



Inquiry into Obesity and Type 2 Diabetes in New Zealand

Report of the Health Committee

Forty-eighth Parliament
(Sue Kedgley, Chairperson)
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Inquiry into Obesity and Type 2 Diabetes in New Zealand

Executive summary

The following key points emerged from the evidence in our inquiry:

- Obesity and type 2 diabetes are crucial issues for New Zealand; they adversely affect the health of many and the social and economic welfare of all New Zealanders.
- These “epidemics” have the potential to overwhelm the health system if left unchecked.
- These epidemics impact disproportionately on Māori and Pacific people. The trends in children and young people are particularly worrying.
- Obesity is the main preventable cause of type 2 diabetes, so an effective strategy to reduce obesity will also bring about a significant reduction in type 2 diabetes.
- The fundamental cause of the rapid rise in obesity is an imbalance between energy intake and energy expenditure. Excessive food intake is the major cause, but there are multiple risk factors for obesity which interact to create an environment where unhealthy food is more visible, more readily available, and far more heavily promoted than healthy food. As a result less healthy choices have become the easy choices.
- Comprehensive prevention is the key to reducing obesity and type 2 diabetes. Educational strategies alone will be insufficient.
- Early lifestyle intervention and management of high-risk people can radically reduce the progression of pre-diabetes to type 2 diabetes.
- An urgent, concerted, and sustained public-health approach is needed to manage these complex issues.
- The public health threat of chronic, non-communicable diseases clearly exceeds the threat of communicable diseases (which are already addressed in public health legislation). Poor diet is a leading risk factor for death in New Zealand (see table in appendix D).

On the basis of the evidence and expert advice received, we have made detailed recommendations designed to achieve the following two broad objectives and three specific targets.

Objectives

- to create an environment in New Zealand that encourages and maintains healthy eating and physical activity patterns, especially among children
- to develop and implement a coordinated national cross-sectoral response to the prevention and management of obesity and type 2 diabetes.

Targets

- to reduce the increase in the rate of obesity in children and youth to zero by 2010, and cut by 20 percent the prevalence of obesity in children and youth by 2015
- to narrow the ethnic gaps in childhood obesity rates so that by 2015 the rates are equally low in Māori, Pacific, and other New Zealand children
- to ensure that by 2010 primary health organisations will have screened 80 percent of their enrolled populations for diabetes, and ensured that appropriate preventive and management interventions are available for high-risk patients.

These targets are ambitious, but achievable, and they should be regularly reviewed.

Principles for action

We believe that the following principles should underpin any specific action, to ensure that the pervasive, complex and multi-factorial nature of the obesity and type 2 diabetes epidemics are addressed effectively and urgently. On the basis of these principles we have established the subsequent list of specific recommendations.

- **Concerted, whole of government response**

A strategic national response will need to be multi-sectoral, involving multiple Government agencies, the private sector, non-governmental organisations and the general public. Clear lines of accountability are critical, and progress must be measured against agreed, quantified, and timed targets. The Government will need to lead and coordinate the work, and the support of all political parties is highly desirable.

- **Urgent, sustained response**

Childhood obesity began to increase in New Zealand approximately three decades ago, and its effects have become entrenched in the population. An effective response is likely to take at least a decade, so sustained action is essential, starting immediately.

- **Integrated and comprehensive response**

The response so far to obesity and type 2 diabetes has been fragmented and poorly coordinated. Action on these conditions needs to be coordinated with the responses to associated diseases, and to related risk factors. All agencies in a position to influence relevant outcomes, including the food and beverage industry, should be required to make clearly specified contributions which are measurable and monitored. A comprehensive approach is needed, with a sound balance between strategies directed at the whole population and strategies directed at high-risk groups and individuals. Education alone will be insufficient and will not modify the obesity-promoting environment.

- **Stepwise approach**

An effective response will involve a wide range of actions, some of which will be readily accepted, while others may require legislation. We therefore recommend a stepwise approach, beginning with the more straightforward and obviously effective interventions. More contentious actions can be implemented later, as the need becomes apparent, and as consensus is built.

- **Environmental approach**

Environmental approaches have the greatest potential to reduce the problem, in combination with social marketing and educational and empowerment approaches, and are less likely to exacerbate health inequalities.

Summary of recommendations

The Health Committee makes the following key recommendations to the Government (more detailed recommendations are included under Recommendations and target dates on page 30):

- We consider that high-level, accountable leadership is essential to drive a strategic response to obesity, type 2 diabetes and associated chronic diseases; we therefore recommend the establishment of a cross-sectoral ministerial committee chaired by the Prime Minister or Minister of Health, with an expert advisory group, to implement the strategy (target date April 2008).
- Some of us also recommend the establishment of an independent commissioner to champion, monitor, and evaluate the implementation of the strategy.
- We recommend that clear measurable and timed targets be established in association with stakeholders for the labelling and modification, and the advertising, marketing and promotion of food and drinks, by October 2008.
- The majority of us recommend that progress towards these targets and compliance with self-regulation be monitored to determine where voluntary regulation is working and where it is not; and that subsequently self-regulation be extended or direct legislation introduced depending on the results. By December 2008 a monitoring system should be in place.
- The majority of us recommend that appropriate restrictions on the advertising, promotion and marketing of unhealthy food and drink to children be agreed urgently. For broadcast media we recommend an 8:30 pm watershed for advertising energy-dense products.
- We recommend that the appropriate health-sector agencies implement programmes for preventing and managing obesity and type 2 diabetes. The primary healthcare sector should establish mechanisms to ensure that people at high risk are identified and enrolled in prevention and management programmes by 2010.
- We recommend that national and local educational authorities should introduce measures to ensure that the school environment fosters healthy diets and physical activity by such means as sponsorship, the sale of foods, and the curriculum, by April 2009.
- We recommend that a sustained social marketing programme be implemented to support parents, caregivers, and families in the promotion of healthy diets and physical activity.
- We recommend that the food, media, and entertainment industries be encouraged to use their influence to promote healthy food and drink and physical activity, especially for children and young people.

We also make the following recommendations to the Government regarding research, and the evaluation, and monitoring of progress to ensure that the measures taken deliver the desired results:

- that the progress and results of the recommendations listed above be monitored and evaluated. The results should be factored into subsequent action, and decisions on possible legislation or regulation.
 - that regular standardised national surveys of food intake, physical activity, and other chronic disease risk factors be introduced, including measures of diabetes status
 - that research into and surveillance of advertising, marketing, and promotion of food products be conducted
 - that the direct and indirect costs to the economy of obesity and type 2 diabetes be measured and assessed regularly
 - that existing programmes for preventing and managing obesity and type 2 diabetes be formally evaluated and continued only if found to be useful.
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New Zealand National Party view

The New Zealand National Party's view on some aspects of the report is on page 36.

Introduction

The worldwide incidence of obesity and type 2 diabetes has grown dramatically in recent years, in what has been described as a pandemic. This inquiry is timely as these related conditions are increasingly important health and economic issues for New Zealand, with the potential to rapidly overwhelm the health system if they continue unchecked. We note that New Zealand voted for the United Nations General Assembly resolution 61/225, which declared diabetes to be a health issue of international importance.¹

Our report is based on the following sources of information and advice

- the written and oral submissions received²
- a synthesis of the international public health literature on the prevention and control of obesity, diabetes, and related conditions
- specialist advice from internationally-recognised experts Dr Robert Beaglehole, Professor Jim Mann, and Professor Boyd Swinburn
- expert evidence from the Ministry of Health.

There was a reasonable degree of consensus on many important points regarding the causes, nature and importance of the issue, and the need for a large-scale, concerted public health response as a matter of urgency to reduce the social, economic and health costs resulting from obesity and related conditions. Significant differences, however, emerged over the role of the food, beverage, advertising, marketing, and promotion industries in causing and combating obesity and type 2 diabetes. The relative contribution of physical inactivity to these conditions, and its implication for any solutions, was also a point of disagreement.

We agree that action is called for, with the overall goal of reducing the social, economic and health impacts of obesity and related conditions as comprehensively and as quickly as possible. Specific aims should include

- implementing a coordinated, multi-sectoral strategy for managing and preventing obesity and type 2 diabetes
- creating an environment that fosters healthy eating and physical activity patterns among New Zealanders, especially children.

The outcomes of prevention and management measures should be monitored and evaluated regularly, and the results factored into subsequent action.

¹ See Appendix E.

² See Appendix C for a list of submitters.

Evidence and advice

A detailed summary and discussion of the evidence and advice presented to the committee follows. It is arranged according to the terms of reference of the inquiry, which fall into two groups, with some overlap between terms two and three. The first three terms of reference describe the problem, its causes and nature, and the current remedial measures. The last three terms pertain to potential solutions.

Unless otherwise specified, the summary below reflects our understanding of the balance of opinion on each topic as it was expressed in submissions and expert evidence.

Terms of reference 1: Causative factors in obesity and type 2 diabetes

The immediate cause of obesity and type 2 diabetes is well known: an imbalance between the intake of energy from food and its expenditure in activity. The indirect causes, which account for the rapid rise in these conditions, are more complex. Social, cultural, and economic changes that influence eating and activity patterns have created an “obesogenic environment”. Multiple factors also encourage lifestyle choices that are unhealthy, especially for people at high risk.

Energy intake

Small but sustained increases in energy intake in individuals and the whole population are the main culprit (see appendix D). These increases reflect changes in the availability, composition, marketing, and pricing of food.

Advertising, promotion, and marketing are major influences on food preferences and eating habits, especially in children. Societal changes in eating habits, reflecting among other factors changes in workforce participation, are also contributing to the rising consumption of energy-dense foods.

Many people lack the knowledge to seek out healthy, affordable food, and the culinary skills to prepare healthy meals. Parents’ poor dietary habits are likely to be passed on to their children.

Physical inactivity

Physical inactivity and sedentary habits have become more common. There is generally far less need to expend physical energy than there was 30 years ago. Urbanisation is associated with less walking and cycling and more use of motor vehicles. Social and economic changes have reduced the opportunities for physically active work and leisure.

Although it is important, promoting physical activity will not by itself reverse the trend. Physical activity accounts for only 20 to 30 percent of total energy expenditure, only a small part of which can be influenced by increasing activity. Dietary changes to reduce energy intake are therefore critically important.

Childhood factors

There is robust evidence that limited breastfeeding, increasing television viewing, rapidly increasing consumption of energy-dense foods and sugary drinks, and reduced physical activity have influenced the growing incidence of obesity in New Zealand children.

Safety concerns, time constraints, and being driven to school have reduced the time children spend on outdoor activity, along with an increase in sedentary pastimes (which are also associated with consumption of energy-dense snacks).

Nutrition and cooking are no longer taught in many schools.

Role of genes

Although there are genetic factors in obesity, changes in the genetic makeup of New Zealanders cannot explain its recent rapid increase.

Terms of reference 2: Effects of obesity and type 2 diabetes**Obesity**

Obesity has become more prevalent in New Zealand, as in many other developed countries, in recent decades. Obesity in adults aged 15 to 74 years doubled from 1977 to 2003, increasing relatively slowly from 1977 to 1989, then accelerating rapidly from 1989 to 1997. A study based on the 1997 National Nutrition Survey showed 35 percent of the population could be classified as overweight and a further 17 percent as obese (as defined using the Body Mass Index). The prevalence of obesity in adults increased from 10 percent in 1990 to 20 percent in 2003.

The 2002/03 New Zealand Health Survey indicated an even higher incidence of obesity, suggesting that 35 percent of adult New Zealanders (over 15 years) or approximately 500,000 people, were obese and a further 21 percent or 900,000 people were overweight. Māori and Pacific peoples had a higher incidence of obesity than New Zealand Europeans and other ethnic groups.

Childhood obesity and type 2 diabetes are of increasing concern. According to the 2002 National Children's Nutrition Survey, 21.3 percent of children were overweight and 9.8 percent obese. Overweight and obesity were most common among Pacific males (33.9 percent and 26.1 percent) and females (32.9 percent and 31 percent). They were followed by Māori males (19.6 percent and 15.7 percent) and females (30.6 percent and 16.7 percent), and males who were New Zealand European or other races (18.4 percent and 4.7 percent) and females (18.8 percent and 6 percent).

Effects

Obesity and type 2 diabetes have severe health, social, and economic effects on individuals, communities, and the country. These effects are still to be comprehensively quantified.

The "epidemics" particularly burden already disadvantaged groups in New Zealand. Increasingly they affect children. Type 2 diabetes, formerly referred to as "adult-onset diabetes" is now being diagnosed in children and teenagers.

The rise of obesity and type 2 diabetes challenges the health system, because they are major causes of chronic illness such as heart disease, stroke, kidney disease, and some cancers. Better management of people at high risk of, or already affected by obesity and type 2 diabetes, is needed. Obesity has heavy direct and indirect costs. The World Health Organization estimates that it accounts for between two to seven percent of a country's total health care costs. In 1991 the direct costs of obesity to New Zealand's health care system were conservatively estimated at \$135 million per year, or 2.5 percent of health expenditure for that year. On this basis the figure for 2000/01 would have been at least \$247.1 million, and it will be higher today.

We do not have up-to-date estimates of the direct and indirect costs of obesity in New Zealand, though the Ministry of Health advised us of plans to update this information. Treating obese patients has financial and practical implications, including additional risks to patients and health professionals, the need for special equipment and training, and prolonged rehabilitation. People who are obese also displace other people in need of treatment.

An analysis of the true costs of obesity in New Zealand is urgently needed.

Type 2 diabetes

In 2005, of an estimated 125,000 people in New Zealand with diagnosed diabetes, approximately 90 percent had type 2 diabetes according to Ministry of Health data. It is believed that about one third of diabetes is undiagnosed, so the total number of people with type 1 or type 2 diabetes is estimated to be between 185,000 and 225,000. Each year 4,500 people die from diabetes. Modelling work by the Ministry of Health estimates that the number of people known to be living with diabetes will increase by 80 percent between 1996 and 2011.

Māori and Pacific people have significantly higher rates of diagnosed diabetes than other ethnic groups. Māori and Pacific people are two to three times as likely to develop the disease, which they do perhaps 10 years earlier than New Zealanders of European descent. Māori males are about 6.5 times as likely, and Māori females 10 times as likely, to die from diagnosed diabetes than their Pakeha counterparts. Pacific people are five times as likely to die from diagnosed diabetes than New Zealand Europeans. The complications associated with type 2 diabetes are thought to account for 20 percent of all deaths among Māori, compared with four percent for non-Māori, non-Pacific people.

Diabetes services throughout the country are overloaded and delivery is inconsistent across District Health Boards (DHBs). Hospital dietetic services are not available for all patients who need dietary advice, and outpatient dietetic support for those with obesity or diabetes is available in some districts only for patients with co-morbidities.

Like obesity, diabetes incurs substantial social costs, and employment and household disruption often requires publicly-funded interventions. The loss of leaders and mentors, especially among Māori and other ethnic groups, erodes social capital.

There is strong international evidence that lifestyle intervention (diet and activity) can radically reduce the progression of pre-diabetes (glucose intolerance, which is almost

invariably associated with obesity) to type 2 diabetes. The early identification and management of these high-risk people should be a priority for primary care organisations.

Effects

Diabetes, like obesity, has direct and indirect economic impacts. Costs are incurred by diagnosis, medication, hospitalisation, continuing care for long-term disability such as kidney damage, time lost from work, and premature death. It is estimated that a person with diabetes generates 2.5 times the hospital costs of a person without diabetes, and that indirect costs are as much again. If the number of patients with kidney failure (primarily due to diabetes) grows as predicted, within five years 20 new dialysis stations will be required.

Government-funded health-care costs for type 2 diabetes have been recently estimated at around \$540 million for the 2006/07 year, that is, 3 percent of state health spending, and if unchecked it is predicted to increase to \$1.78 billion by 2021, or 15 percent of state health spending. An absence of national data and under-diagnosis and under-reporting of diabetes means that projections and costings of its effects are approximate. Recent reports estimate that the present incidence of diabetes is nearly 20 percent higher than the Ministry of Health predicted in 2001. The ministry considers the likely explanation for this increase is improved primary health care which means more people are being diagnosed. The detailed effects of diabetes are poorly described for New Zealand. Hospitalisation and mortality data do not reliably and consistently record the presence of diagnosed diabetes. The collection, compilation, analysis, and publication of diabetes data should be a priority.

Terms of reference 3: Effects of current approaches

Many promising initiatives to prevent obesity are under way in New Zealand, with varying effects.

Government-led actions

Healthy Eating – Healthy Action: Oranga Kai – Oranga Pūmau (HEHA) is the main focus of the Government's response to the obesity epidemic. There is widespread concern, however, that its scale is not commensurate with the problem, nor is it well implemented; and its impacts have not yet been assessed. The Food Accord and the Food Industry Group still have a great deal more to deliver on their parts of this strategy.

Mission On is a new cross-Government-department programme which began in September 2006. It is too early to assess this promising attempt at involving youth in prevention programmes and associated social marketing campaigns.

The *Fruit in Schools* programme is another important initiative which is undertaken as part of the Cancer Control Action Plan. In late 2005, 27,000 children in 114 low-decile schools were participating in the programme, and the number of participating schools had risen to 268 by early 2007. We received evidence that this initiative is having an extremely positive effect by encouraging children to consume more fruit, and that it is improving learning outcomes. We recommend that this programme be rolled out to other schools progressively.

Community programmes

Many other small-scale efforts are under way. Some, such as the community-based APPLE project from Otago and the Obesity Prevention In Communities initiative, are promising.

Private sector actions

Despite some promising initiatives, such as actions by the Food Industry Group, the food and beverage industry is not sufficiently engaged in the prevention of obesity despite having an important role in causing it.

The advertising, marketing and promotion industry has the potential to play a key role in the prevention of obesity but has not yet engaged seriously as part of the solution.

The workforce

There are workforce deficiencies in most, if not all, areas related to obesity and diabetes prevention and management, and especially in the health and education sectors. In particular, there is a shortage of health professionals trained in the area of diabetes, dietitians, and nutritionists, which means that preventive work and treatment services are very constrained. For example, where community dietetic services are available (in many areas they are not), access for people with obesity or type 2 diabetes is limited to those with a co-morbidity, and obese children must be referred by another health professional for dietetic input.

These workforces need to be upskilled urgently, and the number of health professionals trained in nutrition and diabetes should be increased, as well as the numbers of teachers trained in nutrition and food education.

Treatment

While the terms of reference focused on prevention, it is difficult in practice to separate preventive and other kinds of interventions. For example, dietetic or surgical intervention may prevent pre-diabetes associated with obesity from progressing to diabetes. Similarly, the line between detection and management is often blurred for the practical purposes of delivering primary health care.

DHBs' current approaches to the detection and management of diabetes are generally considered to be fragmented, under-resourced, and ineffective. While some DHBs, notably Counties Manukau, have been outstanding in this area, the response of others has been patchy and inadequate. This suggests that the present approach is not working.

It was widely agreed that an overarching diabetes-related national strategy incorporating national guidelines for all DHBs is essential. Current deficiencies in areas such as the workforce, regional planning, clinical care, and screening should be addressed, and research is needed into the causes and incidence of diabetes.

Drug therapies can be a cost-effective measure for treating diabetes and its complications, although the adverse effects of some new drugs is a concern. Some submitters argued that bariatric surgery can be a cost-effective means of treating obesity-induced diabetes in seriously obese people. Others were convinced that resources would be better used to encourage lifestyle change. We received evidence that surgery can be a cost-effective way of

achieving lasting weight control, and reversing several diseases including diabetes for many years. We believe there is a place for bariatric surgery for people with morbid obesity, where attempts to reduce weight have failed. However, surgery should not be considered the first option for combating severe obesity, and it does not represent a societal solution. We understand that Counties Manukau DHB is conducting a pilot research project into bariatric surgery. We recommend that the outcomes be monitored and, if surgery is shown to be cost-effective, that it be explored as a treatment option.

Summary

The many current initiatives are fragmented and poorly coordinated, and insufficient for the prevention and management of obesity and type 2 diabetes in New Zealand. In general, there is too much emphasis on education and the promotion of physical activity as the key preventive interventions. Consumers' knowledge of these measures is already high.

There is an urgent need to significantly scale up the public health response to obesity and type 2 diabetes. Many powerful potential interventions have not been fully used. A strong focus is required on the prevention of obesity in children and youth, and in high-risk socio-economically deprived populations, in particular Māori and Pacific peoples, using strategies appropriate to the recipient groups. Strong Government leadership is perceived as essential.

Terms of reference 4: Need for additional environmental measures

Modifying the environmental determinants of eating and activity patterns, especially in children, will require measures in several areas:

- increasing the availability, accessibility, and affordability of healthier foods, while reducing the availability of energy-dense products
- increasing the advertising, marketing, and promotion of healthier food options, and reducing the advertising, marketing, and promotion of energy-dense products
- providing more opportunities for regular physical activity at school, on the way to and from school, and in leisure time.

Summary

From a public health perspective, environmental measures are needed to make healthy behavioural choices easier and cheaper. This conclusion is disputed by some submitters, particularly members of the food and advertising industries, who favour educational campaigns rather than environmental change, citing the principles of informed choice, freedom of choice, and individual or parental responsibility.

Terms of reference 5: Need for policy and/or legislative approaches

The overwhelming weight of the submissions supported the need for policy and legislative mechanisms to encourage the adoption and maintenance of healthy eating and activity patterns, especially by children. Suggested mechanisms include the following:

- strong government leadership and coordination of stakeholders and programmes, in a strategic approach with goals and quantified and timed targets

- the implementation of policies to encourage children to choose healthy foods and undertake physical activity, and to reduce the pressures that encourage unhealthy choices
- legislation or regulation if voluntary and self-regulatory measures are insufficient (The proposed Public Health Bill is suggested as an appropriate vehicle.)
- further research, especially into the effects of intervention programmes
- long-term evaluation and monitoring of all interventions, including any private sector actions.

Targets

We propose the following targets:

- to ensure that by 2015 the increase in obesity in adults is arrested
- to reduce the increase in the rate of obesity in children and youth to zero by 2010 and cut by 20 percent the prevalence of obesity in children and youth by 2015
- to narrow the ethnic gaps in childhood obesity rates so that by 2015 the rates are equally low in Māori, Pacific and other New Zealand children
- to ensure that by 2010 primary health organisations have screened 80 percent of their enrolled populations for diabetes status, and established appropriate preventive and management interventions.

Process targets

- By April 2008, the Government should have established a national leadership and coordinating mechanism with clear lines of accountability for overseeing the development and implementation of a scaled-up response to obesity and type 2 diabetes.
- By October 2008, all contributors, including those in the private sector, should have agreed on measurable and timed contributions to national prevention and control programmes.
- By December 2008, a transparent evaluation and monitoring system should be operating to assess progress towards the quantified targets and the contributions made by each stakeholder.

Strategic directions

A clear and widely supported strategic approach is necessary to ensure the success of prevention and management programmes. Such an approach would require comprehensive public health strategies, as defined by the World Health Organization, which focus on:

- universal prevention, involving population-wide measures that directly address the social, economic, and environmental determinants of the problem
- selected prevention measures, such as educational and empowerment approaches, and screening, to be directed at high-risk communities, families, and individuals
- targeted prevention directed at people with existing weight problems and people at high risk of type 2 diabetes

- community-based programmes, preferably with an integrated approach
- the evaluation and monitoring of all activities against agreed goals and targets
- a primary focus on reducing energy intake and increasing physical activity
- involvement of all stakeholders, especially those that have yet to make significant contributions to the prevention and control of obesity and type 2 diabetes.

Environmental change, social marketing, and/or education campaigns

No single approach will be sufficient to prevent and control obesity and type 2 diabetes.

We understand that environmental approaches have the greatest potential, are less likely to exacerbate health inequalities, and can be used to support and amplify social marketing and educational and empowerment approaches. Such approaches should be directed to all aspects of the obesogenic environment, including the social, cultural, physical and economic environments, and to specific locations such as schools (including early childhood education centres), communities, and workplaces. We accept that policy and possibly legislative changes are needed to underpin the environmental changes.

We were informed that social marketing, or efforts to change behaviour through mass media campaigns, is of limited use unless it is well supported by environmental changes. We were also alerted to concerns that emphasising weight loss may have unintended consequences, such as stigmatizing people who are overweight and exacerbating the incidence of eating disorders. Therefore general health promotion should be emphasised, rather than focusing exclusively on the issue of weight.

Targeted messages and information distribution systems will need to be developed to reach Māori and Pacific communities.

Educational strategies by themselves are not likely to achieve good results.

Leadership

Strong and effective leadership will be needed to set policy objectives and priorities, coordinate funding and delivery of programmes, in an overarching national strategy, and oversee the evaluation and monitoring of programmes.

We considered various leadership options, and decided that high-level, accountable leadership is essential to drive the strategy.

- We recommend the establishment of a cross-sectoral ministerial committee chaired by the Prime Minister or the Minister of Health, with a high-level advisory group of independent experts, to implement the strategy.
- Some of us also recommend the establishment of an independent commissioner to champion, monitor and evaluate the implementation of this strategy.

We suggest the following objectives for the independent commissioner:

- to increase awareness of public health issues regarding obesity and type 2 diabetes, and champion preventive measures

- to recommend policies, strategies and priorities to reduce the incidence of obesity and type 2 diabetes
- to bring together stakeholders, including industry representatives, non-governmental organisations and the health sector, to promote the prevention of obesity and type 2 diabetes
- to evaluate and monitor the implementation of policies and programmes to reduce the incidence of type 2 diabetes and obesity.

Whatever form of leadership is chosen, we also recommend that an external advisory group be established to ensure that all stakeholders have input into the national strategy. We recommend that representatives of major stakeholders, including industry and non-governmental organisations, be involved in the advisory group to promote collaboration and cooperation among stakeholders. A strong public-health membership is also important. The advisory group should assist in the development and implementation of national standards and guidelines on food and nutrition, physical activity, education, and healthcare, to ensure that programmes and services are adequate, equitable, and evidence-based.

Promoting healthy eating habits

Promoting healthy eating habits is the central public health challenge in the prevention and control of obesity and type 2 diabetes. The food and drink industry, and the advertising, marketing, and promotion industries play key roles in shaping food preferences and choices, especially among children and young people. These stakeholders should therefore play key roles in finding sustainable and acceptable solutions to the rise of obesity and type 2 diabetes. We believe that the power of these industries for influencing food preferences and choices has not been used as well as it might to promote the health of children.

Important steps have been taken by some, but by no means all, elements of the food and drink industry: changing processes or reformulating products such as cooking oils in some fast food restaurants, to reduce the fat, sugar, and salt content of foods; reducing portion sizes; and introducing healthier options in popular classes of processed foods. The Food Industry Group is increasingly promoting healthy behaviours and we welcome this.

However, much more could be done to take advantage of the enormous potential positive influence of these major industries. A challenge is to encourage action by the many small businesses selling fast foods, for example, encouraging them to follow the National Heart Foundation's Tips on Chips and Best Practice Frying guidelines.

We have identified five key avenues of influence over the environment that determine eating habits:

- the food and beverage industry
- advertising, marketing, and promotion
- labelling of food and drinks
- pricing mechanisms
- the promotion of breastfeeding.

Role of the food and beverage industry

The Food Accord and the activities of the Food Industry Group have made only relatively small contributions to the promotion of health in New Zealand. The voluntary nature of the accord means that signatories are not formally committed to any specific action. The industry's commitment to public health was questioned by some submitters, who argued that industry is of its nature self-interested and profit-driven, while others pointed out that protecting their markets requires food processors to attend to consumers' well-being.

Current food and beverage industry responses include promoting education as the primary strategy, and laying the blame on bad diets, as distinct from "bad food". Food industry players also sponsor community health projects, such as mobile dental clinics, with the effect that their products are widely endorsed. They promote the belief that physical inactivity is the major factor in the epidemics, and use celebrity sportspeople to implicitly or explicitly endorse their products.

The key issue regarding the food and beverage industry is whether self-regulation is sufficient to protect children from the adverse effects of the advertising, marketing, and promotion of energy-dense foods. Opinions on this issue were divided between those of the industry groups and those based on reviews of public health evidence. Given this division of opinion, we recommend that the committee set up to drive the obesity strategy should set measurable targets to be achieved by the industry, with strict and reasonably short timeframes. These targets should be monitored, and regulation introduced if the targets are not achieved. It is worth noting, however, that regulation would involve significant monitoring and enforcement costs.

The Food Industry Group argued that there are limits to the speed with which widespread change can be effected, and that the accord, claimed to be an internationally ground-breaking initiative, represents a long-term commitment which should be given time to work. The New Zealand food industry accounts for almost 50 percent of the national economy, with the retail food sector employing 17 percent of the workforce and accounting for 25 percent of the total sales market. Various industry submissions expressed concern that some actions being called for could have a significant adverse effect on the economy. On the other hand, at present the costs associated with unhealthy food are borne by individuals and by society as a whole, and not by the food industry. Furthermore, failure to address obesity and diabetes will place a huge strain on our health system, and have a severe impact on the national economy.

We recommend the setting of targets for the reformulation of energy-dense products, initially focusing on a limited number of high-volume products particularly influential in the diets of children, especially children from low-income families.

There is an opportunity to ensure that the forthcoming Public Health Bill contains mechanisms for regulatory approaches to combat obesity, type 2 diabetes, and other chronic diseases associated with diet if self-regulation by the industry should prove insufficient. Existing public health legislation needs to be strengthened since the public health threat of chronic, non-communicable diseases clearly exceeds the threat of communicable diseases, on which public health legislation is currently focussed.

The role of advertising, marketing and promoting activities

This section addresses three questions relating to advertising and marketing.

1. *Should advertising, marketing and promotion of food products be subject to regulation?*

Several submissions quoted from the Institute of Medicine report *Food Marketing to Children and Youth; threat or opportunity?* which concluded that:³

- food and beverage marketing influences the diets and health of children and young people
- food and beverage marketing practices directed towards children and youth are out of balance with healthy diets and contribute to an environment that puts their health at risk
- advertising and promotion have a direct influence on children's preferences for particular food and drinks.

We understand that the public health evidence indicates that advertising, marketing, and promotion help to condition food preferences and choices in children, normalize unhealthy food, and undermine parental authority in this respect. Advertising establishes and reinforces behaviour, and if it did not the food industry would not spend its money on it. Recent evidence from a project on Assessing the Cost Effectiveness of Obesity Interventions in Victoria, Australia indicated that restricting food marketing and particularly television advertising to children is likely to be the most cost-effective intervention available.

Submitters were polarized on this issue. Support for some form of regulation was strong, with support from 120 submitters, while ten submitters, all but one from the industry sector, expressed opposition to regulation. Submissions in favour of regulation called for stronger action to restrict the exposure of children to these influences; many argued that self-regulation and industry codes of practice are ineffective and ultimately operate to protect the industry rather than public health.

A recent New Zealand study on television food advertising classified 70 percent of food advertisements as “counter to improved nutrition”. The number of food advertisements on state-owned TV2 increased between 1997 and 2005 from 8.0 to 12.8 per hour in the afternoon time-slot, where more advertisements for food are screened than for other products. The average 5–14-year-old watches approximately 15 hours of television per week. In homes with internet access, this drops to 11.2 hours per week but 21.9 hours per week is spent on other technology-based, sedentary activities.

The present self-regulation system is limited to advertising in the strictest sense, and excludes most forms of marketing and product promotion, such as sponsorship and endorsements.

The majority of us recommend that the mandate of the Advertising Standards Authority be extended to cover the marketing and promotion of foods and beverages to consumers. The

³ Institute of Medicine, *Food Marketing to Children and Youth, Threat or Opportunity?* Washington, D.C.: National Academies Press, 2006.

majority of us also recommend a minimum of two members of the Advertising Standards Authority be consumer representatives appointed by the Minister of Consumer Affairs.

2. *Is continuing self-regulation via the Advertising Standards Authority sufficient?*

The self-regulation system suffers from the disadvantage that it is difficult for the food industry to be impartial, given its interest in maximising market penetration. We were advised that the record to date for self-regulation was not encouraging. In 2005 the Advertising Standards Complaints Board considered 267 substantive complaints, and 54 percent of them were upheld. When a complaint is upheld the advertiser, advertising agency, and media involved are requested to withdraw the advertisement immediately, but there are no penalties for advertisers who are found to breach the code. There was full compliance with these requests. However, we were informed that the process for considering complaints is prolonged, and meanwhile the challenged advertisement continues to screen. We were informed that board decisions are typically made on technical and legal issues, rather than those of encouraging demand for and consumption of inappropriate foods in excessive amounts by children.

The tobacco industry, which went through a period of self-regulation before state controls were imposed, was cited as an example of the failure of self-regulation. Attempts to control tobacco promotion and sponsorship may provide a lesson relevant to the protection of children and young people from the advertising, marketing, and sponsorship of energy-dense products. We were told that the major lesson learnt from tobacco control policy was that to be effective interventions need to be part of a comprehensive programme to reduce consumption, and to be implemented in stages as public and political support builds.

The submissions presented by interest groups directly involved with the food and beverage and marketing industries were sceptical of the influence of advertising and promotion and were happy with the current self-regulatory approach. The advantages of self-regulation were said to be that it is cheaper (it is industry funded), faster, and more effective than regulation, and that it protects and empowers consumers. We were informed of many voluntary programming and advertising initiatives, which it was argued demonstrate a socially responsible approach by those involved in television broadcasting in particular. The benefits of targeting branded fast food were questioned by some, because only 26 percent of New Zealanders' total food budget is spent on eating out or takeaway food, of which restaurant and cafe meals constitute the larger, and increasing, proportion. We were informed that regulation may be a breach of s14 of the New Zealand Bill of Rights Act 1990, which could be interpreted to extend to the right of businesses to promote their goods and services.

3. *Is action required on all forms of advertising, marketing, and promotion, or just broadcast media?*

This issue proved less contentious, though difficult to address. There is agreement that children are exposed to an increasing range of advertising and marketing avenues which extend well beyond traditional broadcasting channels, all of which an effective response would need to address. It was argued that the influence of sedentary pastimes involving new technologies on obesity should be researched, and that the result may require a reconciliation of the current government policy to increase the domestic use of the internet with HEHA objectives.

Some submitters were concerned that the lack of controls over indirect marketing methods such as sponsorship works to the industry's advantage, and that controls should apply to all promotion of energy-dense products or of the companies that produce or sell them. It is estimated that major food companies spend \$100 million annually on sports sponsorship and marketing, so any sponsorship restriction would significantly reduce sports bodies' incomes. For example, McDonalds New Zealand is one of the largest sponsors of junior sport in New Zealand, and its franchises support at least 329 sports teams and clubs. Alternative sources of so much sponsorship would be difficult to find.

Celebrity endorsement also drew polarized responses, those in favour supporting it for the purpose of positive role-modelling. Those opposing it considered the practice ultimately harmful, even if the explicit message is health-promoting, where there is an implicit endorsement of unhealthy food.

Any regulation of advertising, marketing, and promotion would obviously have financial implications for industry, which need to be independently assessed. We heard arguments that imposing restrictions on television advertising alone would be discriminatory because other media would benefit from advertising displaced from television. Food and beverage advertising is worth \$140 million annually to broadcasters. However, it is likely that the advertising, marketing, and promotion of healthy foods and drinks would increase, thus redressing the financial implications somewhat. Any net costs to industry would need to be measured against the advantages to society and the economy of reducing obesity and type 2 diabetes.

Self-regulation of all forms of advertising, marketing, and sponsorship of energy-dense food products has been the strategy to date in New Zealand. We are strongly of the view that specific targets need to be set and the industry's self-regulation in this area strictly monitored. Research and surveillance of advertising, marketing, and sponsorship should be included in routine food and nutrition surveys. If self-regulation does not meet the specific targets within the agreed time, the majority of us consider that regulation will be necessary.

We commend the recent agreement between the Government and the major television broadcasters on a five-point plan on food advertising directed to children, but recommend that the time restriction should be extended to 8:30 pm. The agreement introduces a new Children's Food rating. Only food products that receive this rating will be advertised during the screening of programmes directed at children. We also recommend that steps be taken to encourage children to spend less time pursuing sedentary activities, particularly watching television, and to lead balanced lives.

We note that the actions of the United Kingdom Office of Communications (Ofcom) might provide a useful example for New Zealand to adapt to its needs. Ofcom is the independent regulator and competition authority for United Kingdom communications industries. It has restricted television advertising for foods and drinks high in fats, salt or sugar directed to children less than 16 years of age. Restrictions on advertising food and drinks in this category will be based on nutrient profiling carried out by the Foods Standards Agency. These restrictions will be implemented by Ofcom's co-regulatory partners and the new rules will form part of Britain's Television Advertising Standards Code.

Labelling of food and drinks

Submitters expressed reasonably strong support for a user-friendly, readily understood system for labelling food and drinks to distinguish relatively healthy food from relatively unhealthy food. We were informed that when shopping for groceries the average consumer only takes a few seconds to decide on a particular product. Therefore any labelling system must be readily recognised and easily understood.

The advantages and disadvantages of the National Heart Foundation's Pick the Tick scheme were noted in several submissions, along with the difficulties experienced by many consumers in understanding and interpreting current labelling systems. Although the Pick the Tick programme is simple and easily recognisable, it is voluntary, covers a limited number of mainly processed foods (although the National Heart Foundation said the majority of approved products belong to "core food groups"), and fails to engage with the needs of lower-income groups. Also, applicants pay to have their products tested for eligibility to display the tick, which excludes cheaper foods and fresh produce from consideration. The Pick the Tick programme is being reviewed by the National Heart Foundation. In general we believe that the Heart Foundation tick can be misleading and confusing, and that it should be applied only to healthy diet items, rather than, as at present, to the healthiest option in a particular range.

The United Kingdom Food Standards Agency has introduced a multiple "traffic light" system which assesses and labels the fat, salt, and sugar content of foods and drinks. Coloured "lights" on labels indicate whether a food item is high or low in each of these nutrients, thus indicating the extent to which it is recommended for frequent consumption. We understand consumers have accepted it and found it easy to understand, and that it has shifted purchasing in favour of healthier food options. Submitters expressed various opinions on the usefulness of such a multiple traffic light system, and of a system displaying a single light indicating an averaged or overall assessment of the food item rather than separate components. Some argued that the detail afforded by multiple lights would be useful for planning a balanced diet, while others said that it could be confusing; and others suggested that any such system would be of value only in specific settings such as schools, and of little use to the shopper faced with wide choices.

Elements in the food and drinks industry have created their own labelling systems, so that multiple systems now operate in the United Kingdom and in New Zealand. The New Zealand Nutrition Foundation has developed an "e mark" system for food endorsement. We recommend that the Ministry of Health and the Food Industry Group, under the direction of the proposed committee, introduce urgently an effective, clear, consistent system for New Zealand consumers, and set a timeline for its progressive introduction. Some of us strongly favour a simple traffic light system.

A system for profiling the nutrient composition of foods and drinks high in unhealthy fats, salt, and sugar would be required to underpin any labelling system. We suggest that such a system should:

- be based on the Ministry of Health's Food and Beverage Classification System
- be introduced gradually, with the relatively small group of items most commonly consumed by children as first priority

- ensure that fruit was not inappropriately labelled; the sugar content of concern in processed food might usefully be referred to as “added sugars” to exclude naturally occurring fruit sugars.
- distinguish trans fats separately (since they are associated with adverse health effects)
- include all major sources of unhealthy fats, salt, and sugar.
- extend to all alcoholic beverages, and particularly high-sugar “alcopop” drinks, because alcohol consumption can contribute significantly to energy intake.

We recognise that there may be a need for regulation if the industry cannot introduce the labelling system within the agreed time.

Pricing and other mechanisms

Low-income households have a limited ability to afford healthy foods, and pricing mechanisms were raised as an important and potentially powerful tool for supporting healthier consumption. Suggested measures included reducing the GST payable on healthy foods such as fruit and vegetables, and taxing unhealthy foods and drinks. We note that a small tax on sugary drinks has been implemented in some states of the USA. Such policy measures, however, raise complex issues. Some submitters were sceptical of the potential of food taxes to alter consumption because it was considered that a significant price increase would be needed to change purchasing behaviour, and low-level taxation would simply increase the food industry’s compliance costs without achieving the desired effect.

Mechanisms to help control consumption that should be explored, including:

- encouraging the reduction of portion sizes and discouraging “bundling” and discount pricing
- addressing the visibility of food in supermarkets, and in particular discouraging the display of confectionery at check-outs
- zoning fast-food outlets
- promoting fresh food markets to make fresh produce more affordable and accessible
- ensuring that poorer communities are well serviced by supermarkets and public transport
- supporting the provision of cooking, nutrition, and budgeting classes for parents and caregivers
- encouraging supermarkets to promote fresh produce and to employ nutritionists
- discouraging the celebrity endorsement of unhealthy products
- encouraging the provision of healthy foods at entertainment facilities and community events.

Pacific peoples

The high prevalence of obesity among Pacific peoples should be addressed specifically. Sixty percent of Pacific children are overweight or obese, and adult Pacific populations have the highest prevalence of obesity of any region. The majority of us therefore recommend that the Government, the New Zealand Meat Industry, and the Pacific nations

work cooperatively to phase out the export of fatty meats (such as mutton flaps), to the Pacific nations.

Promoting breastfeeding and maternal health

The promotion of breastfeeding for at least the first six months, and preferably for the first year, is widely recommended, as it has an important protective role against obesity during childhood and adolescence, and may also protect mothers against obesity and diabetes. We were given good evidence that exclusive breastfeeding for three to five months is associated with a 35 percent reduction in obesity at the age of five to six years, which cannot be accounted for by other factors. Population-based studies demonstrate that children who are breastfed longer are less likely to become overweight during their childhood and teenage years.

Various programmes are working to encourage breastfeeding, and they should continue and be supported by other policy measures, such as the Baby Friendly Hospital Initiative and increased parental leave. Legislative change may be necessary to promote and protect the rights of breastfeeding mothers and infants (as recommended by the health committee in 2005), and accompanied by changes in environments such as workplaces and crèches.

We recommend implementing the Global Strategy for Infant and Young Child Feeding, and adopting the World Health Organisation International Code of Marketing of Breast-milk Substitutes. New Zealand's breastfeeding maintenance rates are very poor. The current recommendation of exclusive breastfeeding for four to six months should be strengthened to six months to reflect WHO and UNICEF guidelines. We recommend extending paid parental leave to six months to support exclusive breastfeeding. Other specific measures worth considering include establishing human milk banks, and making infant feeding formula only available on prescription.

Workforce capacity and capability issues need to be addressed to ensure that enough suitably trained health professionals are available to provide new mothers with support and consistent advice. Mothers who do not breastfeed should also receive advice on infant nutrition.

There is increasing evidence that poor diet before and during pregnancy, and maternal obesity and maternal diabetes during pregnancy, are associated with an increased risk of diabetes, obesity, and metabolic syndrome (which is a precursor of diabetes) in children. Increasing obesity from childhood to adulthood and into the childbearing years may itself produce a second generation of obese children.

Encouraging physical activity

There is agreement that physical inactivity is an important cause of obesity, especially in children. What is known of the physiology of activity and metabolism indicates that increasing activity can make only a relatively small contribution to achieving energy balance. However, physical activity confers many other important health benefits in addition to its contribution to obesity prevention, which justify efforts to promote physical activity at all ages. We consider that schools (including early childhood education centres) are the ideal setting for initiating long-term patterns of physical activity.

Various current programmes promote physical activity, including the Ministry of Health's flagship Healthy Eating–Healthy Action initiative. Many others, such as the Green Prescription project, Push Play, and Mission On, are supported by Sports and Recreation (SPARC). The Otago APPLE project is a particularly encouraging initiative to increase the physical activity of children at school and in the community generally. Local and school authorities, community organisations, and parents will need to work together to ensure that interventions are integrated, relevant, and well supported. A recurring theme in submissions was the need for better coordination and evaluation of the existing programmes, and better oversight of the highly competitive funding environment. Physical activity initiatives have to be enjoyable and motivating if they are to influence sustainable lifestyle changes, and we were told that current physical activity programmes often fail against these criteria.

The built environment

Urban planning plays a large role in encouraging or discouraging habitual physical activity, especially cycling or walking to and from work or school and during leisure time. We note many positive initiatives to improve public transport and to promote walking and cycling.

The design of buildings and shopping centres affects daily physical activity, and this should be taken into account in local government planning of urban environments. A general goal of local and central government policy in these areas should be to reduce environmental barriers to exercise. Measures such as improving public transport systems will take years to effect, but others such as improving and extending cycle-ways are less complex and may be more easily implemented. Again, there are significant benefits to be gained apart from the effect upon energy balance; reducing dependence on cars will reduce carbon emissions and help combat global warming.

Many existing policy instruments, such as the Local Government Act 2002, the Land Transport Management Act 2003, and the Resource Management Act 1991, can be used to promote opportunities for physical activity. Initiatives such as the Urban Design Protocol, Getting There–On Foot, By Cycle, SPARC's Active Communities programme, and the Activity Friendly Environments project, need further support in the interests of both health and sustainable development.

A majority of us consider that health impact assessments of central and local government legislation and policies should be more widely used, and perhaps mandatory. The scope of such assessments could be more or less broad, depending on whether socio-economic factors or only more immediate determinants were covered. They would help to ensure accountability, especially if integrated into planning procedures. Assessment tools are already available, and current environmental and economic impact assessment tools should provide useful precedents.

Action in specific environments

Schools

Schools are an influential environment for children and present many opportunities for the prevention of obesity and type 2 diabetes. Many school-based programmes are in operation and some, such as the Waitemata project to remove sugary drinks from sale in schools, have been shown to be successful. However, many school programmes are poorly

coordinated, poorly resourced, and only sporadically implemented. Some school policies undermine or contradict health-promotion messages or parental authority. A strong case can be made for ensuring that successful programmes are extended to comparable schools, and monitoring and evaluation should be entrenched.

Energy-dense products should be removed from sale in schools as quickly as possible. A majority of us commend the Government for its recent initiative to change the National Administration Guidelines for schools to restrict the sale of unhealthy food in tuck shops and cafeterias. It remains uncertain, however, whether reducing their availability in schools results in a lower overall consumption of these unhealthy products.

There are opportunities for promoting physical activity at school and encouraging walking and cycling to and from school. The financial implications of these changes, especially for low-decile schools, need to be investigated and alternative sources of funding may be needed for activities previously funded from the sale of unhealthy products.

The existing tripartite agreement between the Ministry of Health, Ministry of Education, and SPARC should be strengthened. The health promoting activities of schools should become part of the regular evaluation of schools using existing mechanisms such as National Administration Guidelines, National Education Goals, and the Education Review Office school-appraisal process.

Nutrition education for all teachers and canteen staff will be critical in ensuring this information is transferred to children so that they can learn how to choose and prepare healthy meals and put this into practice in their daily lives. Physical education and training for all teachers is important.

Other school-based interventions we would encourage include:

- water-only policies on drinks at school
- school vegetable gardens
- media literacy as a curriculum subject
- ensuring daily physical activity sessions, including non-sport options.

Workplace and institutional environments

There are many opportunities for encouraging healthy eating and physical activity in workplaces and other places where people congregate regularly, such as hospitals, prisons, and maraes. Government agencies and State-sector organisations can lead by example by developing health-promoting policies and implementing “active travel plans”. Publicly funded institutions (schools and early childhood education centres and hospitals, for example) should be discouraged from using fundraising and sponsorship associated with food and beverage companies whose products are not recommended as part of a healthy daily diet. We recommend that the consumption of water rather than soft drinks is promoted in schools and workplaces.

Employers have much to gain from promoting measures to improve the health of their employees in their workforce wellness programmes. Travel plans for employees can encourage the use of public transport, and walking and cycling. The economic benefits to

employers of a healthy workplace are indisputable, but incentives may be needed to encourage employers and employees to support and adopt health-promoting behaviour. The smokefree movement is a pertinent example, but we consider that ideally obesity prevention measures in the workplace should be encouraged rather than regulated. Modifying the products sold in vending machines would be a good place to start, especially vending machines and canteens in public facilities where children are commonly present, such as swimming pools and sports facilities.

Health sector responsibilities

All components of the health sector are adversely affected by the obesity and type 2 diabetes epidemics, and they all have a responsibility to strengthen their prevention and management efforts. Without serious action, these epidemics have the potential to overwhelm already stressed health systems.

At present the health system appears to lack the capacity or willingness to intervene effectively either to prevent or to manage obesity and type 2 diabetes. Clearly, these issues have not been accorded sufficient priority by DHBs, with a few notable exceptions. DHBs need to learn from examples such as the Counties Manukau DHB's Let's Beat Diabetes programme, and ensure there are effective prevention and management services, adequately resourced and involving the whole community. For a start, hospital catering services and cafeterias should lead by example.

Primary care organisations have a key role in promoting health and in identifying and managing people at high risk of developing obesity and diabetes, especially people with pre-diabetes. Adequate screening is required, and appropriate and effective follow-up and referral services. The Green Prescription process, which encourages physical activity through individualised programmes, should be expanded.

There is a need to support training for health professionals in order to improve obesity and diabetes prevention and management, especially in primary care. There is strong evidence that the progression of pre-diabetes can be reversed. We believe a nationally coordinated effort is needed to promulgate clinical guidelines for this purpose, along the lines of the New Zealand Guidelines for Cardiovascular Risk Reduction. There is a need for more and better training of school and community personnel in obesity prevention; this might be provided by primary health organisations. The whole field of adolescent health is a neglected aspect of health services in New Zealand, and obesity is an issue of particular pertinence to this age group.

Water should be advocated as the healthy alternative to sweetened beverages, rather than diet beverages, which some DHBs are currently promoting. Promoting a reduction in sugar intake from sweetened beverages can be justified on the basis of oral health promotion alone. Oral ill-health should be recognised as a major nutritional issue, especially in disadvantaged groups, causing considerable suffering and exacting high economic costs. We do not accept the need for health services such as mobile dental clinics to be sponsored by food industry groups; indeed we consider this to be counter to sound health promotion principles.

Screening

A preventive approach to managing obesity and type 2 diabetes should include screening for pre-diabetes and treatment to delay the progression of established disease. Specific high-risk population groups should be routinely screened. High-risk groups include young Māori and Pacific adults, people with a family history of diabetes, obese children, people with diagnosed diabetes or cardiovascular disease, pregnant women, and those diagnosed with gestational diabetes.

Although screening children for weight problems is a contentious issue because of the danger of stigmatisation, it was quite widely supported by submitters. Rather than school-based screening, we recommend the incorporation of screening with well-child and pre-school hearing checks. Appropriate screening tools and criteria would need to be decided upon; the standard Body Mass Index measurement alone is widely considered inadequate.

Screening approaches vary among DHBs and Primary Health Organisations (PHOs). It has been suggested that general practitioners should be more alert to and proactive about obesity, especially in children; many parents do not recognise that their children are overweight and are unaware of the health risks, or fear for children's self-esteem. Opinions differ as to the capacity of PHOs to screen at-risk patients. While some PHOs say they have neither the time nor the resources to carry out screening, the Ministry of Health disputes the funding claim.

The role of communities

Many submissions emphasised the central role of communities in existing national efforts to prevent obesity and type 2 diabetes. The Ngati and Healthy project on the East Coast is an excellent example of a community-based initiative with a population-wide approach. It is based on local community ownership and supported by local identities and organisations, and results are thoroughly monitored and evaluated. Churches are engaging communities, especially Pacific communities, in programmes to prevent obesity. For example, the "healthy village action zones" programme grew out of a parish-based nursing service for the Pacific population in Auckland.

We strongly support community initiatives to prevent obesity and type 2 diabetes. However, we recognise that the full potential of community actions will be achieved only if supported by effective complementary national efforts.

Evaluation and monitoring

Comprehensive evaluation and monitoring of programmes for the prevention and management of obesity and type 2 diabetes is crucial from the outset, to focus the limited resources on programmes of demonstrated effectiveness and to measure progress towards agreed goals.

Ideally, apart from developmental spending, no funds should be allocated to programmes which lack an evaluation framework and a health impact assessment. Funding should be withdrawn if programmes are not performing against agreed criteria.

The Ministry of Health is developing a monitoring and evaluation strategy to assess the effectiveness of the HEHA programmes. This is now urgent, since HEHA was launched in 2003.

Evaluation of obesity prevention could usefully focus on a small number of key indicators. The WHO stepwise approach to monitoring major risk factors is a useful model. We consider that the focus should be on eating and physical activity patterns in children and on key environmental factors, such as the school environment. Regular measuring of the heights and weights of a nationally representative sample of children is needed to ascertain progress. The exposure of children to the promotion of unhealthy products needs to be monitored to ensure that self-regulation is achieving its purpose. Regular, standardised data is also needed on the diabetes status of the New Zealand population.

Conclusion

Tackling the obesity epidemic in New Zealand is imperative. This issue is so serious and wide-reaching that comprehensive, coordinated action by the Government is needed. Key strategic decisions need to be made to ensure significant progress towards the prevention of obesity and type 2 diabetes and the amelioration of associated ill health.

There is sufficient evidence on which to develop a national strategy for the prevention and management of obesity and type 2 diabetes in association with the relevant stakeholders. First, given the stated willingness of the private sector to be involved in seeking effective solutions to these epidemics, clear targets and timelines should be established under the direction of the committee to be established by the Government. These targets and timelines should be used to determine where voluntary regulation and cooperation between the food and drinks industry and the Government are working, and where they are not the majority of us consider that the Government should then either extend self-regulation or introduce regulation accordingly.

The implementation of the recommendations in this report will go a considerable way to protecting New Zealanders from the serious consequences of obesity and type 2 diabetes. Successful prevention and control programmes will lead to a happier and healthier population and contribute significantly to the economic well-being of all New Zealanders.

Recommendations and target dates

For the Government

We recommend to the Government that it adopt the following recommendations.

- The majority of us recommend that the Government use the full range of public policy measures to ensure the development, promotion and maintenance of healthy diet and physical activity patterns, especially among children and young people. This should be done in the context of integrated programmes for the prevention and control of major chronic diseases.
- We recommend the establishment of a cross-sectoral ministerial committee, chaired by the Prime Minister or Minister of Health, with a high-level advisory group of independent experts, to implement the strategy. (Target date for establishment of committee: April 2008)
- Some of us also recommend the establishment of an independent commissioner to champion, monitor and evaluate the implementation of the strategy.
- We consider that high-level, accountable leadership is essential to drive a strategic response to obesity, type 2 diabetes and associated chronic diseases, and therefore recommend
 - that the immediate goal of the cross-sectoral ministerial committee be to develop and oversee the stepwise implementation of a coordinated national strategy and plan of action for the prevention and control of obesity and type 2 diabetes
 - that the national plan of action incorporate existing initiatives such as Healthy Eating—Healthy Action and Mission On
 - that the national plan of action include measurable, timed targets relating to healthy diets (including breastfeeding), physical activity, and overweight and obesity, and suitable process targets. (Target date for development of the national strategy and action plan: August 2008. Date for development of targets: October 2008)
- The majority of us recommend that progress towards these targets and compliance with self-regulation be monitored to determine where voluntary regulation is working and where it is not, and that self-regulation be extended or legislation introduced depending on the results. By December 2008 a monitoring system should be in place. (Target date for development of evaluation plan: October 2008.)
- Some of us propose the following terms of reference for the independent commissioner:
 - increase awareness of public health issues regarding obesity and type 2 diabetes, and champion preventive measures

- recommend policies, strategies and priorities to reduce the incidence of obesity and type 2 diabetes
- bring together major stakeholders including industry representatives, non-governmental organisations and the health sector to promote the prevention of obesity and type 2 diabetes
- evaluate and monitor the implementation of policies and programmes to reduce the incidence of type 2 diabetes and obesity.
- that irrespective of the form of leadership, an external advisory group be established to ensure that all stakeholders have input into the national strategy. We recommend that representatives of major stakeholders, including industry and key non-governmental organisations, be involved in the advisory group to promote the collaboration and cooperation of key stakeholders. A strong public-health membership is also important. The advisory group would help develop and implement national standards and guidelines in food and nutrition, physical activity, education, and healthcare, to ensure that programmes and services are adequate, equitable, and evidence-based.
- that the relevant workforces be urgently upskilled, and that the numbers of health professionals trained in nutrition and diabetes, and the numbers of teachers trained in nutrition and food education, be increased.
- that an analysis of the true costs of obesity be urgently undertaken.

The food, drink, and marketing industries

We recommend that the Government initiate, promote, and monitor the following recommended actions, and report on their implementation in the Ministry of Health's annual report.

- that the cross-sectoral ministerial committee set targets and timeframes for the advertising, marketing, and promotion of healthier diets, especially to children and young people
- that the committee define and implement measurable targets to be achieved by the industry with strict and reasonably short timeframes, which should be monitored, and the majority of us recommend that regulation be considered if the targets are not achieved
- that the Food Industry Group, in association with the Ministry of Health, be given responsibility for achieving these targets under self-regulation within the agreed timeframes
- that fast food restaurants and takeaway services be encouraged to take more responsibility for the promotion of healthy meals, especially to children and youth
- that the Government and scientific, public health, and consumer groups work with the food, beverage, restaurant, and marketing industries to meet agreed targets and timeframes regarding the advertising, promotion, and marketing of energy-dense products, especially to children and young people. (Target date for initiating this process: April 2008)

- the majority of us recommend that a traffic light system or comparable food labelling system should be developed by a national taskforce (including food industry representatives), and food and drink composition standards agreed for use on product information panels, and in the advertising, marketing, and promotion of products, and that progress and compliance are monitored and, if necessary, regulatory approaches adopted. (Target date for agreed targets: June 2008)
- the majority of us recommend that any new labelling system should be introduced gradually, with the relatively small group of items most commonly consumed by children as first priority
- that any labelling system be extended to all alcoholic beverages, and particularly high-sugar “alcopop” drinks, because alcohol consumption can contribute significantly to energy intake
- that targets be set for the reformulation of energy-dense products, initially focusing on a limited number of high-volume products particularly influential in the diets of children, especially children from low-income families
- the majority of us recommend that ways of restricting all forms of unhealthy food and drink advertising, promotion and marketing to children be widely consulted on and agreed. We recommend that the broadcast media extend their present restriction on advertising products that do not meet the children’s food rating during screening of programmes directed at children, up to 8:30 pm.
- that targets for regulating advertising, marketing, and promotion to children of food and drinks high in unhealthy fats, salt and sugar should be set by the committee.
- that the informal fast food industry, such as fish and chip businesses, should be engaged in the national effort to encourage the consumption of food and drinks low in fats, salt and sugar.
- the majority of us recommend a minimum of two members of the Advertising Standards Authority be consumer representatives appointed by the Minister of Consumer Affairs and that its mandate be extended to cover the marketing and promotion of foods and beverages to consumers.
- the majority of us recommend that the Government, the New Zealand Meat Industry, and the Pacific nations work cooperatively to phase out the export of fatty meats (such as mutton flaps), to Pacific nations.

The health sector and District Health Boards

We recommend to the Government that it initiate, promote, and monitor the following recommended actions, and reports on their implementation and the outcomes in the annual reports of the Ministry of Health and the District Health Boards.

- that the relevant health sector agencies develop, implement, and evaluate programmes for the prevention and control of obesity and type 2 diabetes under a coordinated national plan
- that District Health Boards develop, fund, implement and evaluate best-practice-based programmes for the promotion of healthy diets and physical activity, in a coordinated national approach to prevention

- that everyone at high risk of obesity and type 2 diabetes is identified and involved in effective prevention and control programmes (Target date: by 2010)
- that the health and education sector workforces be strengthened. This includes all those engaged in the prevention and management of obesity, type 2 diabetes, and pre-diabetes. There is a particular need for more dieticians and nutritionists, especially those trained in addressing the nutritional needs of Māori, Pacific people, and people with diabetes, and for school teachers trained in nutrition and food education.
- that no obesity or type 2 diabetes prevention or control programmes should be initiated or continued unless they are evaluated and found to be a useful component of a coordinated national plan
- that the Government make the collection, compilation, analysis, and publication of diabetes data a high priority
- that the provision of publicly-funded bariatric surgery be explored as a last resort for people who are morbidly obese. We recommend that the outcomes of the pilot research project into bariatric surgery being conducted by Counties Manukau DHB be monitored for cost-effectiveness to this end.

Schools and early childhood education centres

We recommend to the Government that it initiate, promote, and monitor the following measures, and report on their implementation and outcomes in the annual reports of the Ministry of Health and the Ministry of Education. We recommend also that the Education Review Office monitor and report on these recommended actions in its reports on specific schools and early childhood education centres.

- that national and local educational authorities, with support from parents, health authorities, and other stakeholders, promote healthy diets and physical activity in all aspects of the school environment (for example, commercial sponsorships, foods for sale, and curriculum). This includes early childhood education centres.
- the majority of us recommend the removal of unhealthy food and beverage products from schools (such as those high in unhealthy fats, salt, and sugar), and all agree that the regular evaluations of the performance of schools (including early childhood education centres) should include their efforts to promote healthy diets and physical activity.
- that pilot programmes are evaluated and, if they are successful, are rapidly scaled up under a national coordinated approach to preventing obesity.
- that nutrition, food preparation, and cooking be integrated into the core curriculum so that children of all ages learn to choose and prepare healthy food.
- that more nutrition and cooking teachers be trained and employed to address curriculum deficiencies.
- that the fruit in schools programme be progressively extended to include all schools.

Workplaces, communities, families and individuals

We recommend to the Government that it initiate, promote, and monitor the following actions, and report on their implementation and outcomes in the Ministry of Health's annual report.

- that it encourage all stakeholders to work together to create and implement a sustained social marketing programme supporting parents, caregivers, and families in promoting healthy diets (including breastfeeding) and physical activity for children and young people
- that Government organisations, especially in the health sector, lead by example in making healthy food and drinks and access to physical activity opportunities available to their employees. Walking to work and using public transport should be encouraged. (Target date: December 2008)
- that successful school (and early childhood education) programmes be written up and promoted, and where necessary adapted for other sites, such as workplaces and marae
- that employers be encouraged to invest in workplace wellness programmes
- that national obesity prevention and control programmes partner with communities, with a particular focus on children and youth.

Breastfeeding

We recommend to the Government that it initiate, promote, and monitor the following measures, and report on their implementation and outcomes in the annual reports of the Ministry of Health and all District Health Boards.

- that the Global Strategy for Infant and Young Child Feeding be implemented and the WHO International Code of Marketing of Breast-milk Substitutes adopted. Exclusive breastfeeding to six months should be encouraged wherever possible in accordance with WHO and UNICEF guidelines.
- the majority of us recommend that paid parental leave be extended progressively to six months to support exclusive breastfeeding.

Media-related industries

We recommend to the Government that it initiate, promote, and monitor the following recommended action, and report on the implementation and outcomes in the annual reports of the Ministry of Health and the Broadcasting Standards Authority.

- that the food, media, and entertainment industries be encouraged to use their extensive power to promote healthy foods and beverages and physical activity for children and young people.

Research funding agencies

We recommend to the Government.

- that research agencies be encouraged to develop a national strategy for research into obesity and type 2 diabetes. These agencies should direct substantial resources into coordinated multidisciplinary research on the key questions regarding the promotion of healthy diets and physical activity, particularly among children and disadvantaged populations. Obesity and diabetes research, generally, requires better coordination and much more commitment, including a strategy to recruit and retain public health researchers.
- that systematic, regular studies be initiated to monitor trends in the nutrient intake of New Zealanders, and especially their consumption of energy-dense products, and physical activity, and the determinants of these trends, such as advertising, marketing, and promotion
- that systematic evaluation of the outcomes of obesity and type 2 diabetes prevention and control programmes, including pilot programmes, be made a priority
- that standardised data on the prevalence of various measures of obesity and type 2 diabetes in the New Zealand population be collected regularly
- that applied research into the costs of obesity and type 2 diabetes and of the development, implementation and effects of health promotion programmes be accorded a high priority.

New Zealand National Party view

Obesity and type 2 diabetes are serious medical problems contributing significantly to rising healthcare costs. Along with chronic disease, they threaten to overwhelm the health system.

This challenge requires an approach that identifies and successfully targets the socio-cultural aspects of the problem. In western, Māori, Pacific Island and Asian cultures, food is often central to social interaction, and a mark of hospitality. Basic attitudes to food have to change before the tide of overweight and obesity will begin to reverse. Our “cultural hard drive” has to alter, so that healthy choices are the choices of preference.

A successful long-term response will provide people with the education, skills and desire to make these healthy dietary and lifestyle choices. Interventions that eliminate choice and rely on control will not achieve the required attitudinal changes.

Action must be targeted at those identified as being at risk, and long-term changes in attitude to food and issues of overweight are required in order to address the problem. Working with those groups affected, as well as with industry will be more effective than a prescriptive approach that threatens compulsion. Because it is so important to get the response right, there needs to be a strong evidence base to proposed solutions.

The upcoming Public Health Bill should not be a vehicle for regulation, but the committee indicates in this report that “There is an opportunity to ensure that the forthcoming Public Health Bill contains mechanisms for regulatory approaches to combat obesity, type 2 diabetes, and other chronic diseases associated with diet if self-regulation by the industry should prove insufficient.”⁴ National has concerns about the intent of the bill, and will be watching closely.

National cautiously supports the concept of a cross-sectoral ministerial committee backed by an expert advisory group to implement the response to obesity and diabetes. However, on balance we do not believe that establishing a post for an independent commissioner will increase the efficacy of that response.

National is not in favour of food and drink policies in public facilities and work places that remove individual choice. The emphasis should be on practical approaches that change attitudes to food and exercise. The necessary changes in diet and exercise habits will not occur through Government pressure.

Realistic, achievable targets

Effort should be channelled into collecting data on the crucial indicators that will provide hard information by which success can be measured, such as, weight and diabetes status. The report recommends that in addition to these “regular standardised national surveys of food intake, physical activity, and chronic disease risk factors be introduced”, but National’s view is that the effort should go into achieving a complete data set for the key indicators and doing something with that information, rather than the data collection process itself.

⁴ See page 18 of this report.

Targeting those at risk and changing attitudes

Obesity rates will only decline once there is a cultural shift amongst those groups affected, and people place such a high value on the benefits of maintaining a healthy weight that they will make consistently healthy lifestyle choices.

Those at risk of developing overweight, obesity and non-insulin dependent diabetes must be identified, and there is a need for specific strategies to positively affect outcomes for those targeted groups.

The requirement is for socially and culturally appropriate promotion and education to enable people to make the right choices regarding their health. Skills for selecting and preparing healthy foods have been lost across large segments of New Zealand society, and these need to be reinstated through the education system.

The role of industry

Harnessing the power of the food industry could assist in achieving the cultural changes required. The food industry has indicated it will take a leading role in the battle against obesity. Indeed consumers are demanding more healthy options.

Industry wants to work with Government to develop uniform codes on labelling, advertising, marketing and promotion. Similarly, any restrictions on advertising, promotion and marketing of unhealthy food and drink to children need to be agreed as part of a code driven by the relevant sectors. Rather than a focus on controls on advertising, National prefers an emphasis on active alternatives to television during daylight hours, and sensible levels of television watching overall. There should be support for ongoing monitoring, evaluation and research into the relationship between media advertising and obesity.

Schools and communities

National believes Government should work with schools and communities where obesity is identified as a problem to reduce access to high energy foods at school, and to emphasise active lifestyles. National notes that many schools already have effective food and drink policies, and not all schools have an overweight and obesity problem. National does not wish to limit the sensible consumption of treat foods on an occasional basis.

As regards sponsorship of sport, if such advertising enables physical activity, the net effect is positive. There is nothing wrong with a food or drink treat after Saturday sport.

Petition 2005/0056 of Dr Robyn Toomath

We received a petition from Dr Robyn Toomath relating to the issues considered in our inquiry. The petition requested that Parliament takes action to combat obesity in children and associated health problems such as type 2 diabetes. We have considered this request in conjunction with the many identical and similar issues raised by submitters in our inquiry.

Appendix A

Committee procedure

The committee received 313 submissions and heard evidence from 142 submitters. Eighteen of these submissions focussed primarily on diabetes, and diabetes was mentioned in many of the 313 submissions.

The committee travelled to Auckland, Christchurch, Hamilton and Palmerston North to hear evidence. Submitters from other parts of New Zealand were heard via video conference and telephone from Wellington.

There were three independent specialist advisers appointed by the committee to provide specialist advice on the many issues arising from the submissions. They were Dr Robert Beaglehole, who was until recently the Director of Chronic Diseases and Health Promotion at the World Health Organisation; Professor Jim Mann, Professor of Human Nutrition at the University of Otago; and Professor Boyd Swinburn, Chair in Population Health at the School of Exercise and Nutrition Sciences, Deakin University, Melbourne, Australia. The committee expresses its gratitude for the excellent contribution the three advisers made to the consideration of the evidence and the composition of the report.

The committee requested expert evidence from the Ministry of Health and received 16 written responses and oral evidence on several occasions. The committee thanks the ministry for its assistance.

The committee also heard evidence from Mr Yves Bur, Vice-President of the National Assembly of France on actions taken by the French Government to combat obesity.

Committee members

Sue Kedgley (Chairperson)
Maryan Street (Deputy Chairperson)
Dr Jackie Blue
Dr Jonathan Coleman
Jo Goodhew
Ann Hartley
Sue Moroney
Hon Tony Ryall
Lesley Soper
Barbara Stewart
Tariana Turia

Committee staff

Graham Hill, Clerk of the Committee
Marian Horan, Parliamentary Officer (Report Writer)
John Thomson, Parliamentary Officer (Committee Support)

Appendix B: Terms of Reference

1. To examine the causative factors likely to be driving increases in obesity and type 2 diabetes, including nutrition and physical activity.
2. To identify the effects of obesity and type 2 diabetes on the health of both children and adults and across ethnic and socio-economic groups and potential future costs.
3. To inquire into the effectiveness, particularly for children, of current obesity prevention approaches and interventions including primary prevention and screening, information provision, education, physical activity and voluntary steps taken by the food industry.
4. To inquire into whether additional interventions aimed at changing features of the environment that promote obesity are required.
5. To consider what policy or legislative mechanisms, if any, should be used to give effect to any findings of the inquiry.
6. To report the inquiry's findings and recommendations to the House of Representatives

Appendix C: List of submitters

Submission number	Name of submitter
1	Group Against Liquor Advertising (GALA)
2W ⁵	Dr Tim Halpine
3W	The Green Monkey Company Limited
4W	Dianne Haist
5W	Mary Gregory
6W	Kaye Lamb
7W	New Zealand Retailers Association
8W	Lynda Finn
9W	Cecileah Inns
10W	The Home Economics and Technology Teachers' Association of New Zealand
11W	Healthy Christchurch
12	BikeNZ
13W	Leigh Elder
14W	Tauranga Activity and Nutrition Group (TANGo)
15	Dr Ailsa Goulding
16W	New Zealand Kidney Foundation
17	Melanie Penny
18, 18A	Diabetes New Zealand Inc.
19, 19A-B ⁶	Professor Don Beaven
20W	Canterbury Branch of the Public Health Association
21W	A-Plus Bouncy Castle Hire
22W	Peter Reynolds
23W	Turuki Healthcare Service
24	Health Ministries Department, New Zealand Pacific Union Conference, Seventh-day Adventist Church
25W	Louise Kini
26W	Wendy Woodhouse
27, 27A-B	Dr Nick Wilson
28W	Wellington Regional Diabetes Trust
29, 29A-B	Robin Hoare
30, 30A-B	New Zealand Nutrition Foundation
31, 31A-D	Advertising Standards Authority Inc.
32W	Joelene Paea
33, 33A-O	Emma Harris
34, 34A-B	Sheryl Hanratty
35, 35A-E	Sarah Prowse
36, 36A	Stephanie McLennan
37, 37A-C	Mary Barbour

⁵ "W" refers to a written submission and indicates that oral evidence on the submission was not given to the committee.

⁶ "A" (and subsequent letters of the alphabet) refer to later additional supplementary submissions.

38, 38A	Agencies for Nutrition Action
39, 39A-G	Taupo District Council
40, 40A	Horticulture New Zealand
41	Dr Jane Elmslie
42, 42A-B	Dr Annemarie Jutel
43	Kim Farrant
44	David Bruce Voss
45, 45A-B	Cycling Advocates' Network
46	Whanganui Regional Diabetes Programme Governance Forum
47, 47A-D	The National Heart Foundation of New Zealand
48W	Angela Gordon
49W	Wilma J Ennor
50W	Rosa Roache
51W	Professor Elaine Rush
52W	Dr Jonathan Jarman
53W	The New Zealand Committee of The Royal Australian and New Zealand College of Obstetricians and Gynaecologists
54	Southland Health Promotion in Schools Network
55W	Katy Hart
56W	Jan Smithies
57	Sport Northland
58	Roselands Health Centre Ltd
59	Health Rotorua Primary Health Organisation
60	Public Health South
61W	Physical Activity Nutrition Team (Nelson-Tasman)
62W	Hawke's Bay IBCLC Group
63	Diabetes Auckland Inc
64W	Consumers' Institute NZ Inc.
65W	Southern Network for Nutrition and Physical Activity
66	Cancer Society of New Zealand, Manawatu Centre Inc.
67W	Royal New Zealand Foundation of the Blind
68	Push Play Southland Steering Committee
69	Diabetes Wanganui Incorporated
70, 70A	Otago & Southland Division of the Cancer Society of New Zealand
71	Whanganui Regional Primary Health Organisation
72, 72A	Cancer Society of New Zealand Inc.
73	Nutrition Services, Canterbury District Health Board
74	Waikato District Health Board
75	Dr Tony Baird
76	Nicky McCarthy
77W	Dietitians in Food Industry
78W	United Fresh New Zealand Inc./ 5+ A Day
79W	Te Hauora O Turanganui-A-Kiwa
80W	Tairāwhiti District Health Board
81W	Television New Zealand Ltd
82, 82A-E	Auckland Regional Public Health Service
83, 83A	Canterbury District Health Board
84W	New Zealand Sugar Company Limited

85	The Clinical Trials Research Unit, The University of Auckland
86W	Ashburton District Health Committee
87W	Manufactured Food Database
88	Linwood Avenue School
89W	Eastern Bay Activity & Nutrition Group
90W	Dr Carl Eagleton
91W	Rosie McGrath
92W	Taranaki District Health Board
93W	Children's Healthy Eating Healthy Action
94W	Julia Blazey
95	Physical Education New Zealand Te Ao Kori Aotearoa
96W	Wairarapa Community Public Health Organisation
97, 97A-B	New Zealand Lactation Consultants Association
98	Canterbury West Coast Sports Trust
99W	Diabetes Nurses Team, Capital PHO
100, 100A-B	Te Hotu Manawa Māori
101	Eating Difficulties Education Network
102W	Angela Summerfield
103	Anne Kauika
104W	Central North Island Nutrition and Physical Activity Network
105W	CanWest Mediaworks
106	Quigley and Watts Ltd
107	Western Heights Health Centre
108	Aimee Caudwell
109	Ecologic Foundation
110W	Waitematā District Health Board
111W	Wairarapa District Health Board
112W	Hawke's Bay District Health Board
113W	Dr D Barry
114, 114A-B	New Zealand Society for the Study of Diabetes
115W	Community and Public Health Advisory Committee, Southland District Health Board
116W	Local Diabetes Team, Southland District Health Board
117W	Southland District Health Board
118	Infant Feeding Association of New Zealand
119, 119A	Cancer Society of New Zealand, Canterbury/West Coast Division Inc.
120W	Clinical Dietitians, Capital and Coast District Health Board
121	New Zealand Dietetic Association Inc.
122, 122A	Living Streets Aotearoa
123, 123A	Thoracic Society of Australia and New Zealand
124	Diabetes Waikato Inc.
125	Jeanie McCafferty
126	New Zealand Association for Adolescent Health and Development
127, 127A-D	Professor Janet Hoek
128	New Zealand Medical Association
129, 129A-C	Obesity Action Coalition

130	New Zealand Nurses Organisation
131W	Breastfeeding Advisory Services
132, 132A	La Leche League New Zealand
133, 133A-C	Foundation for Advertising Research
134	Hutt Valley District Health Board
135, 135A	Regional Public Health, Hutt Valley District Health Board
136, 136A	Fight the Obesity Epidemic New Zealand Inc.
137, 137A-B	Public Health Service, Nelson Marlborough District Health Board
138, 138A-B	Fonterra Co-operative Group Ltd
139, 139A	Beer Wine and Spirits Council of New Zealand
140W	Harbour Sport
141	Sue Hamill
142W	Dr Michael Andreasen
143W	Delvina Gorton
144W	Carolyn King
145	KANOHI
146W	Chris Harrison
147	Sarah Crawford
148W	The National Fruit and Vegetable Alliance
149, 149A-E	Rotary Club of Wellington North
150	TaPasefika Health Trust
151	Centre for Physical Activity and Nutrition Research
152W	Bill Leonard
153	New Zealand Society of Paediatric Surgeons
154W	Katherine Stubbs
155, 155A-B	New Zealand Breastfeeding Authority
156	Public Health Association of New Zealand
157, 157A	Food Industry Group
158, 158A	Association of New Zealand Advertisers Inc.
159, 159A	The New Zealand Branch of the Australasian Faculty of Public Health Medicine
160, 160A-B	The Coca-Cola Company/Coca-Cola Amatil (Ltd) NZ
161W	The Social Marketing and Advertising Research Team, University of the Sunshine Coast, Australia
162	Cancer Society of New Zealand, Wellington Division Inc.
163	New Zealand Food & Grocery Council Inc.
164W	Leslie Manukau
165	Karen Fukofuka
166, 166A	Diabetes Projects Trust
167W	Northland District Health Board
168W	The Federation of Women's Health Councils Aotearoa-New Zealand
169W	Taranaki Cancer Society Inc.
170W	Nelson Breastfeeding Network
171W	Nutrition Services, Auckland City Hospital
172W	Peace and Justice Group, Our Lady of Fatima Church
173, 173A	Raewyn Grey
174W	Diabetes Otago
175W	Jodie Robertson

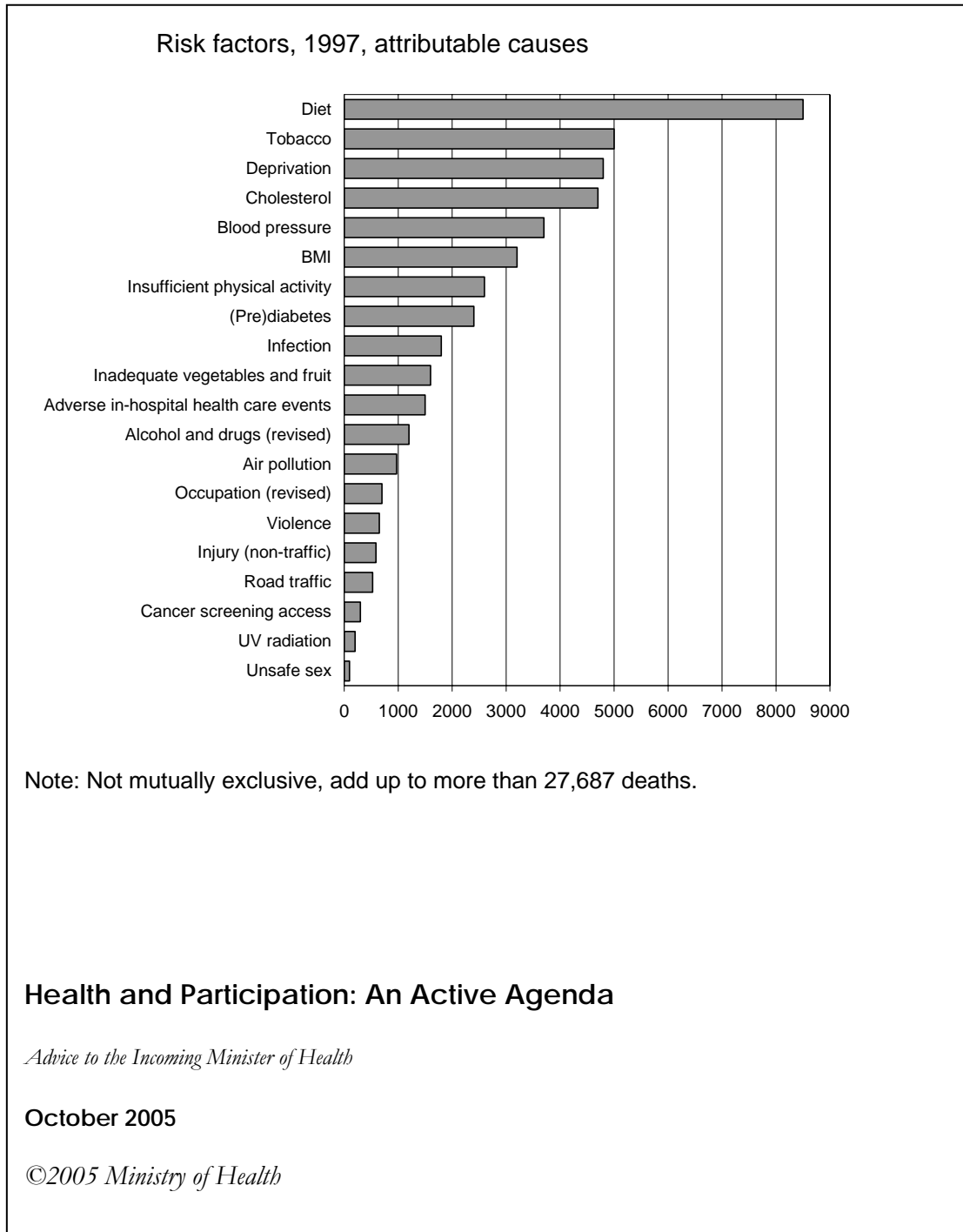
176W	College of Nurses Aotearoa (NZ) Inc.
177W	Louise James
178W	Dietitians at Community Child Health and Disability Service, Starship Childrens Health, Auckland District Health Board
179	CAPS Hauraki Inc.
180, 180A	Daniela Tylkowski
181	Diabetes Ashburton Inc.
182	Gloria Emily LeComte
183	School of Physical Education, University of Otago
184	Terry Urquhart
185	Pacific Women's Health Research & Development Unit
186, 186A-B	Counties Manukau District Health Board
187, 187A-B	Radio Broadcasters Association
188W	Capital and Coast District Health Board
189, 189A	Professor Boyd Swinburn
190, 190A-E	Obesity Prevention In Communities
191, 191A	Richard Stubbs, Elizabeth Munday and Ken Douglas
192, 192A-C	McDonald's Restaurants (New Zealand) Ltd
193W	Diabetes North Otago Inc.
194W	James Archibald
195, 195A	Dr Anthony Raizis
196W	Deborah Ludbrook
197W	Sport Otago
198, 198A	Physical Activity & Nutrition Interagency Network
199, 199A	Nutrition & Human Health Cluster, Institute of Food, Nutrition and Human Health
200, 200A	Dr Bruce Ross
201	The New Zealand Ayurvedic Association Inc.
202W	The Starship Paediatric Diabetes and Endocrinology Service
203W	Michael Milburn
204	Active Hauraki
205	Te Korowai Hauora O Hauraki
206W	Suzanne Mackay
207W	Kathy Archibald
208	Thames Coast Protection Society
209	Manaia Health PHO
210, 210A-B	He Kainga Oranga/Housing and Health Research Programme of the University of Otago
211, 211A	Waikato Healthy Eating-Healthy Action Steering Group
212, 212A	Kia Ora Ngatiwai
213, 213A	Women's Health Action
214W	Zanta Hamilton
215, 215A-C	New Zealand Society of Anaesthetists
216W	Ellen McCrae
217, 217A	Delys Mary Reed
218	Sue Milburn
219W	SportManawatu
220, 220A	Rotorua Physical Activity and Nutrition Network
221W	Age Concern North Shore
222	Fitness New Zealand Incorporated

223	New Zealand College of Midwives (Inc.)
224W	Barbara Warren
225	The Vegan Society of New Zealand
226	The 10th March 2006 Multidisciplinary Meeting to Review Screening and Management of Diabetes in Pregnancy
227W	Cycle Action Auckland
228	Child Poverty Action Group Inc.
229W	Vicki Harding
230W	David Hodges
231W	Mari Komp
232	The National Heart Foundation of New Zealand, Canterbury Branch
233W	Jeff Whitfield
234W	Janet Calley
235W	Chrissy Baird
236W	Shana Allan
237, 237A	Devy Allan
238	Saila Allan
239W	Carolyn Driver-Burgess
240W	Bhadra Macken
241	Kim Mounsey
242W	Shori Allan
243W	Harriette Brickell
244W	ZoomZone
245W	J A Edwards
246W	Gayla Kissling
247W	Audrey van Ryn
248	Dr Felicity Breen
249, 249A	Leanne Young
250W	Communication Agencies Association of NZ
251, 251A	Ngati and Healthy Team
252W	Confectionery Manufacturers of Australasia Limited
253W	Caritas Aotearoa New Zealand
254W	Bobbi Campbell
255W, 255WA-B	Department of Public Health, Wellington School of Medicine and Health Sciences
256	Edgar National Centre for Diabetes Research
257	Professor David Simmons
258, 258A	Dr Alison Barrett
259, 259A	Paediatric Society of New Zealand
260, 260A	Pegasus Health and Partnership Health
261W	Patrick Dean Corcoran
262, 262A	Rose Fowlds
263, 263A	Health Promotion Forum of New Zealand
264W	New Zealand Recreation Association Inc.
265	Green Party
266	Sport Auckland
267	Active Schools Vision, Sport Auckland
268W	MidCentral DHB Primary Health Care Nursing Development Team

269W	Diabetes Lifestyle Centre, MidCentral District Health Board
270W	Community Paediatric Team, MidCentral Health
271W	Mental Health Services, MidCentral Health
272W	Lactation Consultancy Service, Women's Health Unit, MidCentral District Health Board
273W	Public Health Unit, MidCentral District Health Board
274, 274A	Pacific Islands Heartbeat Unit, Heart Foundation
275	Children's Commissioner
276, 276A	Maraerobics Ltd
277, 277A	Sport Wellington Region
278	Sport Bay of Plenty
279W	Otago Obesity Research Consortium
280	Alcohol Healthwatch
281W	Anne Goodhead
282, 282A	North Shore Branch of the Federation of Graduate Women
283W	Foodstuffs (NZ) Ltd
284, 284A-B	The New Zealand Charter of Health Practitioners Inc.
285	Nelson Marlborough District Health Board
286	Te Kupenga Hauora Ahuriri
287W	William Colenso College
288	Dr Miles Williams
289, 289A-G	Sport & Recreation New Zealand (SPARC)
290	APRA
291, 291A-D	National Pacific Diabetes Initiative Steering Group
292W	Dance Aotearoa New Zealand
293, 293A	NZ Television Broadcasters' Council
294W	Age Concern New Zealand
295, 295A-I	Professor Tim Lobstein
296W	Department of Human Nutrition, University of Otago
297W	M Prior
298W	Alastair Macdonald
299W	Ministry of Transport
300	Ministry of Youth Development
301W	Ministry of Social Development
302	The Centre for Midwifery and Women's Health Research
303, 303A	Good Kai Awesome Mana Pilot Project
304W	Diabetes Nelson Inc.
305W	Margaret Earle
306	Paul Stephenson
307, 307A-C	Dr Robert Beaglehole
308	New Zealand Infant Formula Marketers Association
309W	Soy Information Service
310W	Professor Lynnette Ferguson
311W	Ministry of Education
312W	New Zealand School Trustees Association
313, 313A-B	New Zealand Food Safety Authority

Appendix D: Health Risk Factors

Health Risk Factors



Appendix E: United Nations Resolution 61/225, World Diabetes Day

United Nations

A/RES/61/225



General Assembly

 Distr.: General
 18 January 2007

 Sixty-first session
 Agenda item 113

Resolution adopted by the General Assembly

[without reference to a Main Committee (A/61/L.39/Rev.1 and Add.1)]

61/225. World Diabetes Day

The General Assembly,

Recalling the 2005 World Summit Outcome¹ and the United Nations Millennium Declaration,² as well as the outcomes of the major United Nations conferences and summits in the economic, social and related fields, in particular the health-related development goals set out therein, and its resolutions 58/3 of 27 October 2003, 60/35 of 30 November 2005 and 60/265 of 30 June 2006,

Recognizing that strengthening public-health and health-care delivery systems is critical to achieving internationally agreed development goals, including the Millennium Development Goals,

Recognizing also that diabetes is a chronic, debilitating and costly disease associated with severe complications, which poses severe risks for families, Member States and the entire world and serious challenges to the achievement of internationally agreed development goals, including the Millennium Development Goals,

Recalling World Health Assembly resolutions WHA42.36 of 19 May 1989 on the prevention and control of diabetes mellitus³ and WHA57.17 of 22 May 2004 on a global strategy on diet, physical activity and health,⁴

Welcoming the fact that the International Diabetes Federation has been observing 14 November as World Diabetes Day at a global level since 1991, with co-sponsorship of the World Health Organization,

Recognizing the urgent need to pursue multilateral efforts to promote and improve human health, and provide access to treatment and health-care education,

1. *Decides* to designate 14 November, the current World Diabetes Day, as a United Nations Day, to be observed every year beginning in 2007;

¹ See resolution 60/1.

² See resolution 55/2.

³ See World Health Organization, *Forty-second World Health Assembly, Geneva, 8–19 May 1989, Resolutions and Decisions, Annexes* (WHA42/1989/REC/1).

⁴ *Ibid.*, *Fifty-seventh World Health Assembly, Geneva, 17–22 May 2004, Resolutions and Decisions, Annexes* (WHA57/2004/REC/1).

A/RES/61/225

2. *Invites* all Member States, relevant organizations of the United Nations system and other international organizations, as well as civil society, including non-governmental organizations and the private sector, to observe World Diabetes Day in an appropriate manner, in order to raise public awareness of diabetes and related complications, as well as its prevention and care, including through education and the mass media;

3. *Encourages* Member States to develop national policies for the prevention, treatment and care of diabetes in line with the sustainable development of their health-care systems, taking into account the internationally agreed development goals, including the Millennium Development Goals;

4. *Requests* the Secretary-General to bring the present resolution to the attention of all Member States and organizations of the United Nations system.

*83rd plenary meeting
20 December 2006*
