



New Zealand Medical Association  
Policy Briefing

# Tackling Obesity

May 2014

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***Obesity is a major public health issue in New Zealand.***

Tackling obesity is the collective responsibility of all of society, including healthcare professionals, policy makers, educators, the food industry, parents, concerned individuals, community groups, NGOs and government.

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# Executive summary



**Existing** approaches to tackling obesity in New Zealand are not doing enough. New Zealand is now the fourth most obese country in the OECD, with nearly two thirds of adults either overweight (34%) or obese (31%). The rate of obesity is highest in Māori adults (48%) and Pacific adults (68%), and in those with greatest levels of deprivation. The obesity rate in children continues to increase.

Obesity is a preventable risk factor for the development of various non-communicable diseases such as type 2 diabetes, heart disease and several cancers, and is associated with a huge financial burden on the health-care system, as well as indirect costs to society.

The causes of obesity are complex. Key drivers include the increased availability of cheap, palatable and energy-dense foods, persuasive and pervasive food marketing, and reduced physical activity. This has led to an ‘obesogenic’ environment in which making the healthy choice has become increasingly difficult and expensive.

There are compelling reasons for doctors to lead multisectoral efforts to halt and reverse the obesity epidemic. Doctors witness the effects of obesity daily. They have a key role and an ethical responsibility to advocate for their patients, as well as for improved population health and health equity.

Tackling obesity is the collective responsibility of all of society, including healthcare professionals, policy makers, educators, the food industry, parents,

concerned individuals, community groups, NGOs and government. There is no single solution to obesity. Policy responses must be multifaceted and draw on the best-available evidence, without undue influence or interference from commercial interests or ideology. Key aspects to consider include efficacy, cost-effectiveness, implementation issues (including feasibility and sustainability) and effects on equity. A core aim of strategies to tackle obesity should be to help make the healthy choice, the easy choice.

The NZMA recommends that a suite of measures be considered as part of an approach to tackling New Zealand’s obesity epidemic. Central to these measures will be countering the obesogenic environment and improving health literacy. We believe that government is in the best position to implement an integrated response to the obesity epidemic via a combination of legislative, regulatory and policy levers. These measures are necessary to complement community-based approaches to obesity. Many of the key policy approaches to obesity are cost-saving or cost-neutral to government.

## Recommendations:

While this policy briefing is intended for a diverse audience, the following recommendations are directed primarily at doctors, politicians and policy makers:

- 1 Health professionals should take every opportunity to engage sensitively with patients who are obese, providing them with advice for healthy living and directing them to exercise and nutrition programmes as appropriate. Recognising and acting on obesity in childhood is of particular importance.
- 2 Community-based approaches to obesity, as well as nutrition and exercise programmes, should be expanded across the country. These approaches need to be complemented by policy and regulatory initiatives.
- 3 Greater protection from the marketing of unhealthy food should be afforded to children. This should entail a more stringent statutory regulatory regime that addresses all forms of marketing, including product packaging and sponsorships.
- 4 The use of fiscal instruments in the New Zealand context should be evaluated as a means of influencing food consumption, with priority given to a tax for sugar sweetened beverages (SSB).
- 5 A consistent and easy-to-understand food labelling system, preferably the traffic light concept, should be developed and implemented on the front of packaging to help inform consumers about their food choices. Restaurants and fast food outlets should be encouraged to develop visible calorie indicators.
- 6 Food and nutrition guidelines should be introduced in school canteens and in all public services including hospitals.
- 7 Nutrition should be included as part of the mandatory curriculum in schools.
- 8 The licensing of fast food premises should be audited by local authorities, with a view to reducing the proximity of fast food outlets to schools and leisure centres.
- 9 Local authorities should work with public health officials to conduct health impact assessments of planning decisions to facilitate urban environments that support physical activity.
- 10 The concept of a health target around the provision of healthy living advice for pregnant women should be considered, eventually expanding this to all patients.

**Crucially**, all policy measures to address obesity, including those recommended above, must be subject to rigorous evaluation, with appropriate adjustments and modifications as required.

# Introduction

“Obesity in New Zealand is a public health disaster”

Professor Robert Beaglehole  
June 2013

**New Zealand** has the unenviable record of being ranked fourth worst in the OECD (below only the United States, Mexico and Hungary) when it comes to our rates of obesity.<sup>1</sup> Despite obesity having been identified over two decades ago as a potential public health time bomb, efforts to tackle obesity in New Zealand have been piecemeal and largely unsuccessful.

A recent review of the lessons learned from over 20 years of obesity prevention efforts makes for gloomy reading.<sup>2</sup> Despite several comprehensive reviews and strategies over the years, few recommended regulatory policies have been implemented. Worse, certain policies that may have been effective (eg, healthy school food guidelines) have been rescinded.

Nevertheless, the scale of the issue and the implications for the health and wellbeing of all New Zealanders, not to mention the fiscal costs of doing nothing, have led to renewed calls for action on obesity. A symposium held in Wellington on 7 June 2013 was the third in a series of national meetings to continue to encourage collaborative action against obesity, and featured presentations from several internationally renowned obesity experts.<sup>3</sup>

While the distinct lack of progress in halting and reversing the obesity epidemic since the last symposium two years earlier was disheartening, the evidence base to help inform policy measures to tackle obesity is growing.

New Zealand is fortunate to have some of the world’s leading scientific experts in nutrition and obesity. It is hoped that key decision makers heed the advice of the Prime Minister’s Chief Scientific Advisor on the role of evidence in policy formation and implementation.<sup>4</sup> Specifically, we note Professor Gluckman’s recent caution that “there have been too many examples where appealing to apparently confused science masks what is in fact an ideological issue”. When it comes to the obesity epidemic, we must not allow ideology to stand in the way of solutions.

**“Governments have a fundamental role in helping to make healthy choices the easy choice”**

- Lancet Series on Obesity<sup>5</sup>

<sup>1</sup> OECD (2013), “Overweight and obesity”, in OECD Factbook 2013: Economic, Environmental and Social Statistics, OECD Publishing.

<sup>2</sup> Swinburn B, Wood A. Progress on obesity prevention over 20-years in Australia and New Zealand. *Obes Rev* 2013; 14 (Suppl. 2), 60–68

<sup>3</sup> University of Otago Edgar National Centre for Diabetes and Obesity Research. NZ’s Waistline — what will it take to fix it? Wellington, 7 June, 2013

<sup>4</sup> Gluckman P. The role of evidence in policy formation and implementation: A report from the Prime Minister’s Chief Science Advisor, September 2013

<sup>5</sup> Swinburn BA, Sacks G, Hall KD, et al. The global obesity pandemic: shaped by global drivers and local environments. *Lancet*. 2011 Aug 27;378(9793):804–14

# Why has the NZMA developed a policy briefing on obesity?



**Existing** approaches to obesity do not appear to be halting or reversing this major public health problem. As the largest voluntary pan professional medical organisation in New Zealand, the New Zealand Medical Association (NZMA) believes that it is well placed to articulate, and advocate for, an evidence-informed, multisectoral policy response to obesity. Further information about the NZMA can be found at the back of this document.

Doctors regularly witness the effects of obesity first hand during their clinical practice, and are all too familiar with the adverse effects of obesity on individuals' health, their quality of life and their families. Doctors have an ethical responsibility to act in the best interests of their patients, and the population as a whole.<sup>6</sup> The Role of the Doctor Statement, developed by the NZMA in 2011, is unambiguous in its position that doctors are advocates for improved population health and health

equity for all people.<sup>7</sup> This statement also recognises that doctors have diverse roles, within and outside the health sector, in the promotion and maintenance of both individual and population health. As leaders, doctors have a role in applying their intellectual and scientific skills in the development of policy. This is especially so when it comes to health and social policies designed to address a complex issue such as obesity.

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**“Obesity may supplant tobacco as the leading potentially modifiable risk to health by 2016”**

- Ministry of Health Report, 2013<sup>8</sup>

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<sup>6</sup> NZMA. Code of Ethics for the New Zealand Medical Profession, Wellington, 2008.

<sup>7</sup> NZMA. Consensus Statement on the Role of the Doctor in New Zealand, November 2011.

<sup>8</sup> Ministry of Health. 2013. Health Loss in New Zealand: A report from the New Zealand Burden of Diseases, Injuries and Risk Factors Study, 2006–2016. Wellington: Ministry of Health

## Obesity in pregnancy

INCREASED RISK

gestational diabetes  
pre-eclampsia  
C-section  
stillbirth  
fetal abnormalities



## Obesity and Cancer

Obesity is associated with an increased risk of several types of cancer, including colon, endometrium, postmenopausal breast, kidney, oesophagus, pancreas, gallbladder, liver, and haematological malignancy.

These increased risks vary by gender. For example, in men, an increase in BMI by 5 kg/m<sup>2</sup> increases the risk of oesophageal cancer by 52% and colon cancer by 24%. In women, an increase in BMI by 5 kg/m<sup>2</sup> increases the risk of endometrial cancer by 59%, gall bladder cancer by 59%, and postmenopausal breast cancer by 12%.<sup>14</sup>

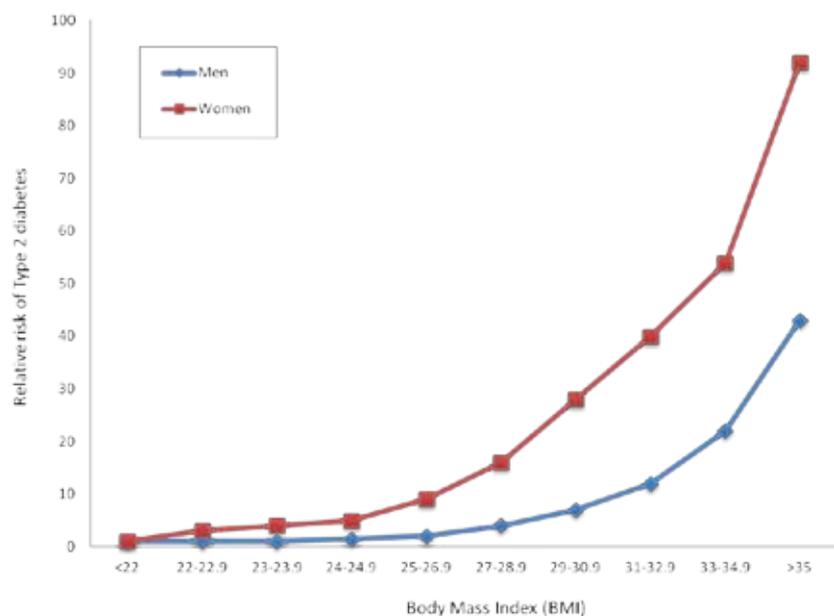
As BMI increases by 5 kg/m<sup>2</sup>, overall cancer mortality increases by 10%.<sup>15</sup>

It has been estimated that excess weight and obesity causes approximately 20% of all cancer cases.<sup>16</sup>

It is important to note that obesity is an established, yet preventable, risk factor for the development of various non-communicable diseases (NCDs). These include type 2 diabetes (see figure 1), cardiovascular disease and many cancers (see box)<sup>9</sup>. Excess body weight also contributes to non-fatal but costly or disabling disorders such as osteoarthritis, gallstones, gynaecologic irregularities, asthma and sleep apnoea.<sup>10</sup> These conditions are often also associated with an adverse impact on health-related quality of life.<sup>11</sup> Obesity also has a two-way association with various

psychological conditions, including depression.<sup>12</sup> While not all people with obesity are unwell, many people with obesity have multiple morbidities.

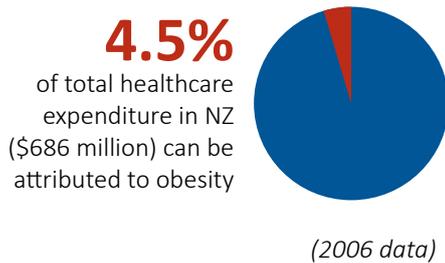
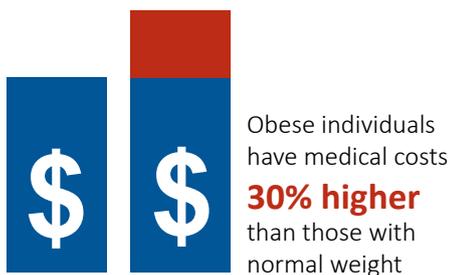
Obesity in pregnancy is associated with adverse maternal, fetal and neonatal outcomes. These include increased risks of gestational diabetes, pre-eclampsia, Caesarean section, stillbirth and congenital fetal anomalies. Infants born to mothers with gestational diabetes are also more likely to develop obesity and type 2 diabetes themselves.<sup>17</sup>



**Figure 1.** The risk of developing type 2 diabetes increases dramatically with increasing body mass index.<sup>13</sup>

<sup>9</sup> Guh DP, et al. The incidence of co-morbidities related to obesity and overweight: a systematic review and meta-analysis. *BMC Public Health*. 2009 Mar 25;9:88; Pi-Sunyer X. The medical risks of obesity. *Postgrad Med*. 2009 Nov;121(6):21–33; Renehan AG, et al. Body-mass index and incidence of cancer: a systematic review and meta-analysis of prospective observational studies. *Lancet*. 2008 Feb 16;371(9612):569–78; AIHW 2004. The relationship between overweight, obesity and cardiovascular disease: a literature review prepared for the National Heart Foundation Australia. Cardiovascular disease series no. 23. Cat. no. CVD 29. Canberra: AIHW;

<sup>10</sup> Guh DP, et al. 2009.



In addition to poor health outcomes and adverse quality of life for individuals, obesity exerts a huge economic burden on the healthcare system via direct health costs, and represents a burden to wider society via indirect costs such as lost productivity. A recent systematic review of the economic burden of obesity worldwide found that obesity accounted for 0.7–2.8% of a country’s total healthcare costs, with obese individuals having medical costs 30% higher than those of normal weight.<sup>18</sup> In New Zealand, the healthcare costs attributable to excess weight and obesity were estimated to be NZ\$686 million or 4.5% of New Zealand’s total healthcare expenditure in 2006, while the costs of lost productivity were estimated to be NZ\$98 million to NZ\$225 million depending on the methodology.<sup>19</sup>

At the outset, it is important to acknowledge that there is no silver bullet when tackling obesity. Any approach to this complex issue must be multifaceted, comprehensive and involve a ‘whole-of-society’ approach. Accordingly, while this policy briefing is intended for a diverse audience, the suite of recommendations is directed primarily at doctors, politicians and policy makers.

**“Health systems everywhere are already struggling to contain costs. Without prevention and control of the risk factors for obesity now, health systems will be overwhelmed to breaking point”**

- Lancet editorial<sup>20</sup>

<sup>11</sup> Anandacoomarasamy A, et al. Influence of BMI on health-related quality of life: comparison between an obese adult cohort and age-matched population norms. *Obesity* (Silver Spring). 2009 Nov;17(11):2114–8

<sup>12</sup> Markowitz S, et al. Understanding the Relation Between Obesity and Depression: Causal Mechanisms and Implications for Treatment. *Clinical Psychology: Science and Practice* 2008; 15(1):1–20; Pulgarón ER. Childhood obesity: a review of increased risk for physical and psychological comorbidities. *Clin Ther*. 2013 Jan;35(1):A18–32. doi: 10.1016/j.clinthera.2012.12.014.

<sup>13</sup> Colditz GA, et al. Weight as a risk factor for clinical diabetes in women. *Am J Epidemiol* 1990; 13: 501–513; Chan, et al. Obesity, fat distribution and weight gain as risk factors for clinical diabetes in men. *Diabetes Care* 1994; 17: 961–969

<sup>14</sup> Renehan AG, et al. Body-mass index and incidence of cancer: a systematic review and meta-analysis of prospective observational studies. *Lancet* 2008; 371: 569–78

<sup>15</sup> Basen-Engquist K, Chang M. Obesity and cancer risk: recent review and evidence. *Curr Oncol Rep*. 2011 Feb;13(1):71–6

<sup>16</sup> Wolin KY, Carson K, Colditz GA. Obesity and cancer. *Oncologist*. 2010;15(6):556–65

<sup>17</sup> Galtier-Dereure F, et al. Obesity and pregnancy: complications and cost. *Am J Clin Nutr*. 2000 May;71(5 Suppl):1242S–8S.

<sup>18</sup> Withrow D, Alter DA. The economic burden of obesity worldwide: a systematic review of the direct costs of obesity. *Obes Rev* 2011;12:131–41

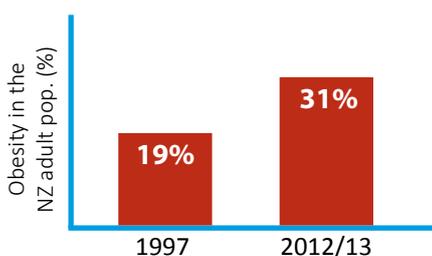
<sup>19</sup> Lal A, et al. Health care and lost productivity costs of overweight and obesity in New Zealand. *Aust NZ J Public Health* 2012;36(6):550–6

<sup>20</sup> Anon. Urgently needed: a framework convention for obesity control. *Lancet* 2011;378:741

# What is the state of obesity in New Zealand and how are we tracking?



of NZ adults are overweight or obese



**Data** on obesity in New Zealand are collected as part of the New Zealand Health Survey and published on the Ministry of Health website.<sup>21</sup> Obesity in adults was defined as a body mass index (BMI) of 30 or more. Obesity in children (aged 2–14 years) used BMI cut-off points developed by the International Obesity Taskforce.<sup>22</sup>

## Obesity in adults

As a nation, we are faring poorly when it comes to the state of obesity. New Zealand is now the fourth most obese country in the OECD,<sup>23</sup> with nearly two thirds of adults either overweight (34%) or obese (31%).<sup>24</sup> Over one million adults are now obese in New Zealand. The rate of obesity is considerably higher in Māori (48%) and Pacific adults (68%).<sup>25</sup>

New Zealand's rate of adult obesity is higher than Australia (25%) and the OECD average (17%).<sup>26</sup> Furthermore, the obesity rate has increased substantially over the past 15 years, from 19% in 1997 to 31% in 2012/2013.<sup>27</sup> Average BMI has increased from 26.1 to 27.7 over the same period.<sup>28</sup>

There is a clear association between deprivation and obesity. The obesity rate is much higher among people living in the most deprived neighbourhoods (44%) than in people living in the least deprived neighbourhoods (27%).<sup>29</sup> This relationship remains strong even after adjusting for age, sex and ethnicity, with people living in the most deprived areas 1.5 times more likely to be obese than those living in the least deprived areas.<sup>30</sup>

**Over one million adults are now obese in New Zealand.**

<sup>21</sup> Details about the New Zealand Health Survey and results are available at <http://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/surveys/current-recent-surveys/new-zealand-health-survey>

<sup>22</sup> Cole TJ, et al. 2000. Establishing a standard definition for child overweight and obesity worldwide: international survey. *British Medical Journal* 320(7244):1240–3

<sup>23</sup> OECD Factbook, 2013

<sup>24</sup> Ministry of Health. 2013. *New Zealand Health Survey: Annual update of key findings 2012/13*. Wellington: Ministry of Health.

<sup>25</sup> Ibid

<sup>26</sup> Ibid

<sup>27</sup> Ibid

<sup>28</sup> Ibid

<sup>29</sup> Ibid

<sup>30</sup> Ibid



**4** New Zealand is the fourth most obese country in the OECD.



**1 in 9** NZ children are obese  
**2 in 10** are overweight

### Obesity in children

About one in nine children (11%) in New Zealand is obese.<sup>31</sup> This represents around 85,000 children. A further two in 10 children (22%) are overweight—about 170,000 children. The rate of obesity is higher in Māori children (one in five children; 19%) and Pacific children (one in four children; 25%).<sup>32</sup>

As with adults, childhood obesity is much higher among children living in the most deprived areas (20%) than among

those living in the least deprived areas (5%). After adjusting for age, sex and ethnicity, children living in the most deprived areas were three times more likely to be obese than children who live in the least deprived areas.<sup>33</sup> Of particular concern is the increase in the rate of childhood obesity from 2006/07 (8%) to 2012/13 (11%).<sup>34</sup> Worryingly, this increase is occurring in the context of plateauing or even decreasing rates of childhood obesity in many other OECD countries.<sup>35</sup>



**1.5 & 3.0**

The amounts by which adults & children who live in the most deprived areas are more likely to be obese than those living in least deprived areas

<sup>31</sup> Ministry of Health. 2013. New Zealand Health Survey: Annual update of key findings 2012/13. Wellington: Ministry of Health.

<sup>32</sup> Ibid

<sup>33</sup> Ibid

<sup>34</sup> Ibid

<sup>35</sup> Nichols MS, et al. Decreasing trends in overweight and obesity among an Australian population of preschool children. *Int J Obes (Lond)*. 2011 Jul;35(7):916–24; Olds T, et al. Evidence that the prevalence of childhood overweight is plateauing: data from nine countries. *Int J Pediatr Obes*. 2011 Oct;6(5-6):342–60

# What is driving the obesity epidemic?



**“The increasing weight of people worldwide is the result of a normal response, by normal people, to an abnormal environment”**

- Lancet editorial<sup>36</sup>

**Obesity** is caused by a chronic energy imbalance involving both dietary intake and physical activity patterns. While the behavioural patterns and their environmental determinants are complex, important drivers of the obesity epidemic have been identified.<sup>37</sup> Key drivers of obesity include the increased availability of cheap, palatable and energy-dense foods, persuasive and pervasive food marketing, and reduced physical activity.<sup>38</sup> This has led to what is often termed an ‘obesogenic’ environment, in which making the healthy choice is becoming increasingly difficult.

To date, policy responses to the obesity epidemic have generally been piecemeal and largely ineffectual. It appears that a prevailing ideology of individual responsibility and vested commercial

interests have combined to thwart, dilute and undermine previous attempts at effective policies to counter the challenge of obesity.<sup>39</sup> For example, only a handful of the 55 recommendations arising from a Parliamentary Inquiry into Obesity and Diabetes in 2006-07 were actually ever enacted. The Healthy Eating Healthy Action (HEHA) strategy — launched in 2003 as the Ministry of Health’s strategic approach to improving nutrition, increasing physical activity and achieving healthy weight for all New Zealanders — had its funding cut in 2011, despite emerging evidence for the success of some of its community initiatives.<sup>40</sup> Healthy food guidelines for schools, another initiative arising from HEHA with strong support from public health experts, was repealed at least partly on the basis of the primacy of personal choice over regulation.

<sup>36</sup> Anon. Urgently needed: a framework convention for obesity control. *Lancet* 2011;378:741

<sup>37</sup> Swinburn BA, et al. The global obesity pandemic: shaped by global drivers and local environments. *Lancet*. 2011 Aug 27;378(9793):804–14.

<sup>38</sup> Ibid

<sup>39</sup> Jenkin G, Signal L, Thomson G. Nutrition policy in whose interests? A New Zealand case study. *Public Health Nutr* 2012;15(8):1483–8

<sup>40</sup> Clinton J, et al. Overview of the Let’s Beat Diabetes evaluation 2009: final report. Auckland UniServices Limited, The University of Auckland: Auckland, 2009; Clinton J, et al., for the Nelson Marlborough District Health Board. Summary of the Evaluation of the Nutrition and Physical Activity Programme: 2007–2010 Final Report. April 2011; Mercer C, et al. Evaluating a healthy eating, healthy action program in small Māori communities in Aotearoa, New Zealand. *Aust J Prim Health* 2012; 19(1): 74–78

# How should we respond to the obesity epidemic?



**Obesity** is not the fault of any one sector, organisation or individual. The NZMA takes the view that tackling obesity is the collective responsibility of all of society. Given the complexity of the obesity epidemic, successfully halting and reversing it is likely to require many sustained interventions at several levels. To facilitate a coordinated response, we suggest the establishment of an overarching national strategy to deal with the epidemic of obesity and related NCDs. This should include representation from all relevant ministries and agencies and be led by a high profile steering group.

While early intervention and prevention is desirable, a life-course approach to tackling obesity is necessary, given that almost 1 million adult New Zealanders are currently obese. People who are obese are at high risk of developing type two diabetes (many already have pre-diabetic changes), yet sustained weight loss in this group reduces progression to clinical diabetes.<sup>41</sup>

The evidence base to inform robust policy around combating obesity is increasing. And while we have made little progress as a nation in combating obesity, notable pockets of success exist (eg, the APPLE project, Project Energize — see case studies) at a local level.

Sharing these successes must be an important element in our collective response to obesity.

The NZMA contends that policy responses to obesity must draw on the best-available evidence and apply the precautionary principle\*, without undue influence or interference from vested commercial interests and without being constrained by ideology. Key aspects to consider when evaluating policies and measures to combat obesity include efficacy, cost-effectiveness, implementation issues (including feasibility and sustainability) and effects on equity.

<sup>41</sup> Gillett M, et al. Non-pharmacological interventions to reduce the risk of diabetes in people with impaired glucose regulation: a systematic review and economic evaluation. *Health Technol Assess.* 2012 Aug;16(33):1–236; Horton ES. Effects of lifestyle changes to reduce risks of diabetes and associated cardiovascular risks: results from large scale efficacy trials. *Obesity* (Silver Spring). 2009 Dec;17 Suppl 3:S43–8

\* The precautionary principle is an approach to decision making in risk management that justifies preventive measures or policies despite some scientific uncertainty, usually about causality or harms. Although most commonly evoked in decisions around climate change, it is increasingly applied to other spheres including public health.

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## Health professionals are uniquely placed to engage with patients who are obese and to provide advice on healthy living.

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The NZMA calls for a suite of measures as part of a multipronged approach to tackling the obesity epidemic in New Zealand. We believe that a core principle of obesity policies should be to support people to make the healthy choice. In this regard, government is a key actor because only it has the ability to enact policies and regulations to mitigate the obesogenic environment. We welcome the recent endorsement of the WHO global action plan for the prevention and control of noncommunicable diseases 2013-2020, which includes the adoption of voluntary targets to halt the rise in diabetes and obesity.<sup>42</sup>

Health professionals are uniquely placed to engage with patients who are obese and to provide advice on healthy living. There is evidence that brief interventions can lead to at least short-term changes in behaviour and body weight if they: i) focus on both diet and physical activity; ii) are delivered

by practitioners trained in motivational interviewing; iii) incorporate behavioural techniques, especially self-monitoring; iv) are tailored to individual circumstances; v) encourage the individual or patient to seek support from other people.<sup>43</sup>

Nevertheless, health professionals cannot achieve success on their own and achieving long-term change will require more than brief advice. There is growing evidence of the effectiveness of specific types of weight reduction programmes.<sup>44</sup> These programmes are currently limited in scale in New Zealand and should be expanded to meet demand. Bariatric surgery should be a more widely provided treatment option for appropriate candidates with severe obesity (BMI of 35 or more) as it has been shown to be a cost effective approach in this group.<sup>45</sup> Even so, these steps alone are unlikely to be adequate to halt and reverse the obesity epidemic.

<sup>42</sup> WHA (2013). Follow-up to the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases. Sixty-sixth World Health Assembly. 27 May 2013

<sup>43</sup> Cavill N et al. Brief interventions for weight management. Oxford: National Obesity Observatory, 2011.

<sup>44</sup> McCombie L, Lean MEJ, Haslam D, and The Counterweight Research Group. Effective UK weight management services for adults. *Clinical Obesity* 2012, 2: 96–102.

<sup>45</sup> Ministry of Health. Assessment of the business case for the management of adult morbid obesity in New Zealand. Wellington: Ministry of Health 2008; Sjöström L. Review of the key results from the Swedish Obese Subjects (SOS) trial — a prospective controlled intervention study of bariatric surgery. *J Intern Med* 2013; 273(3):219–34

**“Governments have largely abdicated the responsibility for addressing obesity to individuals, the private sector and non-government organisations, yet the obesity epidemic will not be reversed without government leadership, regulation, and investment in programmes, monitoring and research.”<sup>47</sup>**

While exercise has an important role in primary prevention of obesity, the impact of exercise on weight-loss for individuals who are already obese is limited. However, exercise has modest beneficial effects on the various risk factors for chronic diseases in patients who are obese. As such, these individuals should still be encouraged to undertake physical activity.<sup>46</sup>

The NZMA recognises the importance of community-based health promotion approaches to obesity prevention and is encouraged by the government’s intention to implement a “Healthy Families NZ” programme, based on Healthy Together Victoria (see ‘What is Healthy Together Victoria?’). However, the NZMA takes the view that community-based approaches need to be supported by policy and regulatory actions.

We believe that countering the obesogenic environment should form the basis of a coordinated and planned response to the obesity epidemic, in conjunction with measures to improve health literacy. We elaborate on these twin objectives in the following pages.

### **What is Healthy Together Victoria?**

Healthy Together Victoria is a state-wide, systems-oriented, long-term, locally-implemented Australian initiative that aims to improve people’s health where they live, learn, work and play. It focuses on addressing the underlying causes of poor health in children’s settings, workplaces and communities.

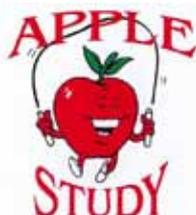
Healthy Together Victoria is encouraging healthy eating and physical activity, and reducing smoking and harmful alcohol use. It has very visible and strong leadership from the Health Minister and a highly dynamic and driven bureaucracy. It is a serious investment in prevention with over 100 new positions sited within 12 high-need communities as the “systems activators”. It is highly evidence-informed and evidence-creating with its proof of principle from several long-term community initiatives. Healthy Together Victoria also creates links to existing health promotion, prevention services and programmes.<sup>48</sup>

<sup>46</sup> Thomas DM, et al. Why do individuals not lose more weight from an exercise intervention at a defined dose? An energy balance analysis. *Obes Rev* 2012;13(10):835–47

<sup>47</sup> Swinburn BA, et al. 2011

<sup>48</sup> More information about Healthy Together Victoria is available from [www.health.vic.gov.au/prevention/healthytogether](http://www.health.vic.gov.au/prevention/healthytogether)

# Case studies



**Project Energize** is a nutrition and fitness initiative that began in 2005 and is funded by Waikato District Health Board. Partners include Sport Waikato and AUT University, the University of Waikato, Waikato Institute of Technology, Sport and Recreation NZ, and the National Heart Foundation. Programme delivery partners are Māori and Pacific health providers Te Kohao Health, Te Korowai Hauora O Hauraki, Nga Miro Health and South Waikato Pacific Islands Health Committee.

Over 44,000 primary and intermediate school children in 244 schools are now part of this project, with over one-third of the children Māori. A team of 27 'Energizers' work with schools, teachers and parents, giving physical fitness and nutritional advice and helping implement health and fitness programmes. Each Energizer is allocated 8-12 schools, and a dietitian works with the energizer team.

In March/April 2011, a formal evaluation of Project Energize was undertaken. Results show that Energize delivers measureable improvements in the health of Waikato children.<sup>49</sup> Energize children's health and fitness were compared with a range of national and regional data (control) by age group. Data collected were also compared with previous evaluations done for Project Energize.

Key findings included: obesity rates decreased between 2006 and 2011; children weighed less and had a lower BMI than Waikato children of the same age measured in 2004; children ran 13% faster than age-matched national data for children between 2001 and 2007; 3,000 questionnaires returned by parents and whānau of children showed that 76% believed their children's fitness had improved as a result of the programme; 78% of schools reported improved quality of daily fitness; 97.5% of 6- to 8- year-olds in the evaluation agreed water was healthy or very healthy; 99% of 9 to 11 year olds thought healthy eating was somewhat or very important. A very recent publication on Project Energize found that the combined prevalence of obesity and overweight among younger and older children in 2011 was lower by 31% and 15%, respectively, than that among 'unEnergized' children.<sup>50</sup>

**The APPLE Project** used a wider community approach to address obesity. It involved all children being exposed to an environment which makes exercise and activity fun, and discouraged excessive television watching and unhealthy eating patterns. It aimed to change the environment in which children live so that appropriate levels of physical activity and healthy foods are more widely available and easily accessible. The intervention programme included Community Activity Coordinators, increased availability of equipment and services, implementation of school policies regarding drinks and 'snackivity' breaks, community activity days, school walking buses and educational activities. The study involved schools and communities in and around Dunedin and Otago. Formal evaluations demonstrated the two-year programme to be a success, with benefits persisting at two years after the cessation of the intervention.<sup>51</sup>

<sup>49</sup> Rush EC, et al. An evaluation of nutrition and physical activity in Waikato primary schools. Project Energize: June 2008-2011. Available from <http://weightmanagement.hiirc.org.nz/page/29135>

<sup>50</sup> Rush E, et al. Project Energize: whole-region primary school nutrition and physical activity programme; evaluation of body size and fitness 5 years after the randomised controlled trial. Br J Nutr. 2014 Jan 28;111(2):363-71

<sup>51</sup> Taylor RW, et al. APPLE Project: 2-y findings of a community-based obesity prevention program in primary school age children. Am J Clin Nutr. 2007; 86(3): 735-42; Taylor RW, et al. Two-year follow-up of an obesity prevention initiative in children: the APPLE project. Am J Clin Nutr. 2008; 88:1371-7.

# Countering the obesogenic environment



**“The aim must be to make the healthier choice the easier choice.”**

- Ottawa Charter for Health Promotion<sup>52</sup>

**We live** in an obesogenic environment characterised by the easy availability of cheap, palatable and energy-dense foods, persuasive and pervasive food marketing, and technological change that has contributed to reduced physical activity. Interventions that aim to reverse the upstream drivers of the obesity epidemic, such as the obesogenic environment, are generally more effective than those directed at modifying more downstream individual behaviours that contribute to obesity.<sup>53</sup> The former types of interventions include legislative, regulatory and policy interventions, while the latter measures include initiatives such as health promotion and education. This is not to say that the latter have no place. Rather, they need to be supported by regulatory/legislative/policy initiatives that address the obesogenic environment.

## Restricting marketing to children

There is considerable evidence to show that food marketing influences children's food preferences, purchase requests, positive beliefs and consumption patterns.<sup>54</sup> Food marketing to children is dominated by energy-dense, nutrient-poor foods and occurs during a period in life when their food preferences are being formed. There is also evidence to show that the quantity of advertising on children's television is related to the prevalence of excess body weight.<sup>55</sup>

Children are particularly vulnerable to the persuasive and pervasive marketing of unhealthy foods. Children younger than four years of age generally see advertisements as entertainment, those under eight years of age do not recognise the purpose of advertising, while children between eight and ten years may be aware of the persuasive intent of advertising but do not understand marketing tactics.<sup>56</sup>



Young children do not recognise the purpose of advertising, instead seeing advertisements as entertainment

<sup>52</sup> World Health Organization. Ottawa Charter for Health Promotion. Ottawa: First International Conference on Health Promotion; 1986. Report No: WHO/HPR/HEP/95.1

<sup>53</sup> Swinburn B, Egger G. Analyzing and influencing obesogenic environments. In: Bray G, Bouchard C, eds. Handbook of obesity: clinical applications. 3rd edn. New York: Informa Health Care, 2008:177–93; James P, Rigby N. Developing the political climate for action. In: Waters E, et al. Preventing childhood obesity: evidence, policy and practice. Oxford, UK:Blackwell, 2010:212–19

<sup>54</sup> Hastings G et al. Review of the research on the effects of food promotion to children. Glasgow, University of Strathclyde, Centre for Social Marketing; 2003; Hastings G et al. The extent, nature and effects of food promotion to children: a review of the evidence. Geneva, World Health Organization, 2006; McGinnis JM, Gootman JA, Kraak VI, eds. Food marketing to children and youth: threat or opportunity? Washington DC, Institute of Medicine, National Academies Press, 2006; Cairns G, et al. The extent, nature and effects of food promotion to children: a review of the evidence to December 2008. Geneva, World Health Organization, 2009.

<sup>55</sup> Lobstein T, Dobb S. Evidence of a possible link between obesogenic food advertising and child overweight. *Obes Rev* 2005;6(3):203–8.

<sup>56</sup> Carter OB, et al. Children's understanding of the selling versus persuasive intent of junk food advertising: implications for regulation. *Soc Sci Med*. 2011 Mar;72(6):962–8

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**“Children are best informed about healthy eating by parents, schools and health professionals rather than commercial entities”**  
- World Health Organization (WHO)

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Food advertising that influences children is restricted, but still permitted, during school-age programming times

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Television advertising is complemented by an increasingly multifaceted mix of marketing activities that focuses on building relationships with consumers. These activities include sponsorship, product placement, sales promotion, cross-promotions using celebrities, brand mascots or TV/movie characters popular with children (further blurring the line between entertainment and marketing), web sites, packaging, labelling and point-of-purchase displays, emails, text messages and smart phone apps. Recognising the relationship between marketing, obesity and NCDs, the WHO has published recommendations for government-led policies to reduce the impact on children of marketing of unhealthy foods — foods high in saturated fat, trans fats, free sugars and salt.<sup>57</sup>

Marketing in New Zealand is largely self-regulated by the Advertising Standards Authority (ASA). All advertisements for food and beverages that influence children should adhere to the relevant ASA Codes.<sup>58</sup> Free-to-air TV advertising is also subject to a voluntary code.<sup>59</sup> No advertising is allowed during pre-school programmes but restricted advertising is permitted during school-age programming times. Food can only be advertised if it is considered healthy according to the Children’s Food Classification System or the Food Standards Australia New Zealand nutrient profile.



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Cross-promotion and offering ‘free’ giveaways are some of the ways children are targeted through food marketing

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<sup>57</sup> World Health Organization (2010). Set of recommendations on the marketing of foods and non-alcoholic beverages to children. WHO.  
<sup>58</sup> Advertising Standards Authority. Children’s Code for Advertising Food 2010; Advertising Standards Authority. Code for Advertising to Children.  
<sup>59</sup> TVNZ & Mediaworks. ThinkTV Advertising on Television. Getting it right for children. 2008. Available from [www.thinktv.co.nz/wp-content/uploads/Booklet\\_Mar\\_2011.pdf](http://www.thinktv.co.nz/wp-content/uploads/Booklet_Mar_2011.pdf)



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Several food and beverage companies who sell unhealthy foods sponsor major televised sporting events

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“Our children deserve to be protected from the pressure to eat junk food while enjoying healthy outdoor activity, and parents need to be supported against pester advertising in their efforts to promote healthy eating to their children”

Associate Professor Louise Signal  
February 2013

The NZMA contends that the existing system of voluntary self-regulation in New Zealand is not adequately protecting children’s rights to health. A major limitation is that restrictions around the timing of advertising do not apply during children’s peak viewing times in the evenings. Furthermore, the system is reactive, not proactive, and relies on complaints being made before advertisements are scrutinised. Parents are often not even aware the ASA codes exist, let alone know how to make a complaint. Importantly, there are currently no regulations relating to on-packaging marketing to children which often feature games, puzzles, website links, promotional characters, gifts and collectibles.

A recent study examined the decisions made through the ASA complaints process in relation to international obligations to protect child rights under the United Nations Convention on the Rights of the Child (UNCROC).<sup>60</sup> This study concluded that the current self-regulatory system in New Zealand failed to adequately protect the rights of the child. Another study found that several food and drink companies selling unhealthy food sponsored popular televised sports in New Zealand.<sup>61</sup> A quarter of food and beverage sponsors’ logos on websites for rugby, our most popular sport, were linked to unhealthy foods. The same study found that some sponsors targeted children with additional marketing activities, such as providing them with product samples, merchandise and vouchers for purchasing more products.



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Children’s meals often feature ‘tie-ins’ with popular movie or television characters

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<sup>60</sup> Bowers S, et al. Does current industry self-regulation of food marketing in New Zealand protect children from exposure to unhealthy food advertising? Report prepared for the Cancer Society of New Zealand by the Health Promotion and Policy Research Unit, University of Otago Wellington, 2012.

<sup>61</sup> Carter MA, et al. Food, fizzy, and football: promoting unhealthy food and beverages through sport — a New Zealand case study. BMC Public Health. 2013 Feb 11;13:126. doi: 10.1186/1471-2458-13-126.



Sponsors may target children with merchandise, certificates or food-based rewards for completing activities

The NZMA recommends more stringent regulation of the marketing of food to children. We suggest this could initially take the form of a co-regulatory approach (self regulation within a legislative framework), but should eventually shift to statutory regulations. Regulation needs to address control of marketing content, volume, timing, repetitiveness, placement, use of persuasive techniques, coordination across different media, as well as sponsorship and product packaging. We caution against reliance on industry-developed codes such as the Australian Food and Grocery Council Responsible Marketing to Children initiative, which was found to be poorly designed with wide variation in interpretation of the framework.<sup>62</sup>

The NZMA draws attention to the Sydney principles (see box) 'for achieving a substantial level of protection for children against the commercial promotion of foods and beverages'.<sup>63</sup> We consider these to be robust principles to guide regulation of marketing. We also draw the attention of policy makers to the WHO framework for implementing recommendations on the marketing of foods and non-alcohol beverages to children.<sup>64</sup> It is useful to note that restricting the marketing of unhealthy foods to children has been identified as one of the most cost-effective approaches to tackling obesity.<sup>65</sup>

### Sydney Principles<sup>66</sup>

These offer the following seven robust principles by which regulation of food marketing to children should be assessed. Regulation should:

- support the rights of the child, by aligning and supporting the UN Convention on the Rights of the Child
- afford substantial protection to children from commercial exploitation
- be statutory in nature – industry self-regulation is ineffectual and insufficient
- take a wide definition of commercial promotions
- guarantee commercial-free childhood settings such as schools
- include cross-border media such as the internet
- be evaluated, monitored and enforced to ensure that it is effective.

<sup>62</sup> Hebden L, et al. Industry Self-regulation of Food Marketing to Children: Reading the Fine Print. *Health Promotion Journal of Australia* 2010;21(3):229–235

<sup>63</sup> Swinburn B, et al. The 'Sydney Principles' for reducing the commercial promotion of foods and beverages to children. *Public Health Nutr.* 2008 Sep;11(9):881–6.

<sup>64</sup> World Health Organization (2012). A framework for implementing the set of recommendations on the marketing of foods and non-alcoholic beverages to children. WHO

<sup>65</sup> Gortmaker S, et al. Changing the future of obesity: science, policy and action. *Lancet* 2011;378:838–47; Sassi F. Obesity and the economics of prevention; fit not fat. Paris, France: OECD, 2010; Sassi F, et al. OECD Health Working Paper No. 48: improving lifestyles, tackling obesity: the health and economic impact of prevention strategies, 2009.

<sup>66</sup> Swinburn B, et al. 2008



## What's happening overseas?

Internationally, the regulation of food marketing to children ranges from statutory regulations to industry-led, voluntary self-regulation.

### United Kingdom

In 2007, the UK introduced statutory regulations. These prohibit advertising high-fat, high-sugar and high-salt foods during children's programmes AND during programmes with a high proportion of children in the audience. Press, poster and online marketing are covered by a self-regulatory code. A new industry code is also being drawn up by the UK's Department of Health. This will look at other marketing tactics such as on-pack marketing and the use of licensed and brand characters.

### Australia

Australia has a combination of government regulation and voluntary self-regulation. Advertising to children on television is subject to a co-regulatory system (this is a self-regulatory approach within a legislative framework). For other media, several voluntary initiatives are in place.

### Quebec (Canada)

All forms of commercial advertising of any goods directed at children are prohibited.

### Sweden and Norway

These countries prohibit the marketing of any commercial products to children in the broadcast media, but these bans only apply to broadcasts originating in their own countries. In Norway, a voluntary initiative agreed in 2013 calls on industry to follow standards (set largely by the government) on a further range of communications channels. It applies to marketing to children under the age of 13.

### France

All television advertising (targeted at children or adults) for processed foods and drinks, or food and drinks containing added fats, sweeteners and/or salt, must be accompanied by an approved message on dietary education (eg, "For your health, eat at least five fruits and vegetables a day"; "For your health, exercise regularly"; "For your health, avoid snacking between meals"; "For your health, avoid eating too many foods that are high in fat, sugar or salt").



A tax on sugar-sweetened beverages is one fiscal mechanism designed to reduce consumption of unhealthy food



The relative expense of fresh fruit and vegetables can impact financially on those wanting to pursue a healthier diet

## Fiscal instruments to influence consumption

The easy availability and low cost of highly calorific food and the relative expense of fresh fruit and vegetables provide strong financial disincentives to individuals pursuing a healthy balanced diet. Various fiscal mechanisms have been proposed to create a more level playing field for consumers to make decisions about their choice of food. These include an excise tax on unhealthy foods and/or the subsidisation of healthier choices including fruit and vegetables.

Until recently, evidence to support the use of fiscal mechanisms as a way to influence the consumption of healthy foods had been limited. However, there is now a growing body of evidence from studies that have modelled the influence of fiscal mechanisms on the consumption of unhealthy food.<sup>67</sup> Furthermore, taxes on certain groups of unhealthy food are already in place in various jurisdictions around the world (eg, Hungary, France, Mexico and various states in the US ). The results from modelling studies suggest that taxation on unhealthy foods is the single most cost-effective approach to tackling obesity.<sup>68</sup>

Some concerns do exist about price elasticity and substitution effects from a tax on fatty foods or subsidisation of healthy foods. But we suggest there are sufficient grounds to introduce a tax on sugar-sweetened beverages (SSB) given what is already known about the effects of SSB on nutrition and health and the results from modelling.<sup>69</sup> Accordingly, the NZMA recommends that the government formally evaluate the use of fiscal mechanisms to reduce the consumption of unhealthy food, giving priority to a tax on SSB. We also recommend that any revenue raised through such a potential tax be ring-fenced and invested back into obesity research and prevention programmes.

While we welcome efforts by the food industry at 'reformulation' to develop products with a lower content of sugar, salt and fat, such initiatives should be viewed as complementary to, rather than a substitute for, the use of fiscal instruments to influence consumption.

<sup>67</sup> Mytton OT, et al. Taxing unhealthy food and drinks to improve health. *BMJ* 2012;344:e293; Haby MM, et al. A new approach to assessing the health benefit from obesity interventions in children and adolescents: the assessing cost-effectiveness in obesity project. *Int J Obes (Lond)*. 2006 Oct;30(10):1463-75; Carter R, et al. Assessing cost-effectiveness in obesity (ACE-obesity): an overview of the ACE approach, economic methods and cost results. *BMC Public Health*. 2009 Nov 18;9:419. doi: 10.1186/1471-2458-9-419

<sup>68</sup> Vos T, et al. Assessing Cost-Effectiveness in Prevention (ACE-Prevention): Final Report. 2010. University of Queensland, Brisbane and Deakin University, Melbourne.

<sup>69</sup> Ibid; Vartanian LR, et al. Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis. *Am J Public Health*. 2007 Apr;97(4):667-75; Briggs AD, et al. Overall and income specific effect on prevalence of overweight and obesity of 20% sugar sweetened drink tax in UK: economic and comparative risk assessment modelling study. *BMJ*. 2013 Oct 31;347:f6189; Escobar MAC, et al. Evidence that a tax on sugar sweetened beverages reduces the obesity rate: a meta-analysis. *BMC Public Health* 2013, 13:1072; Mhurchu CN, et al. Twenty percent tax on fizzy drinks could save lives and generate millions in revenue for health programmes in New Zealand. *NZMJ* 14 February 2014, Vol 127 No 1389



Setting food and nutritional standards in schools has the potential to change eating habits among children

## Food- and nutritional-based guidelines for schools and public services

In the UK, the introduction of mandatory food and nutritional standards in schools has been hailed by the Children's Food Trust as a powerful success story in changing children's eating habits.<sup>70</sup> It demonstrates that children will embrace healthy food if it is made the social norm, something behaviour change specialists support.

The NZMA considers that setting food and nutritional standards for school canteens and public services, including hospital cafeterias, could be a powerful means of changing eating habits. We contend that this could be an element in a multifaceted strategy against the obesity epidemic. It is incongruous that our hospitals continue to sell unhealthy food to staff and patients while at the same time treating patients with obesity-related conditions.

Doctors and other healthcare professionals should be setting an example in terms of healthy eating, and should take the lead in calling for food and nutritional standards across hospitals.

We note that a policy for voluntary guidelines for healthy food to be sold in school canteens in New Zealand was repealed in 2008. This policy reflected the results of a robust and well researched consultative process. Accordingly, we suggest that this policy be reinstated. We also recommend similar policies be implemented in all public services where food is sold.

We recognise that there are important differences between schoolchildren in the UK and New Zealand (most school children in New Zealand bring their own lunch from home). As such, we support the implementation of voluntary guidelines for school canteens that are subject to rigorous evaluation, with a view to making these guidelines mandatory depending on their uptake and the results of the evaluation.

<sup>65</sup> School Food Trust (2012). The impact of school food standards on diet, behaviour and growth presentation.



The impact on the health of local populations should be taken into account in local authority planning decisions

## Audit of fast food density/licensing

The NZMA believes there is a need for more information on the density and location of fast food outlets in relation to schools, colleges, leisure centres and other places where children gather, as well as by level of deprivation. We recommend an audit of local authority licensing and catering arrangements to improve our understanding on the density and location of fast food outlets, with a view to reducing the proximity of such outlets to schools and leisure centres. This recommendation is consistent with similar calls by the Academy of Medical Royal Colleges in the UK.<sup>71</sup>

## Health impact assessments and spatial planning at a local authority level

While physical exercise is beneficial for an individual's health and well-being and can be helpful in maintaining a healthy weight, its impact on weight-loss without appropriate dietary restrictions is modest.<sup>72</sup> Nevertheless, decreased physical activity is one of the drivers of

the obesity epidemic. As such, the NZMA suggests that policies to encourage physical activity should be expanded as part of efforts to improve population health and to accompany other policies to address obesity.

We recommend that public health authorities work closely with local authorities to encourage active travel and protect or increase green space to make the healthy choice the easy option. We also suggest that local authority planning decisions be subject to a health impact assessment that evaluates their potential impact on population health. These recommendations have also recently been made in the UK by the Academy of Medical Royal Colleges.<sup>73</sup>

**“For most people, the easiest and most acceptable forms of physical activity are those that can be incorporated into everyday life. Examples include walking or cycling instead of travelling by car”<sup>74</sup>**

<sup>71</sup> Academy of Medical Royal Colleges. Measuring up: the medical profession's prescription for the nation's obesity crisis. London. February 2013

<sup>72</sup> Thomas DM, et al. Why do individuals not lose more weight from an exercise intervention at a defined dose? An energy balance analysis. *Obes Rev.* 2012 Oct;13(10):835–47

<sup>73</sup> Academy of Medical Royal Colleges. 2013

<sup>74</sup> Chief Medical Officers of England, Scotland, Wales, and Northern Ireland (2011). Start active, stay active: a report on physical activity for health from the four home countries' Chief Medical Officers. P17. Department of Health.

# Improving health literacy



**While** the priority in the fight against obesity should be for policies to reverse the obesogenic nature of our environment, better equipping individuals to make the healthy choice is important. Providing information by way of improved food labelling and nutritional education in schools and to new parents are all useful strategies that have been identified and recommended in the recent UK report.<sup>75</sup>

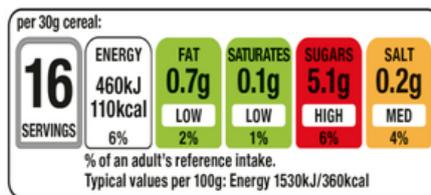
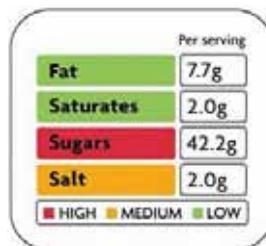
## Better nutritional information and food labelling

There are few better examples of the old adage “knowledge is power” than when it comes to front-of-pack food labelling. We believe that individuals must be given as much support as possible when making food choices. One of the key ways this can be achieved is through food labelling that provides clear and easily understood information for the consumer. In practice, this means

the adoption of a ‘traffic-light’ system of labelling. This is the system most easily understood and supported by consumers.<sup>76</sup> Existing labelling of food and drinks sold in New Zealand contains substantial useful information in the Nutrition Information Panel. This describes the amount per serving and the amount per hundred grams of energy, fats, sugars, sodium and other components of the product. However, the Nutrition Information Panel is typically in small and difficult-to-read print. It is also time consuming and difficult to interpret.

<sup>75</sup> Academy of Medical Royal Colleges. 2013.

<sup>76</sup> McLean R, et al. Effects of alternative label formats on choice of high- and low-sodium products in a New Zealand population sample. *Public Health Nutr.* 2012 May;15(5):783–91; Malam S, et al. Comprehension and use of UK nutrition signpost labelling schemes, BMRB Social Research for the Food Standards Agency, 2009; Stockley R, et al. Citizens’ forums on food: front of pack nutrition labelling. BMRB Social Research for the Food Standards Agency, 2010; Hawley KL, et al. The science on front-of-package food labels. *Public Health Nutr.* 2013 Mar;16(3):430–9; Roberto CA, et al. Evaluation of consumer understanding of different front-of-package nutrition labels, 2010–2011. *Prev Chronic Dis.* 2012 Sep;9:E149; Campos S, et al. Nutrition labels on pre-packaged foods: a systematic review. *Public Health Nutr.* 2011 Aug;14(8):1496–506.



NUTRITION INFORMATION			
Servings per Package: 9.5 (17 slices + 2 crusts)			
Average Serving Size: 74g (2 slices)			
	Avg. Quantity per Serving	%Daily Intake <sup>1</sup> per Serving	Avg. Quantity per 100g
ENERGY	771kJ	9%	1044kJ
PROTEIN	6.1g	12%	8.2g
FAT, TOTAL	2.2g	3%	3.0g
-SATURATED	0.6g	2%	0.8g
CARBOHYDRATE	33.2g	11%	44.8g
-SUGARS	3.0g	3%	4.0g
DIETARY FIBRE	3.0g	10%	4.0g
SODIUM	324mg	14%	438mg

Examples of ‘traffic light’ food labels, which indicate relative levels of fats, sugars and salt per serving

Nutrition information panels like the one above can be confusing and time consuming to interpret



Visible calorie indicators on restaurant and takeaway menus can assist consumers in making healthier choices



**“The food industry across the world has ferociously opposed regulations for traffic light front-of-pack labels”<sup>79</sup>**

It is interesting to note that the food industry has consistently opposed the implementation of a traffic light system of food labelling over decades in virtually all jurisdictions around the world. Nevertheless, such a labelling system was recently introduced in the UK. Under the UK scheme, symbols indicate whether a product is low (green), medium (amber) or high (red) for total fat, saturated fat, sugar and salt. Variations on the format are allowed. While some British manufacturers and supermarkets have taken up the scheme, many are vigorously opposed. The voluntary nature of the British traffic light system has seriously limited its usefulness.



Variations on the traffic light labelling scheme, which has recently been introduced in the UK

The NZMA recommends the mandatory adoption of a consistent and easily understood system of food labelling in New Zealand, preferably the traffic light system, by all major processed food manufacturers and

supermarkets. Such a system is the easiest to understand for the most disadvantaged groups in society and is thus pro-equity. Front-of-pack traffic light nutrition labelling has also been identified as the second most cost effective intervention to address obesity.<sup>77</sup>

We recognise that New Zealanders are increasingly eating out, yet many consumers have little information about the nutritional and caloric content of food that they eat in restaurants, pubs, takeaways and canteens. A number of states in the US have introduced visible calorie information on menus and there is strong consumer support for such measures.<sup>78</sup> As such, the NZMA recommends that restaurants and fast food outlets be encouraged to develop visible calorie indicators.

**Education in schools**

While education is generally recognised by most public health experts as a less effective means of addressing obesity than policies to counter the obesogenic environment, we take the view that there is still merit in approaches that enhance health literacy. We draw on the UK Academy of Medical Colleges’ recommendation in calling for a statutory requirement on all schools to provide food skills – including cooking and growing – alongside a sound theoretical understanding of the long-term effects of food on health and the environment.<sup>80</sup>

<sup>77</sup> Vos T, et al. Assessing Cost-Effectiveness in Prevention (ACE–Prevention): Final Report 2010: University of Queensland, Brisbane and Deakin University, Melbourne.

<sup>78</sup> Navigator. Consumer Response to Nutrition Information Available in Catering Outlets. Report for the Food Standards Agency. March 2009.

<sup>79</sup> Swinburn B & Wood A. 2010.

<sup>80</sup> Academy of Medical Royal Colleges. 2013



## Improved education for women and families

There is considerable evidence to demonstrate the importance of ensuring good maternal nutrition during pregnancy and the early years of life, with research suggesting that the preconditions for overweight and obesity are set very early.<sup>81</sup> Pregnancy itself may represent an ideal opportunity to target lifestyle change as women have increased motivation to maximise their own health and that of their unborn child.

The NZMA believes that women with obesity who are pregnant or considering pregnancy should be offered healthy lifestyle advice including nutritional guidance and ongoing support to reduce weight. There is emerging evidence that such interventions during the antenatal period are effective,<sup>82</sup> with a recent Australian study finding a significant reduction in the incidence of gestational diabetes in pregnant women with obesity offered antenatal dietary advice.<sup>83</sup>

The NZMA supports efforts to promote healthy eating in pregnancy and good nutrition for infants and toddlers, for example, as part of the 'First 2000' days initiative. We specially draw attention to the value of breastfeeding in helping mothers regain their pre-pregnancy weight. We suggest that the early child health workforce be up-skilled where necessary and adequately resourced to deliver basic food preparation skills to new parents, and to guide appropriate food choices that will ensure nutritionally balanced meals.

We recognise that a 'whole family approach' is the most effective, but that women, and in particular mothers, are an especially important group as far as advice around healthy living is concerned. Women are the usual purchasers of food and drink and are particularly receptive to advice when seeking help with family planning, during pregnancy and post-partum.



**Advice on healthy choices is important for women as they are the usual purchasers of food for their families**

We suggest the government give consideration to the introduction of a health target for the provision of healthy living advice, similar to the targets to encourage smokers to quit. This could initially focus on pregnant women (and be part of a target to have 90% of pregnant women have an antenatal assessment by 10 weeks' gestation), but could eventually be extended to all patients.

<sup>81</sup> Gluckman, P. Hanson, M. 2012. Fat, fate and disease: why exercise and diet are not enough. Oxford: Oxford University Press; Sloboda D. Chapter 21: Adolescent obesity: prenatal and early life determinants of metabolic compromise. In: Improving the Transition Reducing Social and Psychological Morbidity During Adolescence: A report from the Prime Minister's Chief Science Advisor. May 2011.

<sup>82</sup> Thangaratinam S, et al. Effects of interventions in pregnancy on maternal weight and obstetric outcomes: meta-analysis of randomised evidence. *BMJ*. 2012 May 16;344:e2088; Oteng-Ntim E, et al. Lifestyle interventions for overweight and obese pregnant women to improve pregnancy outcome: systematic review and meta-analysis. *BMC Med*. 2012 May 10;10:47

<sup>83</sup> Quinlivan JA, Lam LT, Fisher J. A randomised trial of a four-step multidisciplinary approach to the antenatal care of obese pregnant women. *Aust NZ J Obstet Gynaecol*. 2011 Apr;51(2):141-6

# Key recommendations

**The NZMA** recommends a multifaceted, whole-of-society approach to tackle the obesity epidemic. To facilitate a coordinated response, we suggest the establishment of an overarching national strategy on obesity that includes representation from all relevant ministries and agencies. While this policy briefing is intended for a diverse audience, we contend that government is in the best position to implement the policies and regulations necessary to mitigate the obesogenic environment and thus support individuals to **make the healthy choice the easy choice**.

Recommendations to tackle obesity must be based on the best available evidence and should adopt the precautionary principle. Given current fiscal constraints, policies that are the most cost-effective should receive priority. Nevertheless, the NZMA recommends that obesity be recognised as a public health crisis in New Zealand, and that the resources allocated for

researching, preventing and treating obesity are commensurate with the scale of the problem.

The following recommendations, directed primarily at doctors, politicians and policy makers, are intended to serve as the basis for an integrated approach to halt and reverse the obesity epidemic.

1

Health professionals should take every opportunity to engage sensitively with patients who are obese, providing them with advice for healthy living and directing them to exercise and nutrition programmes as appropriate. Recognising and acting on obesity in childhood is of particular importance.

2

Community-based approaches to obesity, as well as nutrition and exercise programmes, should be expanded across the country. These approaches need to be complemented by policy and regulatory initiatives.

3

Greater protection from the marketing of unhealthy food should be afforded to children. This should entail a more stringent statutory regulatory regime that addresses all forms of marketing including product packaging and sponsorships.

4

The use of fiscal instruments in the New Zealand context should be evaluated as a means of influencing food consumption, with priority given to a tax for SSB.

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*Key recommendations continued:*

5

A consistent and easy-to-understand food labelling system, preferably the traffic light concept, should be developed and implemented on the front of packaging to help inform consumers about their food choices. Restaurants and fast food outlets should be encouraged to develop visible calorie indicators.

6

Food and nutrition guidelines should be introduced in school canteens and in all public services including hospitals.

7

Nutrition should be included as part of the mandatory curriculum in schools.

8

The licensing of fast food premises should be audited by local authorities, with a view to reducing the proximity of fast food outlets to schools and leisure centres.

9

Local authorities should work with public health officials to conduct health impact assessments of planning decisions to facilitate urban environments that support physical activity.

10

The concept of a health target around the provision of healthy living advice for pregnant women should be considered, eventually expanding this to all patients.

**Crucially,** all measures to address obesity, including those recommended above, must be subject to rigorous evaluation, with appropriate adjustments and modifications as required.

# Conclusion



**Obesity** represents a public health crisis in New Zealand, with major implications for our health and well being, as well as the future sustainability of our health system.

Existing approaches to obesity have generally been piecemeal and have failed to halt the growing rate of obesity in New Zealand. Obesity is higher in Māori and Pacific peoples, and is strongly associated with deprivation. The NZMA believes that doctors have an important role to advocate for, and help design, policies to combat obesity.

Measures to address the obesity epidemic must be informed by the best available evidence and should apply the precautionary principle. Ideological preferences and vested commercial interests should not exert influence over sound public health policy and advice.

While tackling obesity requires a multifaceted, whole-of-society approach, we contend that government is in the best position to introduce policies and

regulations to mitigate the obesogenic environment so that the healthy choice is also the easy choice. These policy and regulatory measures are needed to complement community-based approaches to tackling obesity. Many of the recommendations above are highly cost effective.

When it comes to halting and reversing the obesity epidemic, New Zealand must do better. As a nation, we cannot afford to continue with the fragmented approach that has characterised efforts to tackle obesity to date. We hope this briefing document will provide a robust platform for policy makers to build an effective, integrated response to one of the biggest public health challenges we are facing in the twenty first century.

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**“Obesity prevention policies do not proscribe particular eating and physical activity behaviours and are thus much less intrusive of human liberties than many policies already in place to control other public health programmes.”<sup>84</sup>**

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<sup>84</sup> Swinburn BA, Sacks G, Hall KD, et al. The global obesity pandemic: shaped by global drivers and local environments. *Lancet*. 2011 Aug 27;378(9793):804–14

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Any approach to obesity must be multi-faceted, comprehensive and involve a 'whole-of-society' approach.

***We must aim to make the healthy choice the easy choice.***

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# About the NZMA

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**The NZMA is the country's largest voluntary pan-professional medical organisation with over 5,000 members. Our members come from all disciplines within the medical profession and include general practitioners, doctors-in-training, specialists and medical students.**

**Statement of purpose**

The NZMA aims to provide leadership of the medical profession, and promote:

- professional unity and values, and
- the health of all New Zealanders.

**The key roles of the NZMA are:**

- to provide advocacy on behalf of doctors and their patients
- to provide support and services to members and their practices
- to publish and maintain the Code of Ethics for the profession
- to publish the New Zealand Medical Journal.

The NZMA works closely with many other medical and health organisations, and provides forums which consider pan-professional issues and policies.

This policy briefing on tackling obesity replaces our earlier position statement on Obesity. It has been developed following extensive consultations with our Board and Advisory Councils. We have also sought feedback from various other medical organisations.



Providing leadership of the medical profession, and promoting:

- professional unity and values, and
- the health of all New Zealanders.

[www.nzma.org.nz](http://www.nzma.org.nz)