

**Parliament of Australia. House of Representatives
House Standing Committee on Health and Ageing
Inquiry into Obesity in Australia**

**SUBMISSION BY THE INSTITUTE OF OBESITY, NUTRITION AND
EXERCISE, THE UNIVERSITY OF SYDNEY
May 2008**

Summary

This submission prepared by the Institute of Obesity, Nutrition and Exercise at The University of Sydney proposes that the high level of obesity in the Australian population has implications far beyond the health system; and that in order to mobilize action across government, industry and the broader community, the Federal Government needs to demonstrate leadership and adopt a whole of government and community approach to the prevention of obesity. This proposition:

- Recognizes the serious economic and social consequences of obesity for Australia
- Focusses on the prevention of inappropriate weight gain, which is relevant to people at all life stages
- Proposes a fresh, evidence-based and considered approach to prevention, where the actions are sufficient to address the problem in terms of their focus and scale, and can overcome current barriers to concerted action.

The Institute of Obesity, Nutrition and Exercise (IONE) is a network of University of Sydney researchers committed to collaborate to reduce the individual and societal impact of obesity and lifestyle-related chronic disease. Led by key researchers across the University, IONE unites expertise in basic, clinical, public health and health policy research in the areas of obesity, nutrition, exercise and metabolic health; clinical intervention and practice; public health program and policy formulation and implementation. Further details are provided in Appendix A.

Obesity has serious health consequences, and this has direct implications for the health sector. IONE recognizes that Australia needs a system of health services to provide weight management services, as well as services that respond to complex clinical consequences. Obesity also has serious consequences for Australia's economy, both through the costs of managing the health problems and through effects on Australia's workforce and their productivity. While IONE has expertise to provide comment on all aspects of obesity, this submission is focused on the second Term of Reference and specifically refers to the prevention of obesity.

This submission is proposes that Australia requires a systems approach to promoting appropriate nutrition and physical activity across the population, in order to prevent obesity. Prevention of (inappropriate) weight gain is relevant to all Australians at all stages of the life course (with the possible exception of people over 80 years).

The importance of prevention has been recognised by Australian governments for many years in policies and statements, and there are a number of excellent strategic plans which identify the need for coherent, whole of government action to address the issues of

nutrition, physical activity and obesity. Unfortunately, the intent has been diluted in practice and there has been minimal action. The actions so far have been limited and small-scale, have not addressed some of the fundamental issues, and have been implemented on a scale that does not match the scale of the problem. There have also been significant barriers. It can be no surprise that actions to date have been relatively ineffective at a whole population level.

Approaches to date have under-estimated the seriousness and significance of the social and economic issues. Sectors outside of health have been slow and reluctant to recognize the far-reaching consequences of obesity and take an active role in solutions. Other countries such as Norway have managed to avoid such pitfalls through the establishment of an independent expert committee on nutrition and physical activity which reports directly to cabinet through the Minister for Health.

Every aspect of our way of life in Australia has the potential to affect the development of weight gain, obesity and related chronic diseases. In many ways the future for Australia is tied to how well we respond to the significant threat posed by obesity and related health problems, as well as how well we deal with the factors within Australian society which are driving excessive weight gain. This links obesity strongly with other major policy issues such as climate change, sustainability, economic growth, community welfare and safety, and inequalities in the community.

FULL SUBMISSION

The serious economic and social consequences of obesity for Australia

Appropriate nutrition and levels of activity make a major contribution to the physical, social and financial health of Australia. Conversely, inappropriate nutrition, a lack of physical activity and high body mass were estimated to account for 16% of the total burden of disease in Australia in 2003. There is ongoing work in Australia to estimate the costs of illness associated with obesity, both current and future costs¹.

Research conducted at The University of Sydney and published last year² has shown that more recent birth cohorts (that is, people who are younger now) are more overweight than previous generations – and thus the health consequences for them, when they are older, will be worse (assuming a scenario where these weight gains are not reversed). For example, it has been calculated that in 20 years, the projected number of hospitalizations of 45 to 54 year olds due to ischaemic heart disease, stroke and obesity-related cancers could be almost double in costs (in 2004-05 dollars), compared with the equivalent hospitalisations for those born 1949-1960. On the other hand, the projected number of hospitalisations could be more than halved, with 178 lives rescued and \$39.0 million (in 2004-05 dollars) saved, if any further increases in obesity amongst the younger birth cohort were halted now³

Re-focus on the prevention of inappropriate weight gain

The prevention of inappropriate weight gain amongst children, adolescents and adults is a key goal. That is, the priority at a population level is to stop people progressing from being overweight to obese, or from healthy weight to becoming overweight. This does not require weight loss at individual level, but increased physical activity (energy expenditure) and improved nutrition (reduced energy intake), sufficient to shift people into energy balance, across large numbers of people.

Like other areas of medicine and health, prevention is an evidence-based discipline, and underpinned by a substantial body of research. Essentially, existing research on the factors contributing to increases in obesity is able to indicate appropriate prevention solutions.⁴

Multiple factors contribute to the problem

Our current environment has been described as obesogenic – over-eating and sedentary activities are the norm, making it easy and likely for many people to become overweight. Thus, changing these everyday environments – so that they promote activity and healthy

¹ Allman-Farinelli MA, Aitken R, King L, Bauman AE. Osteoarthritis - the forgotten obesity-related epidemic with worse to come. *Med J Aust* 2008, **188(5)**: 317

² Allman-Farinelli M, Chey T, Bauman A, Gill T, James P. (2007) Age, period and birth cohort effects on prevalence of overweight and obesity in Australian adults from 1990 to 2000. *Eur J Clin Nutr*, advance online publication, April 18, 2007; doi:10.1038/sj.ejcn.1602769.

³ Manuscript submitted for publications; details available from authors of this submission.

⁴ For example, major reports from IONE members synthesise available evidence in order to guide policy and practice. They comprise:

Building solutions to prevent childhood obesity. NSW Centre for Overweight and Obesity: 2008. Available at www.coo.health.usyd.edu.au.

Best options for promoting healthy weight and preventing weight gain in NSW. Centre for Public Health Nutrition: 2005. Available at www.cphn.mmb.usyd.edu.au.

food choices - is a key strategy for preventing inappropriate weight gain across the population.

In fact, while the health sector is largely responsible for managing obesity-related health problems, it is other sectors which influence these everyday environments which are driving the obesity epidemic. Scientific studies as well as policy documents concur in recognizing the wide range of social, environmental, economic and behavioural factors which contribute to the increasing prevalence of overweight and obesity in adults and children.

In their expert report on *Diet, Nutrition and the Prevention of Chronic Disease*, the World Health Organisation (2004) identified a range of factors which have been shown to either increase or decrease the risk of weight gain (see Table 1).

Table 1. Summary of the strengths of evidence on factors that might promote or protect against weight gain and obesity

| Evidence | Decreases risk | Increases risk |
|-----------------|---|--|
| Convincing | Regular physical activity High dietary fibre intake | High intake of energy-dense foods* Sedentary lifestyles |
| Probable | Home and school environment that supports health food choices for children Promoting linear growth | Heavy marketing of energy dense foods and fast foods outlets Adverse social and economic conditions in developed countries (especially for women) Sugar-sweetened soft drinks and juices |
| Possible | Low glycaemic index foods Breastfeeding | Large portion sizes High proportion of food prepared outside of homes Rigid restraint/periodic disinhibition eating patterns |
| Insufficient | Increased eating frequency | Alcohol |

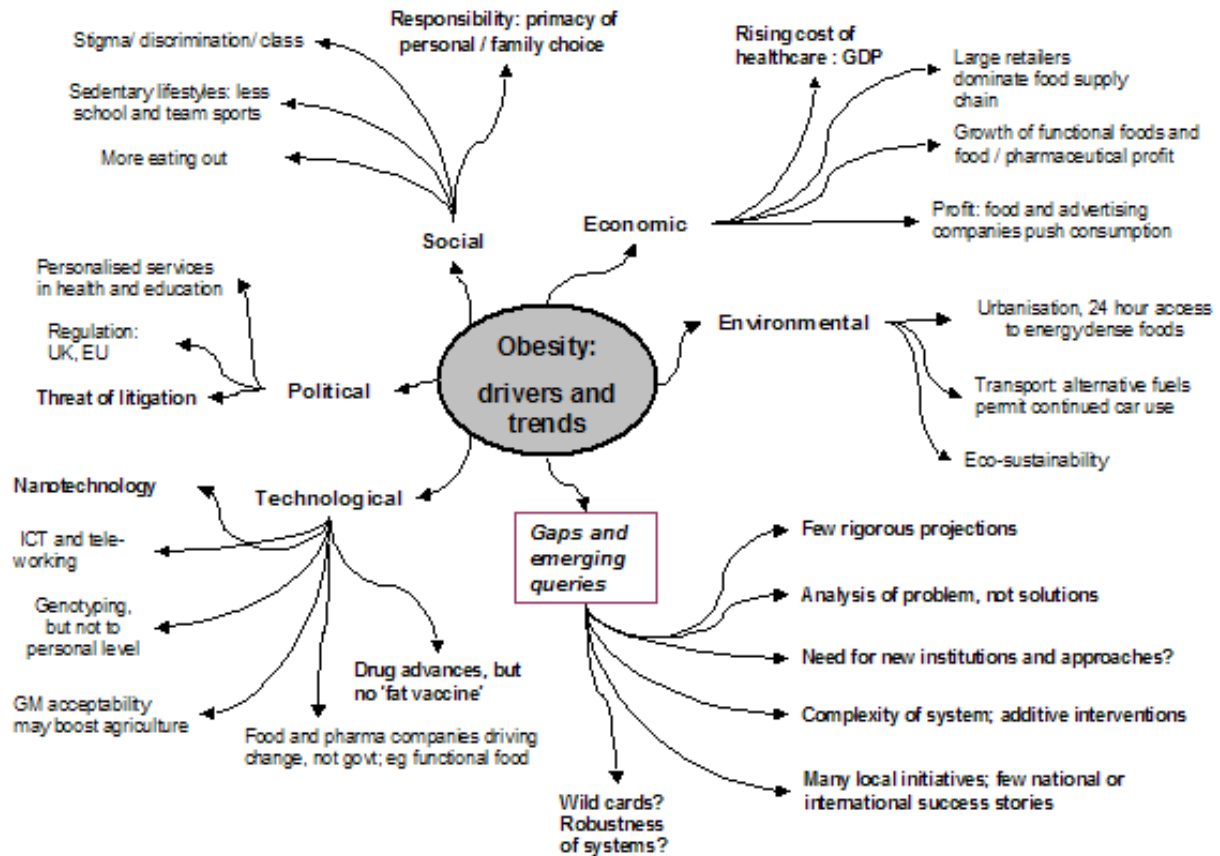
* energy dense foods are high in fat/sugar and energy dilute foods are high in fibre and water such as vegetables, fruits, legumes and whole grain cereals

Source: Adapted from WHO 2004

Further investigations of those factors which influence these behaviours, the ‘causes of the causes’, identify that there is a range of social, environmental and structural influences involved. Such influences occur as part of everyday life, including at home, school, work and community level. They also operate at regional, national and international levels.

Using complex systems approaches, the recent UK Foresight Report has mapped the various influences and sub-systems influencing population weight status (see Figure 2). The different factors identified in these analyses all constitute potential intervention points for public health efforts to prevent weight gain and obesity.

Figure 2: Summary image of obesity drivers and trends from the UK Foresight Report⁵



⁵ Tackling Obesity: Future Choices.UK Government's Foresight program:2008.

Develop and apply solutions that match the problem

To be effective, prevention efforts must be appropriate and proportionate to the problem. Many of the efforts so far are small-scale projects in local communities, or diffuse programs within one sector (e.g. schools). These efforts are insufficient to address the scale and nature of the problem.

Importantly, the prevention of obesity requires many actions which are beyond the scope of the health sector. The rationale for a comprehensive approach beyond the health sector is based on recognition of the numerous social and environmental factors which influence people's eating and physical activity, and which in turn effect energy balance and, over time, weight status. The rationale for this comprehensive approach is basically twofold:

- The factors that cause and contribute to the problem provide the best guide to where to intervene
- These causal and contributing factors are influenced by policies and actions in a range of sectors and portfolios. That is, policies and actions in many different sectors have an impact on the population's weight status and health consequences.

Despite the significance of nutrition and physical activity, these factors continue to be seen as 'soft' issues from a policy making perspective that do not require consideration beyond the health sector. They do not rate the breadth of consideration afforded to 'hard' policy issues such as economic development, fiscal management, trade, industry and commerce and nor do they attract the same level of investment as other health issues such as illicit drugs.

Some people argue for a simpler analysis of causes and solutions – telling people to eat less and move more. However, people's everyday behaviours are not simple to change (otherwise they would), and are strongly influenced by environmental factors (e.g. what foods are available at what price; time pressures associated with work and family commitments) and social factors (e.g. marketing of energy-dense foods; emphasis on spectator rather than participatory sports for adults).

IONE believes that an overly narrow perspective on nutrition, physical activity and obesity will mean that these issues will never be addressed effectively. Currently much of the effort directed at improving physical activity has focussed on sport, which is a minor contributor to overall activity levels, whilst issues of urban design, transport patterns, and safety are neglected. Likewise much of the effort to improve nutrition is directed at education programs to encourage personal behaviour change, whilst issues such as marketing of foods of poor nutritional quality to children, the cost of food, food availability and effective food labelling are ignored. Likewise, obesity has been framed as a condition of personal responsibility rather than a societal issue. In fact, every aspect of our way of life in Australia is potentially affected by weight gain, obesity and related chronic diseases.

The more complex analyses of contributing factors implicitly cautions against any expectations of a simple, single-pronged solution; and guides policymakers towards a comprehensive approach that involves community, government and private industry sectors.

Alternatively, as with climate change, some stakeholders consider that the complexity of factors contributing to obesity means that there is uncertainty and argue that action is

premature. The report from the Parliamentary Inquiry into Obesity by British House of Commons (2004) cautioned against using this uncertainty as an excuse for inaction⁶.

The importance of engaging a broad range of sectors was endorsed as the desired approach at the NSW Child Obesity Summit 2002⁷ and continued to a more limited extent in the subsequent response, *Preventing childhood obesity: NSW Government Action Plan 2003 – 2007*.⁸ In the case of this plan, the government's human services portfolios were involved; however, most infrastructure government portfolios were not involved, and there were no actions that specifically linked government and industry.⁹

This Inquiry has recognized the importance of a multi-pronged solution in its Terms of Reference. The key problem to date is that there has been no leadership for a comprehensive approach within Australia. In fact, this has been actively resisted both within many governments and industry groups. The challenge is **HOW** to build a comprehensive, cross-sector solution.

Processes and systems for leading towards a sustainable solution

At government level it can be difficult to build a cross-portfolio approach; there are few in-built systems or incentives for doing so within routine government business. There is a need for additional processes and levers to facilitate whole of government and cross-sector action.

Our group has observed the difficulties of engendering cross-sector action on obesity in government and industry. The defensive position of food and media industries, that their products are only a small part of the problem at most and should not be singled out, are in fact echoed by government sectors, when they reply that their issue or area of responsibility is only a minor contributor to obesity. The complex causes of obesity can be used as an excuse for specific groups to exempt themselves from playing a role. This problem could be overcome by a central agency taking a leadership role.

One way of establishing a cross-government and cross-sector initiative is to establish a leadership and coordinating group within a central agency, such as the Department of Prime Minister and Cabinet. Such infrastructure would provide a base for leadership across government and in relation to industry and other sections of the broader community. Such an approach has been proposed in the UK¹⁰, and operates in Norway. Norway set up its National Council on Nutrition and Physical Activity in 1999, as an independent expert committee which reports directly to cabinet through the Minister for Health.

This submission proposes a similar approach in Australia: the establishment of a central leadership and coordinating group within the Department of Prime Minister and Cabinet, with the role of developing and implementing a major obesity prevention initiative. The

⁶ House of Commons' Health Committee. *Obesity, 3rd Report of Session 2003-2004*. London: The Stationery Office, 2004.

⁷ Nathan SA, Develin E, Grove N, Zwi AB: An Australian childhood obesity summit: the role of data and evidence in 'public' policy making. *Australia and New Zealand Health Policy* 2005, 2(1):17.

⁸ NSW Government *Preventing childhood obesity: NSW Government Action Plan 2003 – 2007*. 2004

⁹ King L, Turnour C, Wise M. (2007) Analysing policy for child obesity prevention: Strategic policy versus practical action. *Australia and New Zealand Health Policy*, 4: 22

¹⁰ Lang et al. Policy Councils on Food, Nutrition and Physical Activity: the UK as a case study. *Public Health Nutrition* 2005; 8(1), 11-19.

proposed Council should work with stakeholders to identify leverage points and actions across all government departments, as well as industry and community groups. This high level policy body would be able to provide coherence to policy development, without replacing existing executive functions on other government agencies. In some cases, it may be helpful to conduct obesity-focused variations of Health Impact Assessments, to analyse the extent to which taxation, agriculture and environmental policies, for example, promote or protect against obesity. Such analyses are likely to encounter contradictions in aims across different portfolios; thus underlining the value of having a distinct council or office with responsibility for resolving such differences. Some examples of relevant action areas in a range of other sectors are presented in Table 2.

Table 2: Proposed influence/ action areas for promoting physical activity and nutrition by specified sectors

| SECTOR | EXAMPLES OF ACTION AREAS | OBESITY-RELATED BENEFITS¹ |
|----------------------------|---|---|
| 1. Transport, roads | Public transport | ↑ walking & incidental activity |
| | Active transport | ↑ walking & incidental activity |
| | Connectivity | ↑ walking & incidental activity |
| | Sites for food marketing | ↓ energy dense foods & beverages |
| 2. Planning | Open space | ↑ walking & vigorous PA |
| | Mixed use | ↑ walking & incidental activity |
| | Higher density | ↑ walking & incidental activity |
| | Connectivity | ↑ walking & incidental activity |
| 3. Local Government | Recreation facilities | ↑ moderate-vigorous activity |
| | Land use | ↑ walking & incidental activity |
| | Planning | ↑ walking & incidental activity |
| | Transport routes | ↑ access to fresh food (F&V) |
| | Food outlets | ↓ energy dense foods |
| 4. Food, Agriculture | Supply | ↑ access to F&V |
| | Food transports | ↑ access to F&V |
| | Costs | ↑ access to F&V |
| | Production/processing | ↓ energy dense foods |
| 5. Education | School food | ↓ energy dense food, soft drinks |
| | School PDHPE | ↑ moderate-vigorous PA |
| | Curricula | ↑ nutrition & PA |
| | Communication to families | ↓ energy dense food, ↑ activity |
| 6. Children's Services | Transport to/from school | ↑ walking & incidental activity |
| | Childcare food | ↓ sugary drinks |
| | Childcare activity, skills | ↑ incidental activity |
| | Communication to parents | ↑ nutrition & PA |
| 7. Sport & Recreation | Out-of-school activity programs | ↑ moderate-vigorous PA |
| | Community recreation infrastructure | ↑ moderate-vigorous activity |
| | Accreditation of coaches and clubs, limiting inappropriate sponsorships | ↓ energy dense food |
| | Regulations restricting advertising of energy-dense foods to children | ↓ energy dense foods & beverages |
| 8. Media and communication | Health information | ↑ nutrition & physical activity |

Australia needs infrastructure that has the capacity to develop and address these opportunities for cross-sector action. Further policies and reports which simply identify ideas may be helpful, but are not sufficient to spur action. IONE believes that it is imperative that this Inquiry acknowledge the difficulty of moving from ideas into practical action, and address this gap by recommending infrastructure and systems that can genuinely provide leadership and leverage for action across government, industry and community sectors.

Submission written by Lesley King and Tim Gill on behalf of IONE.

Appendix A: The Institute of Obesity, Nutrition and Exercise

IONE is a collaborative of expertise researchers dealing with these problems which consolidates existing clinical and scientific research knowledge and skills, and brings strength through:

- The broadest approach and expertise for combating and preventing obesity and lifestyle-related chronic disease assembled in Australia
- Expertise across the human life-cycle from pre-gestation, through childhood, adolescents and to old age
- Comprehensive experience in combating the problem at all levels from clinical settings through to public health program delivery including effective evaluation
- World recognised staff
- Extensive networks across the University of Sydney, nationally and internationally

IONE Directors

Director - Professor Ian Caterson AM

Boden Professor of Human Nutrition

Expertise: Obesity (cause, effect and management); Fetal origins of adult disease

Professor Stephen Colagiuri

Professor of Metabolic Health

Expertise: Diabetes and obesity; Metabolic health

Professor Louise Baur

Professor, Discipline of Paediatrics and Child Health, The Children's Hospital at Westmead
Clinical School

Expertise: Childhood obesity (prevention and management)

Professor Adrian Bauman

Professor in Public Health (Behavioural Epidemiology and Health Promotion)

Expertise: Prevention; physical activity; Epidemiology

Professor Jennie Brand-Miller

Professor in Human Nutrition

Expertise: The glycemic index of foods; The effect of diet in obesity and diabetes

Professor Maria A. Fiatarone Singh

Geriatrician, Professor of Medicine and
John Sutton Chair of Exercise and Sport Science

Expertise: Ageing and disease; Metabolic disease and exercise

With specific relevance to this submission, IONE has outstanding expertise in prevention, through the work of The NSW Centre for Overweight and Obesity, the Centre for Physical Activity and Health and the Centre for Public Health Nutrition. Further information on these centres is available through their websites:

www.coo.health.usyd.edu.au;

www.cpah.health.usyd.edu.au;

www.cphn.mmb.usyd.edu.au

Appendix B: Specific policies and actions proposed by IONE

There are many policy priorities which are amenable to immediate action, which could be considered and developed by the proposed cross-sectoral infrastructure, and which would demonstrate the leadership role of such an office.

IONE proposes the following as priorities for action:

- Regulation which limits the marketing of energy-dense foods to children on television, computer games, websites, magazines and food packaging. The aspect of this related to television advertising is the subject of an ACMA Inquiry.
- Regulation which bans the sponsorship of schools and children's sports by food companies associated with the production or retail of energy-dense foods. The equivalent type of action was an important milestone in tobacco control, and is a form of food marketing.

Funding incentives for the development of community and environmental infrastructure to support active lifestyles and active transport amongst adults and children (walking paths, lighting, bike paths, swimming facilities, open space etc).

- Introduction of subsidies for the transport of fresh foods to rural and remote locations, to promote availability and affordability.
- Conduct a cross-government obesity audit (a variation of Health Impact Assessment), to analyse the extent to which a range of portfolios and policies including taxation, agriculture and environmental policies, promote or protect against obesity; and could be modified to contribute to the prevention of obesity.