Review

Monitoring policy and actions on food environments: rationale and outline of the INFORMAS policy engagement and communication strategies

H. Brinsden1#, T. Lobstein1,2#, J. Landon2,3#, V. Kraak4#, G. Sacks4#, S. Kumanyika5#, B. Swinburn4,6#, S. Barquera7, S. Friel8, C. Hawkes9, B. Kelly10, M. L’Abbé11, A. Lee12,13, J. Ma14, J. Macmullen15, S. Mohan16, C. Monteiro17, B. Neal18, D. Sanders20, W. Snowdon4,21, S. Vandevijvere6 and C. Walker22 for INFORMAS

1International Association for the Study of Obesity, London, United Kingdom; 2Public Health Advocacy Institute of Western Australia, Curtin University, Perth, Western Australia, Australia; 3United Kingdom Health Forum, London, United Kingdom; 4WHO Collaborating Centre for Obesity Prevention, Deakin University, Melbourne, Victoria, Australia; 5Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, United States of America; 6School of Population Health, University of Auckland, Auckland, New Zealand; 7National Institute of Public Health, Mexico City, Mexico; 8National Centre for Epidemiology and Public Health, Australian National University, Canberra, Australian Capital Territory, Australia; 9World Cancer Research Fund International, London, United Kingdom; 10School of Health and Society, University of Wollongong, Wollongong, New South Wales, Australia; 11Department of Nutritional Sciences, University of Toronto, Toronto, Canada; 12School of Public Health and Social Work, Queensland University of Technology, Brisbane, Queensland, Australia; 13School of Exercise and Nutrition Sciences, Queensland University of Technology, Brisbane, Queensland, Australia; 14Chinese Center for Disease Control and Prevention (CCDC), Beijing, China; 15Consumers International, London, United Kingdom; 16Public Health Foundation of India, New Delhi, India; 17School of Public Health, University of Sao Paulo, Sao Paulo, Brazil; 18The George Institute for Global Health, University of Sydney, Sydney, New South Wales, Australia; 19British Heart Foundation Health Promotion Research Group, University of Oxford, Oxford, United Kingdom; 20School of Public Health, University of the Western Cape, Cape Town, South Africa; 21Pacific Research Centre for the Prevention of Obesity and Non-communicable Diseases (C-POND), Suva, Fiji; 22Global Alliance for Improved Nutrition (GAIN), Geneva, Switzerland

Summary

The International Network for Food and Obesity/non-communicable diseases Research, Monitoring and Action Support (INFORMAS) proposes to collect performance indicators on food policies, actions and environments related to obesity and non-communicable diseases. This paper reviews existing communications strategies used for performance indicators and proposes the approach to be taken for INFORMAS. Twenty-seven scoring and rating tools were identified in various fields of public health including alcohol, tobacco, physical activity, infant feeding and food environments. These were compared based on the types of indicators used and how they were quantified, scoring methods, presentation and the communication and reporting strategies used. There are several implications of these analyses for INFORMAS: the ratings/benchmarking approach is very commonly used, presumably because it is an effective way to communicate progress and stimulate action, although this has not been formally evaluated; the tools used must be trustworthy, pragmatic and policy-relevant; multiple channels of communication will be needed; communications need to be tailored and targeted to decision-makers; data and methods should be freely accessible. The proposed communications strategy for INFORMAS has been built around these lessons to ensure that INFORMAS’s outputs have the greatest chance of being used to improve food environments.

Keywords: Communications strategy, food environments, INFORMAS, monitoring.

Address for correspondence: T Lobstein, IASO, Charles Darwin House, 12 Roger Street, London WC1N 2JU, UK.
E-mail: tlobstein@iaso.org

*Members of the writing group for this manuscript are listed in order of their contribution to the writing of the manuscript.

INFORMAS is the International Network for Food and Obesity/non-communicable diseases Research, Monitoring and Action Support. All authors who are not members of the writing group are listed in alphabetical order, and contributed to discussion of the key concepts and issues raised in this manuscript as part of the first formal meeting of INFORMAS from 19 to 23 November 2012.
Introduction

The 2010 Global Burden of Disease report (1) has highlighted the increasing contribution of food, nutrition and dietary patterns to the burden of non-communicable diseases (NCDs), and strengthened the case for policies to tackle NCDs by improving the healthfulness of food environments (2).

As indicated in the overview paper in this supplement (3), an International Network for Food and Obesity/NCD Research, Monitoring and Action Support (INFORMAS) has been established as a global network of public interest organizations and researchers that aims to monitor, benchmark and support public and private sector actions to create healthy food environments and reduce obesity, NCDs and their related inequalities. The structure of INFORMAS is built around a series of modules that will examine public and private sector’s policies and actions, and their impact on various aspects of food environments. A significant amount of data is expected to be collected by INFORMAS. There is a need to consider how the data from each of the INFORMAS modules may be integrated into a coherent set of indicators and other forms or products that can be communicated to wider stakeholders to support both policy development and implementation. This may require input from experts outside of the field of public health.

Some aspects of food environments and the policies and actions that shape them have previously been investigated. Much of this previous research has focused on developing instruments and approaches to measure different aspects of specific food environments (e.g. retail stores, restaurants, schools or worksites) (4,5) and factors that shape purchasing behaviour and food intake, analysing subsectors for sales trends, food availability and pricing strategies, or analysing commercial data to characterize food and eating environments (6). Global and national databases can be used to identify food supply, sales and purchasing patterns, and can be supplemented by surveys of food use, household distribution and consumption patterns (7,8). Additional research has focused on the description and assessment of policies and actions undertaken by public and private sector stakeholders to create health-promoting food environments for populations (9–11).

There is, however, a need for a set of policy-relevant and globally feasible metrics which can be used to define and numerically benchmark these policies and their effects on food environments. This has been attempted for the World Health Organization’s (WHO) Framework Convention on Tobacco Control (12) and for assessing the implementation of the International Code of Marketing of Breast-Milk Substitutes (13). While some degree of flexibility can be considered in order to account for national and local contexts, a common set of approaches and metrics is expected to help to establish good practice performance for governments, industry and other stakeholders to reduce the burden of obesity and NCDs. INFORMAS is developing such metrics as the first step to informing and advancing progress on improving the healthfulness of food environments. These will then need to be effectively and widely communicated and adopted for them to have an impact on policies and practices.

The purpose of the present paper is to examine the use and nature of performance indicators in public health to both support the development of public health policy and monitor the extent of policy implementation to promote healthy food environments. Insight from this will guide the policy engagement and communications strategies of INFORMAS.

It should be noted that there is very little evidence of the effectiveness and validity of using such indices in supporting policy development. However, for present purposes, it is assumed from the widespread use of such indices in many policy areas, including in public health (such as in tobacco and alcohol control), that this approach is an effective way to communicate with decision-makers. It should also be noted that the use of indices in policy advocacy is discussed in the commentary by Lobstein et al. elsewhere in this supplement (14).

Methods

A search was conducted to identify tools and indicators being used to assess the existence of policies and actions, the extent of implementation of policies, or to inform policy development, in areas of public health related to NCDs. Tools of particular interest were those which use scoring systems, report cards and performance indices, and which had been used by public bodies or public-interest organizations to monitor, evaluate, benchmark and publicly report on the need for public health policies and progress towards their implementation. As a starting point, a search in the WHO website was conducted in September 2012, and again in April 2013, for relevant reports under five headings: tobacco control, alcohol, maternal and child nutrition and health, physical activity, and food and nutrition security. From the reports cited on the WHO website, additional relevant websites, reports and surveys were identified (snowball sampling). Supplementary materials were identified based on the authors’ expertise and knowledge in the area. A tool was included if it met the following criteria: (i) it was based on sets of indicators that were measureable, available, realistic and time-defined (e.g. implementation of a policy into regulation, financial expenditure on policy initiatives, surveys of outcome or behaviour); (ii) it was sufficiently transparent in its construction that it could be replicated and reported on in subsequent years; (iii) it had...
the specific intention of evaluating or monitoring the development or impact of public health policies linked to NCDs or obesity.

A large number of potential tools were identified across a wide range of policy areas, including health protection and disease prevention, environmental quality, and economic and social development. The purpose of the present review is to provide indicative results only, rather than a comprehensive analysis: after the first 50 examples of tools had been identified using the approach described above, two of the authors (HB, TL) examined them jointly in order to select those which could indicate both generality and variety, i.e. (i) could demonstrate similar approaches across different public health fields; (ii) could demonstrate different approaches within similar public health fields. On this basis, 27 tools were selected, and the results are listed in Table 1, with more details provided in Supporting Information Table S1.

Results

The 27 tools were analysed for the approaches they used for reporting their surveillance of indicators. These ranged from scorecards based on the ratings of composite sets of indicators, report cards that gave a single grading, narrative reports of the extent of policy adoption or policy implementation, to awards given for high and low performance of national governments and other stakeholders in meeting the indicators. These may be undertaken annually or using some other time period, in order to establish trends.

Types of indicators used

The indicators used can be broadly divided into three categories: those that are based on processes, such as the adoption, implementation or compliance with policies by both public and private sectors (e.g. tools no. 1–6, 12, 15–18, 22 in Table 1); those used to measure outcomes and effectiveness of policies (e.g. tools no. 7, 8, 10, 11, 20, 21, 23–25); and those that make an assessment based on stakeholders’ views derived from structured questionnaires or evaluative scoring processes (e.g. tool no. 18).

Quantifying the indicators

The majority of indicators were found to be quantified in some way so as to yield a summary composite score. Most commonly, a basic score per indicator was used which was reported alongside a summary/interpretative composite score, using either weighted or unweighted components (e.g. tools no. 8, 10, 25). Weighted components were used in order to adjust the degree of importance of these components to the overall score. In several cases, the scores were recorded in such a way that comparisons could be made with other data sets collected in other locations or across different time periods (e.g. tools no. 20, 23, 24). In some reports, only basic indicator scores were provided with no summary or interpretative score (e.g. tools no. 4, 22, 23). In a few cases, a summary composite score was reported without presenting the component base indicator scores (e.g. tools no. 18, 24).

Interpretation of the indicators and scoring methods

The nature of the summary composite score took several forms. In some cases, the composite score was presented as a proportion (%) meeting a specified indicator (e.g. tools no. 1, 4, 9) or as a change in the percentage meeting the specified indicator over time (e.g. tools no. 15, 16, 20, 21), without any explicit interpretation as to the implication of such a score. In other cases, a scale such as 0 to 100 or 1 to 10 (e.g. tools no. 2, 7, 13, 18, 19) was used which provides an inferred, but not explicit, interpretation.

Several cases were identified whereby explicit interpretations of the scores were given. In these cases, results were clustered and categorized, so that a score of, say, 3 or 4 was described as ‘poor’ while one of 5 or 6 merited ‘fair’, 7 or 8 ‘good’ and 9 or more ‘very good’ (e.g. tools no. 5, 6, 8). In some cases, scores were clustered and named as if they were school report cards, classified from ‘A’ (best) down through ‘F’ (poorest) (e.g. tools no. 3, 14).

Presentation of the scores

Scoring methods commonly included a ranking by score and listing by rank, so that highest-scoring regions, countries, states etc., were listed first and lowest scoring last (e.g. tools no. 10, 11, 12, 13, 21, 26), or a curtailed version of this in which only a few of the best (such as ‘top ten’) and worst (‘bottom ten’) were shown (e.g. tool no. 7). These ranking methods could also be used to provide comparative trend analyses, in which either the magnitude of change or the direction of change in an indicator score is shown, with the best performers being emphasized (e.g. tools no. 8, 15, 20, 21).

Communication of the scores, ratings and rankings

Besides the formats for the scoring processes provided in report cards, the methods for disseminating the findings were also examined. In Table 1, we show which scoring results are made available publicly, to whom they are primarily disseminated, what form of presentation are commonly used, and whether there is evidence that social media are being used to enhance dissemination.
<table>
<thead>
<tr>
<th>Report example</th>
<th>Tools used</th>
<th>Stated purpose</th>
<th>Type of indicator</th>
<th>Scale used</th>
<th>Open access</th>
<th>Communication strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco control</td>
<td>1. FCTC progress report (24)</td>
<td>To support the implementation of the FCTC by tracking progress and mapping the overall status of implementation.</td>
<td>U, I</td>
<td>Percentages meeting each indicator</td>
<td>✓ ✓</td>
<td>✓ ✓ □□ □□ □□ ✓ ✓</td>
</tr>
<tr>
<td>2. Tobacco control scorecard (25)</td>
<td></td>
<td>To support the implementation of tobacco control policies in Australia by tracking progress state by state.</td>
<td>U, I, L</td>
<td>0–10 per indicator, overall rated 0–100 points</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>3. Report card on tobacco policy (26)</td>
<td></td>
<td>To improve federal and state level tobacco control policies in the US through objective evaluation and tracking progress.</td>
<td>U, I</td>
<td>Grades awarded from A to F.</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>4. Global status report on alcohol and health (27)</td>
<td>To help WHO member states to reduce the harmful use of alcohol, and its health and social consequences.</td>
<td>I</td>
<td>Assessed based on % meeting each indicator</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Maternal and child nutrition and health</td>
<td>5. Breastfeeding policy scorecard (28,29)</td>
<td>To monitor breastfeeding policies in 36 industrialized countries.</td>
<td>I</td>
<td>Average of all indicators. 3–4 = poor; 5–6 = fair; 7–8 = good; ≥ 9 = very good.</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>6. State of the Code (30–32)</td>
<td></td>
<td>To survey the measures taken by governments to implement the International Code of Marketing Breastmilk Substitutes so as to increase compliance.</td>
<td>U</td>
<td>Countries categorized into one of nine categories. Data pulled together to form the IBFAN scale of code compliance</td>
<td>✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>7. Mother’s index (29)</td>
<td></td>
<td>To evaluate and report the status of women’s health, nutrition, education, economic well-being and political participation in 165 countries.</td>
<td>U</td>
<td>Ranking the 10 best countries to be a mother (rank 1–10) and the 10 worst (rank 156–165).</td>
<td>✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>8. Infant and toddler feeding scorecard (29)</td>
<td></td>
<td>To analyse and report the status of child nutrition in 73 priority countries where children are at greatest risk of dying before the age of 5 years or where they are dying in the largest numbers.</td>
<td>U</td>
<td>% meeting indicators and graded very good, good, fair and poor</td>
<td>✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>9. Breastfeeding report card (31)</td>
<td></td>
<td>To improve breastfeeding rates and breastfeeding policies in US states.</td>
<td>U, I</td>
<td>Prevalence – % meeting indicators Process – % meeting, per 1,000 people or ratio</td>
<td>✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>10. Report card on child well-being (34)</td>
<td></td>
<td>To encourage monitoring, to permit comparison and to stimulate the discussion and development of policies to improve children’s lives.</td>
<td>U</td>
<td>Countries ranked 1–21 based on indicator results</td>
<td>✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>11. State trends in child well-being (35)</td>
<td></td>
<td>To promote progress in child well-being at a state and national level in the US.</td>
<td>U</td>
<td>Overall score and ranking (best) – 50 (worst state) per indicator</td>
<td>✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Physical activity</td>
<td>12. Bicycling and walking benchmarking (36)</td>
<td>To support policies to increase walking and bicycling by measuring progress, determining best practice and comparing cities and states in the US.</td>
<td>U, I, L</td>
<td>Number who have each indicator implemented, then ranked from best to worst</td>
<td>✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>13. American fitness index (37)</td>
<td></td>
<td>To support community collaboration and engagement with physical activity and healthy lifestyle initiatives in the US.</td>
<td>U</td>
<td>Ranking, 1–50, based on year on year comparison. Further categories into areas of excellence of priority areas for each state</td>
<td>✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
</tbody>
</table>

The table above illustrates the tools used to monitor existing policies and actions for addressing public-health challenges and methods for communication employed.
<table>
<thead>
<tr>
<th>No.</th>
<th>Tools used</th>
<th>Communication strategy</th>
<th>Report example</th>
<th>Stated purpose</th>
<th>Type of indicator</th>
<th>Scale used</th>
<th>Open access</th>
<th>Target Audience</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Food 2030 (39,40)</td>
<td>To support policies for a sustainable and healthy food supply in the UK</td>
<td>U, I</td>
<td>Comparison to baseline</td>
<td>U, I</td>
<td>Data comparison over 10 years</td>
<td>0-1</td>
<td>Yes</td>
<td>Press release</td>
</tr>
<tr>
<td>16</td>
<td>Food system report card (41)</td>
<td>To inform the development of policies for sustainable and healthy food supplies in the state of Iowa</td>
<td>U, I</td>
<td>Data comparison over 10 years</td>
<td>U, I</td>
<td>Data comparison over 10 years</td>
<td>0-1</td>
<td>Yes</td>
<td>Press release</td>
</tr>
<tr>
<td>17</td>
<td>Obesity action award (42)</td>
<td>To stimulate and improve government policies to reduce obesity in Australia</td>
<td>U, I</td>
<td>% prevalence compared over time, countries ranked for size of improvement, with best 15 and worst 15 identified</td>
<td>U, I</td>
<td>% prevalence compared over time, countries ranked for size of improvement, with best 15 and worst 15 identified</td>
<td>0-1</td>
<td>Yes</td>
<td>Press release</td>
</tr>
<tr>
<td>18</td>
<td>Obesity prevention state plan index (43)</td>
<td>To support state policies for the reduction of obesity in nine US states by supporting technical assistance, training and communications.</td>
<td>U, I</td>
<td>0-5 based on presence and strength of the policy</td>
<td>U, I</td>
<td>0-5 based on presence and strength of the policy</td>
<td>0-5</td>
<td>Yes</td>
<td>Press release</td>
</tr>
<tr>
<td>19</td>
<td>A taste for change (44)</td>
<td>To inform and support policy recommendations to the UK government and food industry for comprehensive action on diet-related ill-health.</td>
<td>U, I</td>
<td>0-5</td>
<td>U, I</td>
<td>0-5</td>
<td>0-5</td>
<td>Yes</td>
<td>Press release</td>
</tr>
<tr>
<td>20</td>
<td>Malnutrition index (29)</td>
<td>To identify country performance in reducing the prevalence of stunting among infants.</td>
<td>U</td>
<td>% prevalence compared over time, countries ranked for size of improvement, with best 15 and worst 15 identified</td>
<td>U</td>
<td>% prevalence compared over time, countries ranked for size of improvement, with best 15 and worst 15 identified</td>
<td>0-5</td>
<td>Yes</td>
<td>Press release</td>
</tr>
<tr>
<td>21</td>
<td>World ranking food safety performance (45)</td>
<td>To identify strengths and weaknesses in Canada’s food safety performance and to highlight policies to improve food safety.</td>
<td>U, I</td>
<td>Ranking based on country figures for each issue and a comparison to previous years</td>
<td>U, I</td>
<td>Ranking based on country figures for each issue and a comparison to previous years</td>
<td>0-5</td>
<td>Yes</td>
<td>Press release</td>
</tr>
<tr>
<td>22</td>
<td>Commitments and practice of 25 companies (46)</td>
<td>To review the self-reported policies of food and drink companies in the light of the WHO global strategy on diet, physical activity and health.</td>
<td>U, I</td>
<td>Yes vs. No over 14 indicators</td>
<td>U, I</td>
<td>Yes vs. No over 14 indicators</td>
<td>0-1</td>
<td>Yes</td>
<td>Press release</td>
</tr>
<tr>
<td>23</td>
<td>HFSS advertising restrictions final review (47)</td>
<td>To assess the effectiveness of restrictions on children’s exposure to TV advertising for products that are high in fat, salt or sugar.</td>
<td>U</td>
<td>Exposure to HFSS vs. non-HFSS ads</td>
<td>U</td>
<td>Exposure to HFSS vs. non-HFSS ads</td>
<td>0-1</td>
<td>Yes</td>
<td>Press release</td>
</tr>
<tr>
<td>25</td>
<td>Behind the brands (49)</td>
<td>To provide information on the top 10 food companies in order to hold companies to account for what happens in the supply chain.</td>
<td>I, S</td>
<td>1-10 per theme, scored as an overall percentage</td>
<td>I, S</td>
<td>1-10 per theme, scored as an overall percentage</td>
<td>0-10</td>
<td>Yes</td>
<td>Press release</td>
</tr>
<tr>
<td>26</td>
<td>Hunger and nutrition commitment index (50)</td>
<td>To measure the political commitment to reduce hunger and under-nutrition in developing countries.</td>
<td>U</td>
<td>Normalized indicator scores, ranked and averaged across indicators</td>
<td>U</td>
<td>Normalized indicator scores, ranked and averaged across indicators</td>
<td>0-5</td>
<td>Yes</td>
<td>Press release</td>
</tr>
<tr>
<td>27</td>
<td>Access to nutrition index (51)</td>
<td>To assess the nutrition-related commitments, performance and disclosure practices of 25 of the world’s largest food and beverage manufacturers.</td>
<td>I, L, S</td>
<td>Indicators rated 1-10, combined into weighted averages for seven categories, ranked for the ranking</td>
<td>I, L, S</td>
<td>Indicators rated 1-10, combined into weighted averages for seven categories, ranked for the ranking</td>
<td>0-10</td>
<td>Yes</td>
<td>Press release</td>
</tr>
</tbody>
</table>

**Note:** FCCD, full details of country compliance with each component of the index; FCTC, Framework Convention on Tobacco Control; FDS, full dataset available to download; HFSS, high in fat, salt or sugar; I, implementation; IBFAN, International Baby Food Action Network; L, lobbying and advocacy; S, policy resources/spending; U, usage/exposure; WHO, World Health Organization.
In all examples, multiple channels of communication were found to be used, often tailored and targeted towards different stakeholders. In the examples shown, the outputs were targeted most commonly to policymakers, but also on occasion to academics, professionals or advocacy organizations. Publication was accompanied by media alerts and press releases to draw attention to a report’s findings. Social media (e.g. Twitter and Facebook) are increasingly being used to supplement formal media and website publications. In no case was an estimation of the reach or impact available.

Additional means of dissemination include the publication of indices and ratings without a full background report, for example, when the background arguments and policies are assumed to be familiar to those viewing the index or rating, are easily found elsewhere, or when the index or rating is one of a series continuing an already-familiar trend.

Reports published on the websites of the public bodies or public interest organizations that produced the reports were usually freely available to download, but in some cases only freely available in a summary format.

It should be noted that the websites featuring the reports and tools gave few details of how the indices or ratings were used after their publication (e.g. through presentation in expert meetings, submission to consultations, cited in reports by other organizations, professional bodies). The websites generally provided no information on the effects that the reports have had on policy development or implementation, although those reports which examined trends in progress over time generally included some commentary on the forms of policy which were likely to influence those trends. One exception to this was a follow-up to the Oxfam report (tool no. 25) in which Oxfam cited the responses from the food companies they had assessed in their report in an online blog commentary from the Oxfam campaign coordinator (15).

**Implications of the findings for INFORMAS**

**Developing INFORMAS indicators**

As noted in the Introduction, the present paper is primarily concerned with examining the use and nature of performance indicators in public health to support the development of public health policy and to monitor and report on the extent of policy implementation. For INFORMAS, the proposed purpose of the indicators and ratings is to summarize progress and/or extent of implementation of public health policies and monitor the environments and behaviours that such policies create. The stated aims are to ensure a degree of transparency and accountability in government and corporate actions, to provide evidence of performance (positive or negative), to acknowledge success and leadership, and to maintain a ‘demand’ for continuing the promotion of public health through such policies (3).

From the reports examined, it is clear that a ratings/benchmarking approach is very commonly used, and previous approaches can provide guidance for INFORMAS. A summary of the key principles for the indicators to be used for INFORMAS is shown in Box 1.

There are, however, a number of limitations that must be considered when developing the INFORMAS approach. First, the different tools identified in this paper may not generalize across different audiences and contexts. For example, a low ranking may indicate a lack of political desire for change or a lack of capacity, or strong opposition to policies. Such contextual issues raise questions over the interpretation of rankings and ratings, and they will need to be addressed when the measures are being constructed, as well as being taken into account as they are monitored over time, and clearly described when reports are published and publicized. However, the expectation is that the process, benchmarks and ranking systems will provide a spur for those countries lagging in policy implementation.

Further, some scoring tools may be best constructed in the form of benchmarks for progress and/or extent of policy implementation rather than absolute measures of achievement. Just as health improvements need to be interpreted in the context of the health status prevailing at the time of monitoring, so INFORMAS’ ratings of the healthfulness of food environments will need to be contextualized in terms of trends and changes over time. Thus, a simple indicator such as consumption of fruit and vegetables may be low in absolute terms but nonetheless improving rapidly from a lower base, thanks to a progressive policy for better consumption. In contrast, a higher level of consumption...

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**Box 1 Key principles for the indicators to be used for INFORMAS**

The INFORMAS indicators should:

- Be relevant to policy decisions
- Allow comparisons between categories, locations and/or over time
- Be easy to interpret
- Be quantifiable and replicable
- Be combinable into a composite score for rating or ranking
- Take account of trends, capacity and distributional concerns
- Be validated against relevant NCD risk factors, dietary behaviour or body mass index and their change over time
- Provide constructive opportunities for action by stakeholders
may indicate a more traditional diet which is beginning to be undermined by factors such as the unregulated intensive marketing of energy-dense and nutrient-poor processed foods (16–18).

Lastly, it will be important to provide not only the score for a national indicator, but to take into account subnational scores (e.g. by state or province) if policies are predominantly developed and implemented at those levels and data are available at that level. Also, scoring patterns may differ considerably by location, reflecting population-level inequalities, for example between urban and rural populations, different ethnic population mixes or different educational or socioeconomic status (19–22).

**INFORMAS media and communications strategy**

A communications strategy for INFORMAS can be built around the learnings from other projects identified previously in this paper, with the intention of ensuring that data generated through INFORMAS can be effectively used to improve food environments, practices and policies.

In particular, we focus on the communication strategies that can be employed to frame and translate the key issues identified from the performance indicators to various audiences, including policymakers and the private sector.

Channels of communication that can be used as part of the INFORMAS outputs include expert consultations, appointed advisory boards and committees, ministerial or legislative briefings, scientific and peer-reviewed publications, conference and seminar presentations, research partnerships with government and various print, broadcast or digital media platforms. INFORMAS will utilize this influence to meet specific communication goals, such as those identified in Box 2.

**Box 2 Communication goals for INFORMAS**

The goals for INFORMAS communication are:

- To increase awareness among stakeholders, and set the policy agenda on improving food environments and reducing obesity, NCDs and their related inequalities
- To provide a platform for knowledge exchange and debate among all relevant stakeholders
- To stimulate policy research, evaluation and debate by policymakers, researchers, commercial stakeholders, the general news and trade media, and other public interest non-governmental organizations
- To stimulate action among policymakers, private sector and other policy implementers
- To build the INFORMAS brand so it is trusted and recognized among stakeholders.

A dedicated website hosted by the International Association for the Study of Obesity (IASO) and linked to other INFORMAS consortium partners’ websites will be developed. Presently, information is available at http://www.informas.org. The INFORMAS site will be a source of material on the methodologies used for gathering information, and the data that accumulate as a result, and will be meta-tagged with key search terms to ensure the site is readily accessed by search engines.

For the purposes of policy support, INFORMAS intends to provide open access to the data it collects and the analyses it performs, which is common practice as shown in the majority of examples in Table 1. Material will be subject to the usual copyright restrictions which apply to analyses published in journals or other fee-charging publications. Primary data should be made available to non-INFORMAS researchers after a period of 2 years from first collection: this lag is intended to allow the original research team to undertake analyses, publish results, provide feedback to stakeholders and perform any tasks required by their funding bodies before making their data openly available.

The data, along with research results and links to published materials, will be published in a periodic report, produced by IASO. This will provide the summary ranking or rating of countries, and allow comparison of performance across different governments. Summary indices will also be publicized and disseminated through IASO’s media channels and through INFORMAS partner media lists, including the members in INFORMAS membership bodies (IASO, Consumers International, the UK Health Forum, Corporate Accountability and others).

**Targets of communication**

The anticipated audience for the INFORMAS results are decision-makers in government and the private sector, academic communities, health professionals, non-governmental organizations, the media and the public. Table 2 provides a detailed summary of the anticipated communication and knowledge exchange approaches that should be considered by INFORMAS for each of these target audiences.

As Table 2 demonstrates, there is significant overlap between some of the key communication methods proposed, for instance the provision of an open-access data repository, the use of social media such as LinkedIn and Twitter and public news media. It is anticipated that information about the project findings will be published in appropriate peer-reviewed journals and newsletters, while a series of briefings and reports will be compiled and targeted to different stakeholder groups. In addition, workshops, presentations and symposia will be used to increase direct engagement with the target audiences at policy meetings, scientific conferences or events for healthcare professionals or the private sector.
It is anticipated that reports, including comparisons of country-level and company-level progress against global good-practice benchmarks, will be communicated directly to all stakeholders and to the media. Interim results will also be shared with named governments, named food companies and trade representative bodies in order to provide them with an opportunity to verify the data and to give feedback to the INFORMAS team. The process of feedback to governments and companies will be constructive and supportive of efforts to make changes to policies and actions. A balance in approach will need to be struck between providing monitoring information and supporting change on the one hand; and operating as an independent accountability system on behalf of the public on the other hand.

### Conclusion

The communication element of the INFORMAS project sets out to bring the results to the attention of the relevant stakeholders concerned with the quality of food environments, including governments and their agencies, intergovernmental bodies, commercial and trade organizations, health professionals and public health and consumer advocacy organizations. In this paper, we have shown that a variety of approaches are being used to communicate results on health- and food-related environments, with different types of information collected and information disseminated through various media.

We have also attempted to identify some key components that should be taken into consideration when developing...
indicators as part of INFORMAS. Namely, benchmarks should be policy relevant, quantifiable, reliable, valid and allow comparisons. However, the paucity of evaluations of the various approaches currently being used, and the lack of analysis of their effects on policy development, means that it has not been possible to assess the relative merits of different approaches. Furthermore, there are complications associated with the use of different approaches in different circumstances: it may be reasonable to compare different states within the United States with one another, or compare the practices of different formula milk manufacturers, but it would be less reasonable to compare small island nations with major industrial economies, or countries with a large range of subpopulations with countries that have relatively homogenous populations, or the actions of multinational corporations with those of localized, small-scale food suppliers.

A further concern that can overshadow the use of rankings and ratings to influence policy is the multiplicity of factors that may have an impact on policy development and implementation. For example, a food company may score highly based on an analysis of their corporate responsibility programme, such as their statements on developing nutritious products for low-income consumers, or their support for Millennium Development Goals, but they may also take part in political lobbying and make donations to policy research institutes which may also have an influence but might not be so easily measured (23). The information that is most easily obtained about a company is not necessarily the information that best summarizes the true position of the company and its policies.

INFORMAS will attempt to take account of these issues in their reports of food environments and the actions of public and private sector stakeholders. The composite scores will be developed, refined and reviewed with these concerns in mind, and will be responsive to comments and critiques from civil society. In order to improve the data, it is intended that all the base results will be reported and made freely available, subject to confidentiality, copyright and data protection constraints. In this way, it is hoped that INFORMAS outputs can be made an open resource for broad dissemination and widespread use.

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Conflicts of interest

Bruce Neal is the Chair of the Australian Division of World Action on Salt and Health (2007–ongoing), was a Member of the Pepsico Global Scientific Advisory Board (2010–2012), was the Independent Adjudicator for the Australian Responsible Marketing to Children’s Initiative (2009–2010) and holds funding from the Australian Food and Grocery Council as part of a National Health and Medical Research Council of Australia Partnership project (2010–2014). The other authors declare that they have no competing interests.

Supporting information

Additional Supporting Information may be found in the online version of this article, http://dx.doi.org/10.1111/obr.12072

Table S1. Detailed summary of tools used to monitor government performance to achieve specific public policy goals.

References