

Government action on diabetes prevention: time to try something new

Thirty years ago, governments were similarly reluctant to take regulatory action on tobacco

Diabetes mellitus is the fastest-growing non-communicable disease (NCD) in Australia. Around one in 25 adults has type 2 diabetes, and half do not manage their condition effectively.¹ By 2023, diabetes will account for around 9% of Australia's burden of disease, compared with 5% in 2003.² Health spending on diabetes has been predicted to rise by 400% between the 2002–03 and 2032–33 financial years, reaching \$7 billion.² The rising burden of diabetes is largely due to rising rates of overweight and obesity, to which poor diet is a key contributor.

In 2013, Australia and other members of the World Health Assembly committed to a range of global goals for reducing the burden of NCDs, including a halt in the rise of diabetes. Achieving these ambitious goals will require a paradigm shift from personal responsibility to shared responsibility, as well as greater accountability from governments and industry.³ Although individuals can take steps to improve their own diets, achieving healthier diets at the population level requires cost-effective public policy measures.

Until now, Australian government action to prevent diabetes has focused largely on encouraging individuals, through education and information, to change their lifestyles. In this article, we propose a new approach. We summarise four regulatory actions that the federal government could take to modify the preventable dietary risk factors of diabetes at the population level. These are:

- Implementing a mandatory front-of-pack food-labelling system;
- Restricting children's exposure to junk food advertising;
- Strengthening co-regulatory structures for food reformulation; and
- Taxing sugar-sweetened carbonated beverages.

Unlike medical interventions, legal and regulatory interventions are rarely assessed in clinical trials. Priorities must therefore be identified according to well recognised criteria (effectiveness, cost impact) as well as other factors that are perhaps less quantifiable, including political feasibility. Each of the priorities we propose is supported by an evidence base and engages with at least one of the three policy domains that have been identified as crucial to prevention: food behaviours, the environments in which we make food choices (including price, marketing and advertising) and the nature and quality of the food supply.⁴ Importantly, these priorities do not override individual autonomy or personal choice, although they may constrain the actions of food businesses and alter the incentives for individual behaviour. These actions complement education and the provision of information to members of the population — they are not intended to be a substitute.

Summary

- Type 2 diabetes mellitus, driven by overweight and obesity linked to unhealthy diets, is the fastest-growing non-communicable disease in Australia.
- Halting the rise of diabetes will require a paradigm shift from personal to shared responsibility, with greater accountability from Australian governments and the food industry. It will also require governments to try something different to the prevailing approaches emphasising education and the provision of information.
- We propose four priority areas where government regulation could strengthen Australia's response. Those areas relate to mandatory front-of-pack food labelling, regulating junk food advertising, better oversight of food reformulation and taxing sugar-sweetened beverages.

Unhealthy diets, obesity and diabetes

Overweight and obesity are the most important direct risk factors for diabetes.⁵ Between 2007–08 and 2011–12, rates of overweight and obesity in Australian adults rose by 1.6 percentage points, reaching nearly 63%.¹ Overweight and obesity in children aged 5–17 years exceed 25%.⁶

Rather than illustrating a nationwide failure of personal responsibility, unhealthy diets and weight gain among Australian adults and children are the result of complex global and local processes. Social, economic and technological changes have profoundly reshaped the food supply, making unhealthy choices easier than healthy ones.⁷ The processed food industry has been influential, driving consumer tastes and spending patterns towards foods that are cheap to produce, highly profitable, energy-dense and nutritionally poor. The recent Australian Health Survey showed that we consume over 35% of energy as discretionary (or “junk”) foods — foods with little nutritional value that tend to be high in saturated fats, sugars, salt and/or alcohol.⁶ These dietary patterns contribute to chronic energy imbalances between kilojoules consumed and kilojoules expended at the individual level, and high rates of overweight and obesity at the population level.

The need for leadership on diabetes prevention

Governments have a duty to protect the population from risks that may lead to disability and premature death. Achieving this on a population scale often requires the use of laws and regulations. This is uncontroversial when it comes to infectious diseases and injuries: Australians rarely object to laws protecting them from exposure to asbestos particles, contaminated food, Ebola virus or motor vehicle injuries.

Jenny C Kaldor

BA(Hons), LLB(Hons), MSc¹

Roger S Magnusson

BA/LLB(Hons), PhD,
GradDipManaging
Development¹

Stephen Colagiuri

MBBS, FRACP²

¹Sydney Law School,
Sydney, NSW.

²Boden Institute of Obesity,
Nutrition and Exercise,
Sydney, NSW.

jenny.kaldor@
sydney.edu.au

doi: 10.5694/mja14.01611

NCDs account for 85% of Australia's disease burden,⁵ yet successive Australian governments have been slow to take regulatory action. Government action to improve diets has focused on health promotion and the provision of information, including through nutrition labelling, the Australian Dietary Guidelines and campaigns such as Shape Up Australia in 2013.

These approaches sit comfortably with the food industry, which emphasises personal responsibility for dietary choices. It also prefers voluntary, industry-led approaches to food labelling, marketing and reformulation.⁸ However, while individual responsibility is critical for individuals to manage their own diabetes risk, it has demonstrably failed as a public policy approach to growing rates of diabetes.⁷ While the food industry's desire to demonstrate responsibility is laudable, little progress has been made through voluntary schemes. And although it is tempting to regard dietary risk factors for NCDs as being self-inflicted, effective prevention requires changes that can only be achieved with government action, including public policies to improve the food supply and the food environment.

Time to try something new: four priorities for government action

A mandatory front-of-pack food-labelling scheme

If consumers are to take responsibility for their health, they need clear and consistent nutritional information about the foods they buy.⁹ Australian law requires manufacturers to disclose the ingredient list and nutrition information panel on food packages; however, this can be time consuming to read and difficult to interpret. A front-of-pack label translates this information into simple visual messages about the quality of the nutrition of the food.⁹ In January 2015, the Australian Government announced it would proceed with a new front-of-pack labelling scheme, a star rating.¹⁰ Companies may implement the star rating voluntarily, and it may be accompanied on food packages by the industry's preferred label, the daily intake guide.

However, voluntary use of two different labels perpetuates the status quo. Food companies that do not wish to draw attention to products high in sugar, salt or saturated fat are already ignoring the star rating,¹¹ while those that act responsibly bear the cost of increased regulation. In 2011, the Blewett review of labelling law recommended a colour-coded ("traffic light") front-of-pack label, supported by a comprehensive national nutrition policy.⁹ Four years on, there is no sign of a national nutrition policy, the food industry has successfully resisted colour-coded labels, and the front-of-pack label-development process has been drawn out and hampered by political controversy.

Time to try something new. It is time for Australia to have a legislated, mandatory front-of-pack labelling scheme,

creating a level playing field for companies and clear choices for consumers.

Restricting children's exposure to junk food advertising

In its 2004 *Global strategy on diet, physical activity and health*, the World Health Organization stated:

Food advertising affects food choices and influences dietary habits. Food and beverage advertisements should not exploit children's inexperience or credulity.¹²

A variety of mechanisms have been adopted in different countries to restrict children's exposure to junk food advertising.¹³ However, evidence suggests that government regulation is more effective than voluntary industry measures. A recent systematic review found that

self-regulatory pledges are unlikely to be sufficiently comprehensive to have the desired effect of reducing children's exposure to promotional marketing of unhealthy food products *unless tied to stronger government oversight*. [emphasis added]¹⁴

It recommended as best practice "comprehensive, preferably statutory measures" including clear definitions of media and audience, monitoring of compliance, and sanctions for non-compliance.

In 2008, the Australian Government considered, but decided against, regulating junk food advertising to children. Instead, the food industry signed up to two voluntary codes of conduct. Empirical analysis has shown that these have done little to reduce children's actual exposure to junk food advertising.¹⁵ This is because their commitments are vague, contain loopholes, cover a narrow range of media, and allow for subjective interpretation by companies.¹⁶

Time to try something new. Mandatory targets, broader coverage and real sanctions for non-compliance would significantly strengthen the ability of industry codes to limit children's exposure to junk food advertising.

Stronger co-regulatory structures for food reformulation

Food reformulation has been described as

a realistic opportunity to improve the health of a population through improving the nutritional characteristics of commonly consumed processed foods.¹⁷

Reformulation could involve reducing the salt, sugar or saturated fat content of processed foods, or their portion sizes or energy density. This approach is regarded as cost-effective,¹⁸ since it does not depend on individually targeted behavioural changes.¹⁹

However, food reformulation in Australia has so far been limited to voluntary, industry-led approaches. Since 2009, the major national initiative has been the Food and Health Dialogue, which convenes representatives of government,

the food industry and public health to collaborate on reformulation. The Dialogue sets targets on a range of common foods, and manufacturers choose which ones to implement.

A recent systematic assessment found that, in its first 4 years, the Food and Health Dialogue achieved none of its reformulation targets.¹⁹ The authors also found that few targets had been set, and that participants regularly failed to meet deadlines for reporting on progress. Further, evidence from other jurisdictions illustrates how commitments made under industry-led processes tend to be diluted to the point of meaninglessness,²⁰ or simply remain unfulfilled.²¹

Time to try something new. Food reformulation processes need specific targets and timelines, robust oversight mechanisms, incentives for compliance, and independent review of progress and performance. If self-regulation fails to meet its targets, the government should progressively intervene.²²

A tax on sugar-sweetened carbonated beverages

Taxes act on consumer behaviour by changing the cost of different choices relative to one another. If unhealthy foods are cheap to buy, then raising their price through taxation provides a price signal — although without removing choice altogether. A 2012 review of health-related food taxes found that, if carefully designed, these could be effective in shifting patterns of consumption towards healthier foods,²³ with a 20% tax suggested as the minimum rate for effectiveness. Excise taxes (taxes levied on a specific kind of product) have been found to be particularly effective and are used to correct for negative externalities (harm to a third party external to the producer–consumer relationship — in this case, social harm) caused by persistent consumption of unhealthy products, such as tobacco, alcohol or unhealthy foods.²⁴ Revenue from such taxes can also be hypothecated towards health promotion initiatives or healthy food subsidies.

Proposals to tax fats can be complex, with unintended consequences for basic products like dairy foods. By contrast, sugar-sweetened carbonated beverages (SSBs) are more straightforward targets. They add little nutritional value while contributing significantly to excess energy intake. In January 2014, Mexico joined 34 US states, Denmark, France, Tonga and several other jurisdictions by introducing a tax on SSBs.

In its response to the recommendations of the National Preventative Health Taskforce in 2010, the Australian government stated it would not be considering taxes to decrease the consumption of unhealthy foods and drinks.²⁵ Since then, however, community support for a tax on SSBs has grown significantly. In 2013, a coalition of non-governmental health organisations (the Cancer Council, Diabetes Australia and the Heart Foundation) launched a national campaign calling on government to explore taxation as part of a suite of policies aimed at reducing SSB consumption.

Time to try something new. Thirty years ago, governments were similarly reluctant to take regulatory action on tobacco. Looking forward 30 years, which Australian governments will be seen as leaders and pioneers in regulating for diabetes prevention?

Conclusion

Individualised, education-based and voluntary approaches have dominated the diabetes prevention efforts of successive Australian governments, and rates of diabetes have continued to rise. Results matter. Dogged commitment to failed policy approaches makes no sense; and accountability for these failures is long overdue.

Using law and regulation, governments can have a real impact at a population level, influencing patterns of consumption and tackling the environmental influences on poor diet, obesity and diabetes. No single intervention will be a silver bullet. Instead, we need a quiver of arrows — a selection of public policies that, in the right combination, can begin to reshape our food supply and food environments in a healthier direction. With an ageing population, new cases of diabetes are inevitable. But these numbers can be reduced if governments take prevention seriously, and are willing to challenge the status quo.

Acknowledgements: Roger Magnusson's participation was supported by a Discovery Grant from the Australian Research Council.

Competing interests: No relevant disclosures.

Provenance: Commissioned; externally peer reviewed. ■

References are available online at www.mja.com.au.

- 1 Council of Australian Governments Reform Council. Healthcare in Australia 2012-13: five years of performance. Report to the Council of Australian Governments. 30 Apr 2014. http://apo.org.au/files/Resource/coag_healthcare-in-australia-2012-13_2014.pdf (accessed Apr 2015).
- 2 Department of Human Services (Victoria). Future prevalence of overweight and obesity in Australian children and adolescents, 2005-2025. Melbourne: Department of Human Services, 2011. <http://docs.health.vic.gov.au/docs/doc/Future-prevalence-of-overweight-and-obesity-in-Australian-children-and-adolescents--2005-2025> (accessed Apr 2015).
- 3 Swinburn B, Kraak V, Rutter H, et al. Strengthening accountability systems to create healthy food environments and reduce global obesity. *Lancet*. 2015 Feb 18. pii: S0140-6736(14)61747-5.
- 4 Hawkes C, Jewell J, Allen K. A food policy package for healthy diets and the prevention of obesity and diet-related non-communicable diseases: the nourishing framework. *Obes Rev* 2013; 14 (Suppl 2): 159-168.
- 5 Australian Institute of Health and Welfare. Australia's Health 2014. Canberra: AIHW, 2014. (Australia's Health Series No. 14. Cat. No. Aus 178.)
- 6 Australian Bureau of Statistics. Australian Health Survey: updated results, 2011-2012. Canberra: ABS, 2013. (ABS Cat. No. 4364.0.55.003.)
- 7 Swinburn BA, Sacks G, Hall KD, et al. The global obesity pandemic: shaped by global drivers and local environments. *Lancet* 2011; 378: 804-814.
- 8 Deloitte Access Economics. Reforming regulation of the Australian food and grocery sector, commissioned by the Australian Food and Grocery Council. 28 Oct 2013. http://www.deloitteaccesseconomics.com.au/uploads/File/DAE-AFGC_reform_FINAL_281013.pdf (accessed Mar 2015).
- 9 Blewett N, Goddard N, Pettigrew S, et al. Labelling logic: review of food labelling law and policy. Canberra: Commonwealth of Australia, 2011. [http://www.foodlabellingreview.gov.au/internet/foodlabelling/publishing.nsf/content/48C0548D80E715BCCA257825001E5DC0/\\$File/Labelling%20Logic_2011.pdf](http://www.foodlabellingreview.gov.au/internet/foodlabelling/publishing.nsf/content/48C0548D80E715BCCA257825001E5DC0/$File/Labelling%20Logic_2011.pdf) (accessed Apr 2015).
- 10 Australia and New Zealand Ministerial Forum on Food Regulation. Final communiqué. 30 January 2015. [http://www.health.gov.au/internet/main/publishing.nsf/Content/3B618FD6A03A5528CA257DDD0006BA34/\\$File/dept001.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/3B618FD6A03A5528CA257DDD0006BA34/$File/dept001.pdf) (accessed May 2015).
- 11 Australian Associated Press. Kellogg's, McCain, Mars and other food producers opt out of government food rating scheme. *The Australian* 2015; 17 Mar. <http://www.theaustralian.com.au/life/food-wine/kelloggs-mccain-mars-and-other-food-producers-opt-out-of-government-food-rating-scheme/story-e6fgrg8jo-1227265862727> (accessed May 2015).
- 12 World Health Organization. Global strategy on diet, physical activity and health. Geneva: WHO, 2004. http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf (accessed May 2015).
- 13 Hawkes C. Regulating food marketing to young people worldwide: trends and policy drivers. *Am J Public Health* 2007; 97: 1962-1973.
- 14 Galbraith-Emami S, Lobstein T. The impact of initiatives to limit the advertising of food and beverage products to children: a systematic review. *Obes Rev* 2013; 14: 960-974.
- 15 King L, Hebden L, Grunseit A, et al. Building the case for independent monitoring of food advertising on Australian television. *Public Health Nutr* 2013; 16: 2249-2254.
- 16 Reeve B. Private governance, public purpose? Assessing transparency and accountability in self-regulation of food advertising to children. *J Bioeth Inq* 2013; 10: 149-163.
- 17 National Heart Foundation of Australia. Rapid review of the evidence: effectiveness of food reformulation as a strategy to improve population health. NHFA, 2012. http://www.heartfoundation.org.au/SiteCollectionDocuments/RapidReview_FoodReformulation.pdf (accessed Mar 2015).
- 18 Cobiac LJ, Veerman L, Vos T. The role of cost-effectiveness analysis in developing nutrition policy. *Annu Rev Nutr* 2013; 33: 373-393.
- 19 Elliott T, Trevena H, Sacks G, et al. A systematic interim assessment of the Australian Government's food and health dialogue. *Med J Aust* 2014; 200: 92-95.
- 20 Panjwani C, Caraher M. The public health responsibility deal: brokering a deal for public health, but on whose terms? *Health Policy* 2014; 114: 163-173.
- 21 Mozaffarian D. The Healthy Weight Commitment Foundation trillion calorie pledge: lessons from a marketing ploy? *Am J Prev Med* 2014; 47: e9-e10.
- 22 Reeve B, Magnusson R. 'Legislative scaffolding': a new approach to prevention. *Aust N Z J Public Health* 2013; 37: 494-496.
- 23 Mytton OT, Clarke D, Rayner M. Taxing unhealthy food and drinks to improve health. *BMJ* 2012; 344: e2931.
- 24 Thow AM, Heywood P, Leeder S, et al. The global context for public health nutrition taxation. *Public Health Nutr* 2011; 14: 176-186.
- 25 Australian Government. Taking preventative action – a response to "Australia: The Healthiest Country by 2020", the Report of the National Preventative Health Taskforce. Commonwealth of Australia, 2010. ■