

We can turn the tide on the type 2 diabetes epidemic in Australia

For four years I've been advocating for a public campaign to raise awareness of the dangers of type 2 diabetes. I've even produced two commercials that played nationally on free-to-air TV. Both featuring a working-class Aussie bloke, Neil, who suddenly went blind in both eyes due to his type 2 diabetes. I'd hoped the hard-hitting story would scare the nearly two million Australians with this disease into having their eyes checked, to prevent them from going blind. I now realize these interventions don't work. Although personal stories can be emotive and powerful, they obscure the government food and beverage policies shaping the behaviour of people such as Neil. And worse, they erode any desire to change those harmful policies.

The underlying issue is that our government policies have created an unhealthy food and beverage environment – one that is flooded with sugary drinks and highly processed “foods” that are loaded with sugar and seed oils.

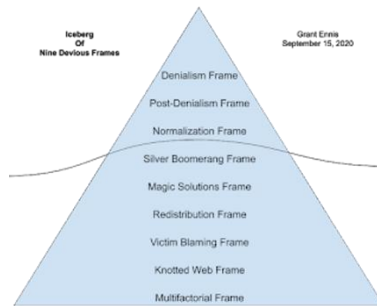
And what's the systemic impact? A chronic disease epidemic, indeed a tidal wave. An epidemic of tooth decay, obesity and the big baddy... type 2 diabetes. An epidemic we are now seeing in our kids. 100,000 Australians develop type 2 diabetes every year. 15,000 Australians die from type 2 diabetes every year. And Australians are missing 1.2million days of work due to type 2 diabetes every year. And most of the associated misery, disability, and death is avoidable.

Australian taxpayers are footing the annual quarter billion dollar bill for treatments to avoid the most feared complication of type 2 diabetes... blindness; the half billion dollar bill for the second most feared complication... amputation; and the half billion dollar bill racked up by dialysis for kidney failure. The total annual bill for type 2 is estimated by *Diabetes Australia* to now be in excess of \$20 billion dollars. However, if we factor in the critical, and often neglected point, that type 2 diabetes is a driver of the top killers in our society – heart attack, dementia, stroke and cancer – then I have no doubt the cost to the taxpayer is many fold higher.

Clearly, we need **action**. In 2020 I devised an **action strategy** that involves a three-pronged approach of **awareness, accountability, and assistance**. In 2020, I met with Federal Health Minister Greg Hunt to outline the scope of the problem, the key drivers, and to offer my solution, my action strategy. I also met with the then Shadow Health Minister Chris Bowen. And I met with South Australian Health Ministers Stephen Wade in 2020 and Chris Picton in 2022. Each time I called for a public awareness campaign to highlight the multitude of life-changing and life-threatening dangers of type 2 diabetes. I called for better education of our children regarding the dangers of sugary drinks and ultra-processed 'foods'. I called for a food labelling system that's clear and transparent and one that's not been hijacked by industry. And I called for better training and resourcing of our army of health care practitioners who are dealing with the disheartening fallout, every day of their working lives.

In 2021, my wish appeared to be granted when the *Australian Medical Association* unleashed its *Sickly Sweet* campaign. I then read Grant Ennis's brilliant book *Dark PR: How corporate disinformation undermines our health and the environment*. And I realised that I'd got much of my advocacy wrong. Thanks to enlightenment from my reading of *Dark PR*, I now see more clearly. I now realise that calls for initiatives such as these are simply a form of victim blaming. As these initiatives all hinge on providing more information so individuals can make better “choices,” they divert attention away from the pro-industry policy environment, shifting accountability from laws favouring the sugary drink and ultra-processed 'food' industries to the willpower of everyday Australians, the victims of these harmful policies. Sadly, these efforts don't change population health, they undermine support for policy change, and they reduce political will for meaningful action.

Dark PR unveils a myriad of other framing techniques used by industry to attempt to deceive the Australian public...

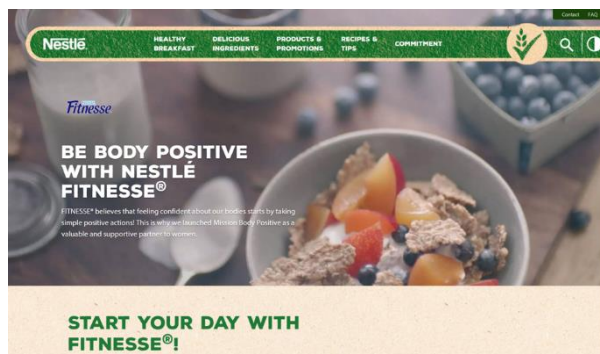


First and perhaps foremost are lies. Big blatant lies...



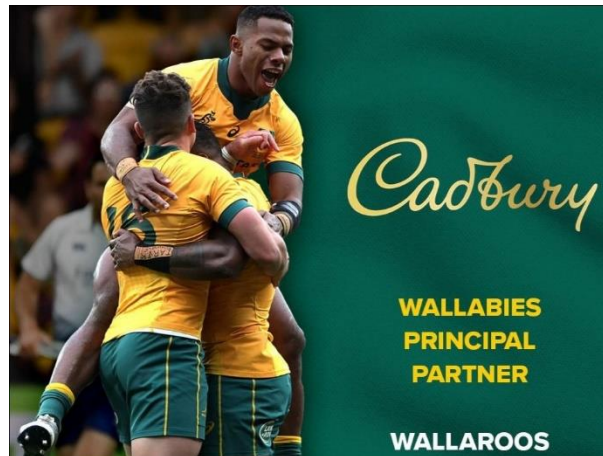
Lies enable corporations, and the associations that often front them, to undermine support for policy change by denying the fact that sugar causes diseases such as tooth decay, obesity and type 2 diabetes. And they back up their lies by funding studies that manipulate the data in their favour. One eye-opening review paper in 2016 revealed that of the 34 studies that were not sponsored by the sugary drink industry, 33 showed that sugar-loaded beverages are associated with obesity and type 2 diabetes. In contrast, of the 26 studies that were sponsored by industry, none showed a link between sugar-loaded beverages and chronic disease (*Do sugar-sweetened beverages cause obesity and diabetes? Schilinger et al. Annals Int Med 165:895, 2016*). Industry pollutes the scientific literature on purpose, so they can argue the data is inconclusive. This ultimately undermines support for any change at all.

Coca Cola has been one of the biggest culprits in the dissemination of disinformation, denying their drinks can be dangerous to our health. For years, *Coca Cola's* annual reports to the *US Securities and Exchange Commission* listed obesity and its health consequences as the biggest threat to their profits. The sugary drink and ultra-processed 'food' industries counter such threats with intensive marketing and lobbying. These industries also fight public health campaigns with their own devious campaigns. One such campaign is *Nestlé's Be Body Positive with Nestlé Fitness*...

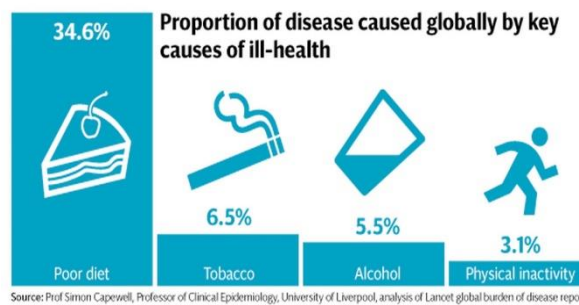


The concerning trend of normalising obesity, amplified by the food and drink industries, is an injustice to those who suffer from this condition and its many devastating consequences. Only 1 in every 200 people with obesity are metabolically healthy. The normalisation of obesity instils a belief in the population that obesity is not a problem and hence no solution is required. With two-thirds of Australians either overweight or obese – in other words metabolically unhealthy – it looks as though most of us have fallen for this devious frame.

Beyond the lies, corporations employ solutions that generate the appearance of action. *Coca Cola* is a founding corporate partner of *Exercise is Medicine*, a global initiative that perpetuates the message that exercise is the solution to our chronic health problems, backed up by research funded by *Coca Cola*. This is reinforced by copious links between the junk food, fast food and sugary drink industries and sporting clubs, teams, and associations. Think *Cadbury's* sponsorship of the *Wallabies* rugby union team...



And who can forget *Kellogg's* 'Iron man food'. There's no doubt exercise is important for health, however the reality is our poor diet is responsible for more disease and death than alcohol, tobacco and inactivity combined.



The pervasive message to “move more and eat less”, popularised by industry and their various fronts, is not the answer to our obesity and type 2 diabetes epidemics.

Even more concerning is *Nestle's* sponsorship of suicide prevention charity *R U OK?* through sales of *Kit Kat*...

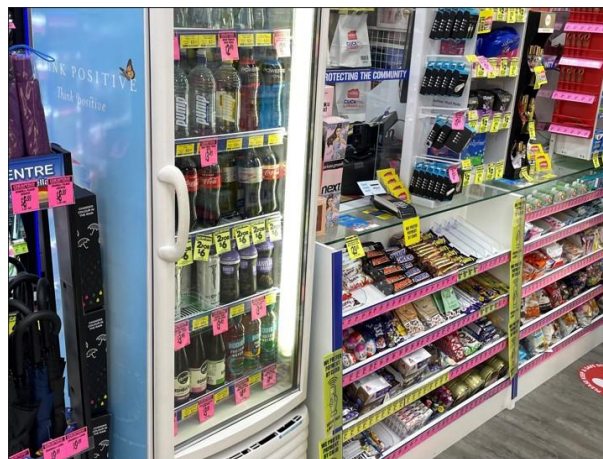


With 50% of patients with type 2 diabetes suffering from mental health issues, this is a thinly veiled attempt to divert attention away from the fact that ultra-processed consumables are the likely culprits driving the chronic disease and mental health tidal wave.

I met with executives from both *Coles* and *Woolworths* during 2020. I expressed my concern regarding their relentless promotion of unhealthy food and drinks at checkouts and at the end of aisles within their supermarkets. They wanted to focus instead on the support provided to a variety of charitable organisations. All well and good, however I felt this was nothing more than virtue signalling, particularly if these companies continue in parallel with their predatory marketing and sales behaviour. It's this ruthless behaviour that's driving profits at the expense of our health. Far from curtailing their insidious tactics, I recently discovered a chocolate stand in the fresh food section of a *Woolworths* supermarket, preying on those customers who are trying to avoid the junk food aisles...



These companies can and should do better. It's not just the supermarkets that are preying on our addictions, but service stations, post offices, school and office supply stores, and chemists. Are chemists truly "protecting the community" ...?

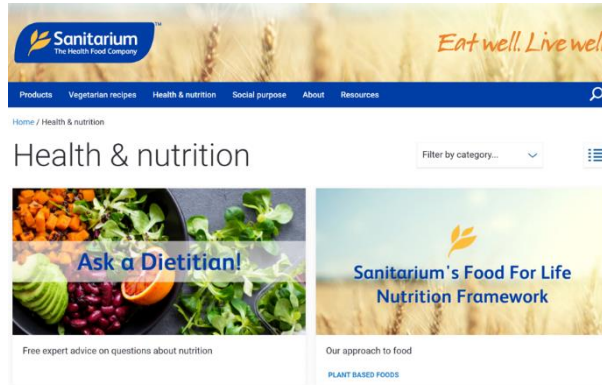


I wrote to *Officeworks*, questioning the junk food at their checkout counters. Apparently, they have "identified the need... to include more health products" in their "impulse range" at checkouts. Presently, nearly three quarters of *Officeworks*' impulse products are unhealthy, and parents have to run the gauntlet of junk food stands as they progress in the queue with their sugar-addicted kids in tow.

More disturbing is that industry is now offering up dietary treatments for obesity and type 2 diabetes at the same time as continuing the subsidised marketing of the very foods and drinks that are responsible for these chronic diseases. A classic example is *Optifast*, an ultra-processed food-like substance designed for weight loss by *Nestlé*, a company in which over 60% of its food and drinks portfolio do not meet the "recognised definition of health". *Nestlé* is currently providing *Optifast* for a study in Sydney to determine whether the substance can

put type 2 diabetes into remission. Disturbingly, this study is being supported by local obesity and diabetes associations. Make no mistake, we are being conned. “Treatments” are being promoted by companies rather than preventive measures that would impact on their profits. And pharmacists, health practitioners and patients alike are falling for it.

And then there’s *Seventh Day Adventist Church*-owned ultra-processed food giant *Sanitarium*, providing nutrition fact sheets for the public, teachers and health professionals...



They also claim to be the biggest provider of corporate wellness programs in Australia through their *Vitality Works* platform. Imagine... a processed food industry, owned by a church with devout beliefs on diet, providing health and wellness to Australian companies and involved in shaping policy guidelines to our government?

We also see combinations of these devious strategies, framing the public health crisis as multifactorial or complicated. The *Australian Non-alcoholic Beverage Industry's* recent *Sugar Reduction Pledge* is one such tool from the devious framing toolbox of the sugary drink industry. The pledge utilizes a multifactorial strategy that harnesses a number of activities with dubious efficacy. These include nutritional literacy programs and funding for companies that frame obesity as an individual issue instead of the public health issue that it is. Both of these activities have been proven ineffective. As Grant Ennis puts it, “the argument that these approaches that don’t work in isolation, would work when combined - is a scam.”

The *Sugar Reduction Pledge* makes the *Non-alcoholic Beverage Industry* appear to be working for the public good, when its unlikely to be having any impact at all. Such a tool distracts us all from more tightly regulating an industry that’s harming our health. The reality is, the reduction in sugar of less than 1g/100ml still leaves the average drink with 5g of sugar per 100ml of liquid, a level that’s dangerously high. Sadly, this initiative is destined to fail in solving our public health crisis. What’s worse is it will dilute political will for real change. Further, only four out of over 70 members of the *Australian Beverages Council* have committed to the voluntary pledge.

Another example of devious framing can be found on *Nestlé's Know More About Diabetes* webpage, where its states “The main reason behind acquiring diabetes is genetic”...



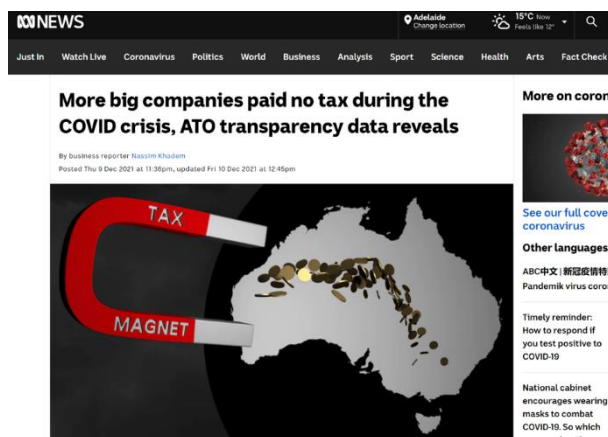
There's been a four-fold increase in type 2 diabetes globally over the past four decades. In one generation. And an eighty-fold increase amongst Australia's First Nation's people. This is not due to genetics. The illusion that innovative genetic therapies will be the solution to obesity and type 2 diabetes once again clouds the policies promoting our unhealthy food environment.

A levy on sugary products has been shown in many countries to both reduce purchase and consumption, however its a strategy that's been successfully demonized by industry. And is not palatable for either of our government's major parties. Opponents and lobbyists accuse governments of enforcing "nanny state" policies. But the disturbing reality continues, the nanny is killing us. Lobbyists from the food and drink industries persuade our governments to subsidise operating costs, to the tune of trillions of dollars each year, thereby lowering the cost of their products and increasing consumption. Grant Ennis proposes that "rather than making an unpopular appeal for more taxes, "We should rally to the cause of ending subsidies."

According to public health education group *Live Lighter*, "In Australia, food companies receive subsidies that are contrary to public health outcomes from both state and federal governments. While recent discussions around Australia's taxation system have canvassed several unsatisfactory proposals, such as removal of the GST exemption on basic foods, costs incurred by the junk food industry associated with advertising, marketing and sponsorship are tax deductible. In this respect, Australian taxpayers are subsidising the advertisements for junk food and sugar sweetened beverages, which is effective in encouraging us to buy more of these products."

Food companies may also be eligible to receive the *AusIndustry* research and development tax concessions, which allow a tax deduction of 125% of the company's R&D expenditure. Federal and State governments in Australia also subsidise the industrialised food system through payment of hidden costs. Companies produce unhealthy food and drinks, profit from their sale, and leave governments to pay the astronomical healthcare costs of the resulting chronic disease burden.

The 2019-2020 tax data provided in an ABC online news article compares what these food and sugary drink companies should have paid in taxes to what they actually paid after tax breaks...



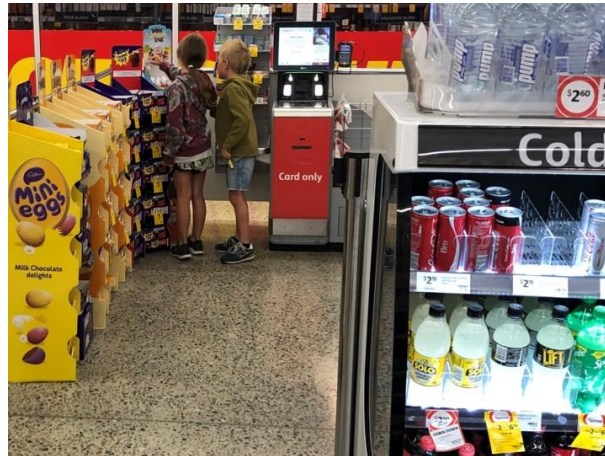
The results were disturbing. Through a plethora of tax breaks, many of the largest food companies paid essentially 0% in taxes. This means we are incentivizing them to make us sick, through our tax code.

According to the data, *Coca Cola* alone costs Australian taxpayers over one billion dollars each year in lost tax revenue. In total, the sugary drink and ultra-processed 'food' industries receives nearly five billion dollars each year in Australian tax subsidies. This lost revenue means the cost of production of sugary drinks and ultra-processed 'foods' is cheaper, effectively lowering the cost of these products. The very opposite of a sugar tax.

This is plainly outrageous. It's time for our government to act. To end the harmful policies driving the avoidable chronic disease epidemics, epidemics that are causing such misery to Australians and their families. In the meantime, let's look again to my action strategy for some guidance...

Firstly, **Awareness**. Multiple levels of awareness. The Australian public needs to be made aware that sugar is highly addictive, and we often use it to alleviate stress. That sugary products are cheap, highly accessible and

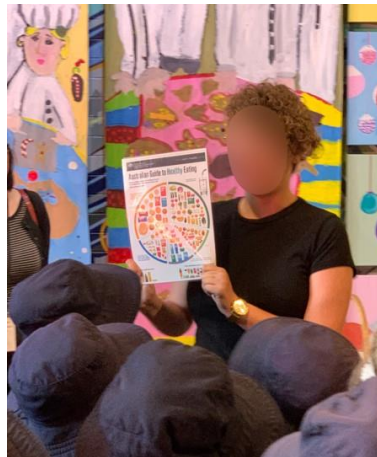
often targeted at our kids. That three quarters of our consumables have added sugars. And finally, that we're being bombarded by advertisements for sugary products, sometimes in the most insidious of ways...



And, once again, our precious kids bear the brunt of these targeted campaigns.

We also need **accountability**. Multiple levels of accountability:

- Accountability with regards to the preventability of type 2 diabetes. That there's no evidence we can prevent the disease with our current high carbohydrate eating pattern, a pattern that's endorsed by our *Australian Dietary Guidelines*. A document that's outdated, and one that's been biased and shaped by industry influence (see my National Press Club Address submission). And yet one that's being used by teachers to educate our kids...



And is being used by cooks to inform what should be prepared and eaten in childcare, aged care, prisons, the armed forces and our hospitals. It also informs our army of health practitioners, health educators and government health policy makers.

The *Royal Australian College of General Practitioners' "Management of type 2 diabetes"* handbook, released in 2020, advises "eating according to the *Australian Dietary Guidelines*" for optimum management. Even *Diabetes Australia* echoes this advice in the *Eating Well* section of their website – "We recommend people follow the *Australian Dietary Guidelines*". Type 2 diabetes is a disease of carbohydrate intolerance, and yet Australians, including those with this disease, are being told to eat foods that are high in carbohydrates. It makes no sense to me.

Our dietary guidelines discourage the eating of foods containing natural saturated fats, and this has in turn led to the production of thousands of low-fat products, many of which are highly processed and loaded with sugar and refined carbohydrates, to enhance the flavour lost by removing fat. The guidelines claim that the link between dietary saturated fat and cardiovascular disease is well

established, however there's no evidence whatsoever to link whole fat dairy, unprocessed red meat, and eggs with heart attacks, stroke and type 2 diabetes. Foods that have been demonised by our guidelines since their inception. This lack of evidence was well known in 2009 when the last review commenced. This critical piece of evidence was seemingly ignored. And once again, this advice continues to be echoed by a multitude of health associations and organisations, including the *Royal Australian College of GPs*, *Diabetes Australia*, *Dietitians Australia*, *Nutrition Australia*, and the *Australian Heart Association*. Instead of promoting healthy saturated fats, the *Australian Dietary Guidelines* and these various bodies encourage the eating of unhealthy polyunsaturated oils. And this in turn has led to the boom in production and consumption of margarines and seed oils, industrially produced fats which have been linked to cardiovascular disease.

And these bodies must stop demonising meat, especially red meat. Afterall, an extensive review published in the *Annals of Internal Medicine* in 2019 showed us there's no evidence to make public health recommendations to limit red and unprocessed meat (*Ann Intern Med. 2019;171:756-764. doi:10.7326/M19-1621*).

- We need accountability with regards to the potential reversibility of type 2 diabetes. Until 2021, *Diabetes Australia* was reinforcing the pervasive message that type 2 diabetes is a progressive disease. Fortunately, we now have the opportunity for remission of type 2 diabetes documented in our national policy for diabetes, the *Australian National Diabetes Strategy 2021-30*.
- We need accountability from businesses who prey on our addiction to sugar...



And from businesses and their industry allies who prey on the vulnerable and on our kids.

And from our governments and city councils who allow this type of predatory marketing to continue everywhere in our diabolical food environment...



- We need accountability from medical schools, universities and hospitals who offer vending machines packed with sugary products...



I wrote to *University of Adelaide* in 2020, requesting they remove the heavily sugared products from their campus vending machines. They did oblige me and have trialled two units with 'healthy' choices. I've recently learnt that "revenue is 50% less than adjacent machines", and the contracting body is "reluctant to roll out the concept further". As always, its profit over health. Even in our major health bastions.

- We need accountability from hospitals who continue to serve up sugar and carb-heavy meals to patients in diabetes, cardiac, stroke and vascular wards...



- We need accountability from schools, where junk food is regularly used to raise funds...



Or is being sold in tuck shops and canteens by private contractors. Surely, it's time to start a healthy lunch program at all schools across the country?

- We need accountability at sporting clubs who use fast food to reward their star players...



- And we need to stop the relentless promotion of junk food to our kids on TV and social media.

Finally, we need **assistance**. Multiple levels of assistance:

- Medical students need assistance. They need an unbiased training in strong evidence-based methods to both prevent and reverse chronic disease using nutrition rather than medication. By using real food as medicine.
- Doctors need assistance. To have the time, financial rewards, and resources to be able to provide this critical information to their patients. Fortunately, there are plenty of resources out there.
- Our health associations and institutions need assistance. To reduce their reliance on funding from the pharmaceutical, sugary drink, and processed 'food' industries. To remove the vested interests shaping our food environment and its resulting chronic disease epidemic.
- Patients with type 2 diabetes need assistance. To have subsidised access to nutritionists and dietitians, and other practitioners well-versed at prescribing therapeutic carbohydrate restriction. And to understand through CGM the potential impact of cereals, grains, starchy vegetables, fruit and processed foods on their blood sugar level.
- People from lower socio-economic areas need assistance. To have access to real food at affordable prices, rather than rely on the cheap, addictive, and alluring sugary products that reign supreme in their suburbs.
- And people with physical dependency on, or addiction to, sugary food and drinks need assistance. To have access to helplines, self help groups and psychological counselling to help steer them away from the addictive pull of these consumables. And to help them sustain remission of their type 2 diabetes.

Ultimately, we need a system change. A big change that will eventually make Australia #type2free.

We can't afford to wait any longer.

Australia, we can turn the tide.

Dr James Muecke AM

Australian of the Year 2020