dragovic, C 2014a, 'Parent and child interactions with two contrasting anti-obesity advertising campaigns: a qualitative analysis', *BMC Public Health*, 11 February 2014, viewed 29 March 2014, http://www.biomedcentral.com/1471-2458/14/151

Thomas, SL Olds, T Pettigrew, S Randle, M & Lewis, S 2014b, "Don't eat that, you'll get fat!" Exploring how parents and children conceptualise and frame messages about the causes and consequences of obesity', *Social Science & Medicine*, vol. 119, pp. 114-22.

Townend, L 2009, 'The moralizing of obesity: A new name for an old sin?', *Critical Social Policy*, vol. 29, no. 2, pp. 171-90.

Truesdale, KP & Stevens, J 2008, 'Do the obese know they are obese?', *North Carolina Medical Journal*, vol. 69, no. 3, pp. 188-94.

United States Department of Health and Human Services 2001, *The Surgeon General's call to action to prevent and decrease overweight and obesity*, United States Office of the Surgeon General, Rockville, viewed 14 November 2014, http://www.cdc.gov/nccdphp/dnpa/pdf/CalltoAction.pdf

Vartanian, LR & Shaprow, JG 2008, 'Effects of weight stigma on exercise motivation and behavior, A preliminary investigation among college-aged females', *Journal of Health Psychology*, vol. 13, no. 1, pp. 131-8.

Vartanian, LR & Smyth, JM 2013, 'Primum non nocere: obesity stigma and public health', *Journal of Bioethical Inquiry*, vol. 10, no. 1, pp. 49-57.

Vartanian, LR Pinkus, RT & Smyth, JM 2014, 'The phenomenology of weight stigma in everyday life', *Journal of Contextual Behavioral Science*, vol. 3, no. 3, pp. 196-202.

Vartiainen, E Laatikainen, T Peltonen, M Juolevi, A Männistö, S Sundvall, J Jousilahti, P Salomaa, V Valsta, L & Puska, P 2010, 'Thirty-five-year trends in cardiovascular risk factors in Finland', *International Journal of Epidemiology*, vol. 39, no. 2, pp. 504-18.

Wake, M Baur, LA Gerner, B Gibbons, K Gold, L Gunn, J Levickis, P McCallum, Z Naughton, G Sanci, L & Ukoumunne, OC 2009, 'Outcomes and costs of primary care surveillance and intervention for overweight or obese children: the LEAP 2 randomised controlled trial', *BMJ*, vol. 339, pp. b3308.

Wakefield, MA Loken, B & Hornik, RC 2010, 'Use of mass media campaigns to change health behaviour', *The Lancet*, vol. 376, no. 9748, pp. 1261-71.

Walls, HL Walls, KL & Loff, B 2012, 'The regulatory gap in chronic disease prevention: A historical perspective', *Journal of Public Health Policy*, vol. 33, no. 1, pp. 89-104.

Walsh, RA Paul, CL Tzelepis, F Stojanovski, E & Tang, A 2008, 'Is government action out-of-step with public opinion on tobacco control? Results of a New South Wales population survey', *Australian and New Zealand Journal of Public Health*, vol. 32, no. 5, pp. 482-8.

Wang, C & Coups, EJ 2010, 'Causal beliefs about obesity and associated health behaviors: results from a population-based survey', *International Journal of Behavioral Nutrition and Physical Activity*, vol. 7, pp. 19.

Wann, M 2009, 'Foreword: Fat studies, An invitation to revolution', in ED Rothblum & S Solovay (eds), *A Fat Studies Reader*, New York University Press, New York, pp. ix-xxv.

Wanna, J 2009, 'Critical reflections on Australian public policy: selected essays', *ANU E Press*, viewed 5 October 2013, http://epress.anu.edu.au/critical\_citation.html

Wardle, J Rapoport, L Miles, A Afuape, T & Duman, M 2001, 'Mass education for obesity prevention: the penetration of the BBC's Fighting Fat, Fighting Fit campaign', *Health Education Research*, vol. 16, no. 3, pp. 343-55.

Warin, M Turner, K Moore, V & Davies, M 2008, 'Bodies, mothers and identities: rethinking obesity and the BMI', *Sociology of Health & Illness*, vol. 30, no. 1, pp. 97-111.

Warin, MJ & Gunson, JS 2013, 'The weight of the word: Knowing silences in obesity research', *Qualitative Health Research*, vol. 23, no. 12, pp. 1686-1696.

Wickins-Drazilova, D & Williams, G 2010, 'Ethical and public policy aspects of childhood obesity: opinions of scientists working on an intervention study', *Obesity Reviews*, vol. 11, no. 8, pp. 620-6.

Willis, B 2013, *The advantages and limitations of single case study analysis*, E-International Relations Students, viewed 5 July 2014,

http://www.e-ir.info/2014/07/05/the-advantages-and-limitations-of-single-case-study-analysis/

Wolf, N 1991, *The Beauty Myth: How images of beauty are used against women*, Random House Group, London.

---- 2002, *The beauty myth: How images of beauty are used against women*, 2nd edn, Harper Collins, New York.

Wolffers, I 2000, 'Biomedical and development paradigms in AIDS prevention', *Bulletin of the World Health Organization*, vol. 78, no. 2, pp. 274-5.

World Health Organisation 1948, *Preamble to the Constitution of the World Health Organisation*, WHO, Geneva.

2000, *Obesity: Preventing and managing the global epidemic*, WHO, Geneva, viewed 18 June 2014, http://www.who.int/nutrition/publications/obesity/WHO\_TRS\_894/en/

- ---- 2006, *Obesity and Overweight: What are overweight and obesity?*, WHO, Geneva, viewed 20 July 2014, http://www.who.int/mediacentre/factsheets/fs311/en/index.html
- ---- 2008, WHO framework convention on tobacco control: guidelines for implementation: Article 5.3, WHO, Geneva, viewed 28 August 2014, http://www.who.int/fctc/guidelines/adopted/article\_5\_3/en/
- ---- 2013, Global burden of disease, injuries, and risk factor study 2013, WHO, Geneva.
- ---- 2014, *History of the development of the ICD*, WHO, Geneva, viewed 9 June 2014, http://www.who.int/entity/classifications/icd/en/HistoryOfICD.pdf
- ---- 2015, *Obesity and Overweight*, WHO, Geneva, viewed 25 March 2016, http://www.who.int/mediacentre/factsheets/fs311/en/

Yach, D Hawkes, C Epping-Jordan, JE & Galbraith, S 2003, 'The World Health Organization's Framework Convention on Tobacco Control: implications for global epidemics of food-related deaths and disease', *Journal of Public Health Policy*, vol. 24, no. 3/4, pp. 274-90.

Yach, D McKee, M Lopez, AD Novotny, T & Novotny, T 2005, 'Improving diet and physical activity: 12 lessons from controlling tobacco smoking', *BMJ*, vol. 330, no. 7496, pp. 898-900.

Yin, RK 2014, Case study research: Design and methods, Sage publications, New York.

Zavaroni, I Bonini, L Fantuzzi, M Dall'Aglio, E Passeri, M & Reaven, G 1994, 'Hyperinsulinaemia, obesity, and syndrome X', *Journal of Internal Medicine*, vol. 235, no. 1, pp. 51-6.

Zimmet, P 2011, 'Bariatric surgery: New paradigm in type 2 diabetes management?', *The Conversation*, 11 August 2011, viewed 12 December 2014, http://theconversation.com/bariatric-surgery-new-paradigm-in-type-2-diabetes-management-2393

Zimmet, P 2012, 'We should stop putting blame on obese people', *The Sydney Morning Herald*, 19 January, viewed 19 April 2012,

http://www.smh.com.au/opinion/society-and-culture/we-should-stop-putting-blame-on-obese-people-20110118-19v78.html