

# Sweet Misery

**IS SUGAR THE NEW FAT - AND WILL IT CAUSE THE NEXT WAVE OF HEART DISEASE? DONNA CHISHOLM REPORTS.**

By god, we fell like flies in those days: 1960s New Zealand – land of full-cream milk and honey. The days when Mum kept the dripping from the Sunday roast in the old Wattie’s fruit can by the oven so she could fry the chips in it later. The days when you got olive oil from the chemist and you didn’t buy it to eat but to soften the wax in your ears. The days when about 7000 of us every year dropped dead from heart disease.

It wasn’t just us, of course, although as a farming nation we had a big appetite for animals. Internationally, doctors couldn’t agree on the cause for the heart disease epidemic, but there were two obvious dietary culprits: sugar and fat. Leading the

prosecution against sugar was British researcher Professor John Yudkin from the University of London, author of *Pure, White and Deadly*. Heading the case against fat was American nutritionist Ancel Keys, who initiated the 25-year-long Seven Countries Study that first confirmed the links between diet, blood cholesterol levels and heart disease. Eventually, Yudkin would be discredited by his funding from the dairy industry while Keys died in 2006 at the age of 100, a scientific hero.

Back at home, the Heart Foundation came along in 1968 and in the 1970s began to spread the message to reduce our dietary fat intake, stop smoking and up our exercise. In 1972, in Auckland, we got off our chuffs and started running round the bays every year. By the end of the 1970s came the first signals our healthier lifestyle was saving lives: heart disease death rates began to fall.



GETTY IMAGES  
DONNA CHISHOLM IS NORTH & SOUTH'S EDITOR-AT-LARGE. PHOTOGRAPHY BY JUSTIN LAMBERT AND ADRIAN MALLOCH.





And they have kept falling ever since. Today, they are an astonishing 80 per cent lower than they were at their peak in the 1960s. And yet we're fatter than we've ever been, with more than a quarter of us considered obese.

Now, though, it's predicted the rate of improvement in heart disease death rates will soon start to plateau and even reverse. The disease is the same, but its profile is different. While smoking rates, blood pressure and cholesterol levels are all improving, obesity and diabetes-related mortality is on the rise.

Enter the new vanguard of dietary gurus telling us we've been sold a pup with this low-fat message. The real problem, they say, is sugar.

Today's debate echoes that of the 1960s, in that the San Francisco paediatric endocrinologist leading this new wave of advice is self-described Yudkin acolyte Robert Lustig. Lustig, whose *Bitter Truth* video on YouTube has attracted nearly three million hits, calls Yudkin a prophet who was "thrown under the bus" by a food industry eyeing big dollars from "low-fat" food.

While Lustig's message has failed to get widespread backing from the medical profession, it's embraced by a number of influential authors, including American science writer Gary Taubes (*Why We Get Fat: And*

**Heart disease death rates are an astonishing 80 per cent lower than they were at their peak in the 1960s. And yet we're fatter than we've ever been, with more than a quarter of us considered obese.**



*What to Do About It*) and Australian lawyer David Gillespie (*Sweet Poison*), who lost 40kg by cutting out sugar.

The theory is attracting followers here (see *Sugar Free*, page 42), which is no surprise given New Zealanders are among the largest sugar consumers in the world: we each scoff more than 39kg every year compared to Britons' 34kg, for example.

But with all the conflicting advice, which can we rely on? What is the relationship between sugar and our weight, and sugar and our heart health?

The answer is the same as with most relationships: it's complicated.

Public health physician Simon Thornley has put sugar in the dock. His waistline has found it guilty and discharged fat, the co-accused, without conviction.

At Auckland University's School of Population Health, where Thornley works as a research fellow, it's a polarising position but, as we've explained, one which is clearly influencing a public, if not professional re-think of decades of dietary advice.

Somewhat controversially, within his department, Thornley has not only switched to a low-sugar diet these past couple of years, but he's also increased his saturated fats, changing from skim to blue-top milk, from low-fat yoghurt to the Greek full-fat version, and even frying an egg in butter for breakfast.

This year, Thornley co-authored *Sickly Sweet*, a book which investigated the role of sugar, and sugar addiction, in global obesity. Thornley says he was exposed to the "low-fat mantra" at medical school in the 1990s and for the next 10 years he went along with it. He says he ended up packing on 15kg.

It was while working on techniques to help smokers quit that he read Robert Atkins' low-carb weight-loss book – which fuelled a rash of low-carb diets – and found a reference to an overweight executive addicted to sugar, who experienced symptoms similar to a smoker trying to give up nicotine.

Seven years later, Thornley has taken a "what if" idea to develop his hypothesis that sugar – or at least, the fructose component of sugar – is addictive, and our craving for it can overwhelm our satiety response and make us keep eating when we've already had enough.

He says while people often report feeling "hypo" – shaky, weak and craving a sugar hit – those who aren't diabetic or on pills to lower their blood glucose levels would never get truly hypoglycaemic. But sugary food can

make them feel better.

"Most people don't eat because they think they have to meet some energy demand. They eat because they're hungry and part of this hunger is very similar to the withdrawal syndrome from drugs of abuse."

So far, so straightforward. But here's where we need to explain a little more about fructose. Until recently, it's been the silent 50-50 partner, with glucose, in sugar. Most of us have heard of glucose, but we know less about fructose, other than that it's what makes fruit taste sweet. The fact fructose comes from fruit has been largely responsible for its pristine reputation – but the way it's been harnessed commercially has, in the United States at least, seen it assume a new status as obesity villain.

Fructose has been particularly targeted by Robert Lustig, who sheets blame for the obesity epidemic back to former US President Richard Nixon, who encouraged farmers into industrial-scale production of corn in an effort to stabilise food prices as part of his "war on poverty". From corn came high-fructose corn syrup (55 per cent fructose and 45 per cent glucose), which was about twice as sweet and half the cost of sugar.

Soon, in the US, high-fructose corn syrup would replace sugar in everything from pizzas and bread to soft drinks. And because it was cheap, and we are programmed to like sweet food – because we need glucose to survive and sweetness is an evolutionary signal for food safety – it was soon being pumped into products that hadn't been sweetened before, including sauces, salad dressings and even hamburger meat.

But Lustig goes further than saying we're eating too much fructose and it's making us fat. He contends it's poisoning us, because of the way the body metabolises it.

Now for a quick lesson in biochemistry to learn about the different ways we respond to fructose, and to glucose. When we take in glucose, the pancreas releases insulin to metabolise it. Eighty per cent of the glucose we eat is used to provide instant energy. About 20 per cent is delivered to and processed by the liver, where most is converted to glycogen and stored for later use. A very small amount is converted to fat.

Fructose, on the other hand, does not stimulate the release of insulin – the process that signals we're full. Instead, fructose is absorbed from the small bowel and broken down by the liver where it is converted mostly to fat, or uric acid (which causes gout).

Relatively recently, diabetic groups even advocated their members increase their fruc-



Public health physician Simon Thornley.

tose intake because it didn't increase blood glucose levels. But what they were soon to learn was the downside of fructose: it raises levels of a type of cholesterol (LDL) – which has been linked to heart attacks – in the blood.

While Otago University's world-renowned nutrition expert Professor Jim Mann accepts that sugar can raise blood levels of triglycerides – another chemical compound linked to heart disease – he says his own work for his PhD thesis 40 years ago showed very large amounts are required before it has that effect and Lustig's description of sugar as toxic is "over the top".

But, he says, very much more sophisticated experiments are now being done, particularly in regard to uric acid, which is also believed to be important in a range of metabolic disorders that lead to obesity and diabetes. It's those metabolic abnormalities which can then cause cardiovascular disease.

While Mann says he's regarded as "one of the arch-enemies of the sugar industry", he's appeared in debates with Lustig in the past and says there's "no evidence whatsoever" for Lustig's theory that sugar, rather than fat, is the culprit in coronary heart disease. "He hasn't got enough evidence to say that, in amounts typically consumed by you and me and people like us, sugar is uniquely bad by virtue of being sugar." But he does agree that sugar promotes obesity, obesity drives diabetes and diabetes increases the risk of heart disease and stroke.

While the infamous high-fructose corn syrup is now ubiquitous in the food chain in the US, its use has not been widespread here. New Zealanders have never embraced the

**"Most people don't eat to meet some energy demand. They eat because they're hungry and part of this hunger is very similar to the withdrawal syndrome from drugs of abuse."**

Public health physician Simon Thornley (above).

flavour of syrup-sweetened Coca-Cola for example. But as several experts pointed out, the difference between the syrup, which is 55 per cent fructose, and sugar, which is 50 per cent fructose, isn't that great anyway. And we have also fallen victim to the food industry's relentless marketing of "low-fat" food as a healthy alternative – despite the fact the flavour lost from fat has been replaced by sugar or salt.

Whether that's been a deliberate or accidental evil depends on your interpretation of events. "A Chinese whispers thing happened," says former National Heart Foundation director Dr Boyd Swinburn, now professor of population nutrition at Auckland University. "Scientists said – and still say – that a diet relatively high in fat will cause an



# The Sweeteners



GETTY



If you've switched natural sweeteners, from table sugar to honey – maybe maple syrup or the even more exotic agave nectar – in the belief you're doing yourself a dietary favour, the unpalatable truth remains that it's not so much the quality of a sweetener as the quantity consumed that ultimately finds its way to your waist and hips.

Certainly, honey, maple syrup, golden syrup and the family of brown sugars (including muscovado, demerara and rapadura) impart flavour to food and drink that's lacking in white "table sugar". And there are traces of minerals in brown sugars and maple syrup, although not in meaningful amounts for nutrition. "Active" manuka honey has also been shown to have some health benefits – wound healing among them – unrelated to its calorific content. Don't be fooled, though. The way our bodies metabolise the molecules in different sweeteners may vary, but they're all sugars and carbohydrates.

New Zealand sugar is mostly sourced from sugar cane, whereas Europe gets the bulk of its supply from beets. High-fructose corn syrup, extracted from corn, is a largely American food-ingredient phenomenon. Its recent bad press, both for its ubiquity and high fructose content (see page 37), has seen some food manufacturers switching to other sweeteners and publicising the fact on their packaging – boldly, as plastered across this box of shredded wheat breakfast cereal (left) from a US supermarket.

The best way to get your sweet fix? Dieticians will always champion fruit, eaten fresh and whole (rather than juiced), and naturally sweet vegetables such as carrots. One 110g apple, for instance, has 6g fructose, 3g glucose, 2g sucrose – a total of 11g carbohydrate – but with the health-bearing benefits of plentiful vitamins and minerals and a good dose of dietary fibre, too.

increase in weight. That then got flipped into a diet low in fat will help lose or maintain weight, and that got flipped into a diet high in carbohydrates must therefore be good for you and that got flipped into eating more of the stuff is good for you... So you had the whole industry push around low fat, and eat more of this because it's low fat, when it happened to be loaded up with sugar. The industry spin on the science, when it got turned into marketing, became an overconsumption message."

Swinburn says studies show that people, particularly women and women dieters, see a "97 per cent fat-free" product as a signal that it's OK to eat more of it. "If people are given two yoghurts for morning tea, and one is labelled low- or no-fat, and then they're able to eat whatever they want at lunchtime, those who've had the low-fat version do the calorie count in their heads and eat more at lunch. So it's not only a metabolic issue, but a psychological one as well."

Similarly, Auckland University epidemiologist Professor Rod Jackson identifies a problem with the bastardisation, over the years, of the "eat less saturated fat" message to a simpler one of "eat less fat". This has meant all fats – even the vegetable fats which don't harm your heart but are equally calorific – have been removed and the only way to compensate for the loss of taste has been to add sugar, which can also make us fat; or salt, which can lead to high blood pressure.

"It seems kind of weird that you reduce your fat intake and get fatter. But I think it's possible if the price we've paid for eating less fat has been eating more sugar."

To Jackson the solution seems simple – replace more of the sugar with non-animal fats. "If you eat less saturated fat and less salt and don't smoke, the benefits of that overwhelmingly outweigh the harms of getting fatter. I'm not suggesting fat is good, but a lot of other causes of heart disease are more important than being fat."

Jackson is horrified Thornley is increasing his saturated fat intake while cutting out sugar, saying the evidence against saturated fat is overwhelming. However, he believes Thornley's addiction theory is "an interesting hypothesis that theoretically and biochemically looks important. Maybe we've addicted a whole population because we've increased the sugar in food.

"We're talking real generalities, but if we've replaced fat with sugar and sugar is addictive, maybe that's what we've done. It kind of fits, it's feasible and it's worth pursuing in more studies because if it's true it would help

explain why we just keep eating if we're full."

Thornley is keen to do that work, but has been stymied by lack of funding. In the meantime, he is his own one-person clinical trial and says he's finding that the less sugar he eats, the less hungry he feels. "I used to feel hungry all the time. And while I haven't dramatically lost weight, I now don't need to snack all the time."

Instead of a breakfast cereal that's 30 per cent sugar, he'll now have an egg, scrambled or fried, and he's given up fruit juice. "I used to drink a lot of juice because I thought it was good for me because it's natural, but it's also got a very high concentration of fructose."

The higher fat does seem to be having an effect, though. His "bad" LDL cholesterol has gone up, while his "good" HDL cholesterol remains high. "But," he rationalises, "low HDL is more strongly associated with heart disease than high LDL."

It's impossible to discuss Thornley's theories without at least a nod to the glycaemic index. Most of us have heard of it – food with a lower GI rating helps us feel full for longer. Food with a higher rating causes higher peaks in our blood sugar levels, with a corresponding increased release of insulin. In fact, so much insulin can be released that it causes a kind of rebound effect, gobbling up so much glucose from the blood that it takes it below the normal baseline – making us hungry again more quickly.

Ironically, a teaspoon of sugar is only moderately high in GI with a ranking of 65, compared to a medium boiled potato with 88. A slice of banana cake weighs in at 47 and a Snickers bar 41 – mainly because of fats which slow the rate at which foods leave the stomach.

"GI is useful for differentiating starchy foods in terms of their ability to deliver glucose," says Thornley, "but as a predictor of the addictive ability of food, it totally misses sugar."

National Addiction Centre director Professor Doug Sellman has also recently talked about food addiction, particularly junk-food addiction, saying it should be recognised as a medical condition. Likewise, scientists at the University of Michigan have reported how foods high in fat and sugar triggered a spike in an opioid-like chemical in the brain of rats. The stronger the rise in the brain chemical, the faster the rats raced to eat the sugary food – in this case M&Ms.

But confounding this whole argument that eating more sugar is making us fat are the findings of the National Nutrition Survey in



JUSTIN LAMBERT

**Dr Boyd Swinburn, professor of population nutrition at Auckland University. "The industry spin on the science, when it got turned into marketing, became an overconsumption message."**

2008-2009 that suggested our total calorie intake had significantly declined since 1997.

"It has to be wrong," says Jackson. "We've got fatter and yet our activity levels haven't changed much. What's happened is that since 1997 almost every newspaper every other day has an article about obesity. It's become the new tobacco and that would lead people to under-report. I don't think there's any doubt we're eating more of everything except saturated fat and salt."

And yet a paper published by the *Public Health Nutrition Journal* in 2007, of which Otago associate professor Winsome Parnell was the lead author, used the nutrition survey





## Negotiating the Sugar Maze

We asked nutritionists for some dietary advice to guide us through the sugar-fat maze.

- Elaine Rush**, professor of nutrition at Auckland University of Technology:
- Physical activity churns up the glucose. You're better able to process sugar the more active you are.
  - If you gradually cut down sugar, for example in tea and coffee, your taste buds will start to adapt to the change.
  - Staff cafeterias can ask vending-machine operators to change the position of products so healthier options such as water are in first line of sight.
  - Eating the vegetables on your plate first can help to fill you up and reduce your intake of less healthy food at the same sitting.

- Helen Eyles**, public health nutritionist for the National Institute for Health Innovation at Auckland University:
- If you're trying to keep to foods with no more than 10 per cent sugar content, make sure you factor in serving size. For example, soft drinks have only eight grams of sugar per 100 grams, but the average drink is three times that.
  - A low-GI breakfast such as porridge will keep you feeling full for longer than a highly processed, sweetened cereal.

data to conclude: “Current sugars or sucrose intake is not associated with body weight status in the New Zealand population.”

Jim Mann, who is listed as a co-author in the study, distanced himself from the conclusion when contacted by *North & South*, agreeing with us that it would be “totally misleading” to a lay reader. He says his only contribution to the paper had been to include a paragraph pointing out that a cross-sectional study such as the nutrition survey, which questioned people about what they’d eaten over the past 24 hours, meant the data could not be used to imply cause and effect.

Acknowledgments in the paper say “secondary analyses” of the nutrition survey data was commissioned by NZ Sugar Ltd – effectively Chelsea Sugar – which funds the NZ Sugar Advisory Service. The service’s stated aim is to “encourage appropriate use and enjoyment of sugar as part of a healthy and balanced diet”.

Parnell is listed on the service’s website as a member of its advisory panel.

Parnell says she is not on the company’s payroll, but sometimes receives a small honorarium to cover costs. Asked if there was a risk that being an adviser for a number of years to the company could be perceived as compromising her, she replied: “I don’t care what you think about it. I don’t care what anyone thinks. My conscience is entirely clear. I’ve professionally advised Heinz Wattie’s for 20 years. I am impartial in the advice I give. I don’t think they like all the advice I give.”

She says the paper in *Public Nutrition* was not intended for a lay audience.

Parnell says she never picks out a particular nutrient as a cause of obesity; obesity results from an energy imbalance. “I have not been convinced by the literature that sugar as a nutrient is any more involved in causing obesity than too much fat. Often the two go together in food anyway.” It was a “gross generalisation” to say sugar promoted obesity.

Parnell has also been quoted in the past as saying banning fizzy drinks from schools would do nothing to stop the high levels of sugar children were getting from powdered fruit-flavoured drinks at home.

She told *North & South* that if she were an overweight teen, she’d choose a sugar-free version of a soft drink but she would not generalise for all. “There are many very underweight young people who drink a sweetened drink. If you took that away, they might fade away, I don’t know.”

However, many others in the field have targeted soft drinks as both a cause of unhealthy

weight gain in children and a “low-hanging fruit” for public health initiatives. Gerhard Sundborn, an epidemiology research fellow at Auckland University’s School of Population Health, has written a post-doctoral paper suggesting an “end game” for sugar-sweetened drinks similar to the government’s proposal to eliminate smoking by 2025.

While the American Heart Association recommends a daily intake of just six teaspoons of sugar a day for women, nine teaspoons for men and three for children, we’re eating far in excess of that, with a median intake of 24 teaspoons for women, 30 for men and around 26 for children. Given a 600ml bottle of soft drink contains about 16 teaspoons, eliminating just one drink a day could do much to reduce that consumption.

An analysis of international research suggests it’s highly likely sugar-sweetened drinks are the single largest driver of unhealthy weight. One major American study reported they accounted for 20 per cent of the weight increase in the US over 30 years from 1977. But any attempt to restrict them will face a pushback from the industry and opposition to “nanny state” ideology. John Key’s government, for example, moved swiftly



**An analysis of international research suggests it’s highly likely sugar-sweetened drinks are the single largest driver of unhealthy weight. One major American study reported they accounted for 20 per cent of the weight increase in the US over 30 years from 1977.**



**Auckland University epidemiologist Professor Rod Jackson: “It seems kind of weird that you reduce your fat intake and get fatter. But I think it’s possible if the price we’ve paid for eating less fat has been eating more sugar.”**

in 2009 to revoke the Labour government’s requirement that schools were to sell only healthy food – a change the Heart Foundation described as a giant leap backwards.

Most recent advances, though, have been the result of collaboration rather than legislation. For example, in 2006, McDonald’s and Coca-Cola joined a Counties-Manukau District Health Board “Let’s Beat Diabetes” initiative and trialled the replacement of Sprite with Sprite Zero for six months in all 21 McDonald’s restaurants in Counties-Manukau. When consumers didn’t oppose the change – or even notice it, it seems – the sugar-free drink became the “default” lemonade served throughout the country.

This, and a 40 per cent reduction in sugar in McDonald’s buns about the same time, removed 300 tonnes of sugar a year from the chain’s menus in New Zealand. McDonald’s told us the same deal isn’t being considered for Coke and Coke Zero because it believes the taste is noticeably different.

Coca-Cola says while it won’t divulge sales figures, Coke Zero and Diet Coke are now the third and fourth most popular of its drinks brands and Coke Zero sales increased 8.6 per cent last year – a bigger increase than

regular Coke. The company referred us to Winsome Parnell for additional comment.

Food and Grocery Council chief executive Katherine Rich says council members, including Nestlé, Coca-Cola Amatil, Tasti, Cerebos, Fonterra and Hansells, are heavily involved in promoting healthy food messages. “I suspect they’re investing more than the government. Sugar is the focus at the moment but it wasn’t so long ago that the big discussion was about fat or salt. You can take out as much as you like but eventually you find yourself eating cardboard.”

Some confectionary companies had reduced portion sizes “with well-intentioned reasons but the cheap shot is often you’re only doing that to save money”. She conceded, however, that smaller portions didn’t always bring smaller prices. “To embark on a programme that removes sugar is completely unnecessary because we’re talking about a natural product that’s an integral part of a healthy diet. It has to be all things in moderation.”

Rich also suggested we approach Winsome Parnell for comment.

Competitive edge is one reason sugar probably won’t be reduced in food very much or

very fast – and makes it likely we wouldn’t be told about it anyway. Sanitarium’s nutrition services manager, Cherry Downing, says while they’re always looking to make healthier options, “we’re up against other manufacturers who might still be putting certain levels of sugar in”. And if the product doesn’t taste good, consumers won’t buy it.

The company does provide low-sugar cereals, including Weet-Bix, San Bran and Puffed Wheat. Weet-Bix, which are very low in sugar, remain the country’s number one cereal – although Downing acknowledged many customers would add sugar or other sweeteners.

Heart Foundation medical director and former cardiologist Dr Norman Sharpe says the foundation wouldn’t be collaborating with fast-food chains any time soon in its initiatives to reduce sugar, fat and salt.

“It’s a no-win situation. They’ll give a little here, then rip you off over there. They’ll put in the token salad, but they’re still marketing it [fast food]. The Heart Foundation worked with McDonald’s in Australia and got badly burned. They got set up, and McDonald’s used their brand to market their product. You get families in through marketing some salad, but the kids are still going to buy the rest of the junk. It was a fiasco.”

In 2010, Weight Watchers in New Zealand collaborated with McDonald’s and endorsed three of their meals, a move criticised at the time by Boyd Swinburn. “Make no mistake, this is about selling more burgers and fries.”

Sharpe says while the Heart Foundation had been very successful in working “under the radar” with the food industry to reduce salt in bread – 150 tonnes was taken out of the national food supply annually – it was a slow process and with it went the risk of “capture by the food industry”.

“Basically, we’re outgunned and outnumbered.”

He admitted the foundation had also been burned when it gave a “tick” to Milo in 2008 when Nestlé simply advised consumers to use less of it. “The tick is a bit of a trap,” says Sharpe, “because it doesn’t necessarily mean the product is recommended but within its category it’s the healthier choice.”

Sharpe says while our declining heart disease death rates are encouraging, we can’t afford to be complacent in the face of the obesity and diabetes tsunami looming, and sugar is an obvious next target. “We have the fat down in the diet but sugar is the new fat. It’s all about energy imbalance. Sugar has been substituted for fat and the portion size has gone up and the result is carnage.”





### Junk Food and Alzheimer's

When *New Scientist* magazine reported in September on research linking junk-food diets and insulin resistance to Alzheimer's disease, it confirmed work done more than 10 years ago by Auckland scientist Professor Garth Cooper.

Cooper and his colleagues from Auckland University and Christchurch Medical School described in 2001 how the "misfolding", or changing shape of proteins in the pancreas of diabetics, mimicked changes in the brain tissue of patients with Alzheimer's.

He says there's now widespread belief that type 2 diabetes and Alzheimer's are either very similar or "more closely linked than that". In fact, some researchers now see it as "just another form of diabetes".

Recent studies have shown up to 80 per cent or more of people with Alzheimer's have undiagnosed diabetes or pre-diabetes, leading some to dub Alzheimer's "diabetes 3".

*New Scientist* called the link the "ultimate food scare".

"The world already faces an epidemic of diabetes. The prospect of a parallel epidemic of Alzheimer's is truly frightening.

"A preference that started out as a survival mechanism has, in our age of plenty, become a self-destructive compulsion."

Cooper (*North & South's* New Zealander of the Year in 2004) now splits his time between Auckland and the University of Manchester, and is trying to find ways to stop the misfolding proteins from killing cells. Both sugar and saturated fats are implicated, he says, particularly in the highly processed foods many of us are now eating to excess.

It's estimated about 240,000 people in New Zealand have type 2 diabetes – that figure is predicted to increase by 50 per cent in the next decade without effective prevention programmes.

# Sugar Free

An Auckland couple kick the sweet stuff.

When IT professional Donovan Marshall, 34, and his wife Margo went cold turkey on sugar earlier this year, they didn't give temptation a look-in. They took the chocolate, biscuits, jam, maple syrup and sweets out of their cupboards and gave them all away.

Marshall says his wife, worried about their sugar intake and creeping weight gain, had been inspired by Australian author David Gillespie's book *Sweet Poison*. He read the book and other similar titles before deciding to go sugar-free himself. "I thought it made sense and it wouldn't hurt to give it a go."

The reading made him realise just how high his sugar intake was. "I have a sedentary job and I was consuming a lot of sweet products to keep myself going."

He'd regularly skip breakfast, and by mid-morning he was hungry – time for a Pepsi and a chocolate bar. At lunchtime, he headed to St John's, near Auckland University's Tamaki campus where he works, for a burger from new fast-food restaurant Carls Jr. A couple of hours later, the munchies would strike again – time for another couple of cans of Pepsi and another couple of chocolate bars. By the time he got home, he'd need a few biscuits to tide him over to dinner.

It's hardly surprising that he found himself packing on the pounds, with

his weight ballooning from its usual 90kg to 115kg. For someone who's 165cm tall, it was, says Marshall "a little on the heavy side".

The first change was having breakfast – although, given that was a Carls Jr breakfast burger, it might not have been the healthiest option. At work, Marshall swapped Pepsi for water or the sugar-free Pepsi Max, and the chocolate bars for nuts and dried fruit. He and his wife used Splenda, a sugar substitute, in their American pancakes, and a sugar-free maple syrup. Out went the tomato sauce – 30 per cent sugar – and the low-fat, but high-sugar yoghurts. Within a few weeks, he found his appetite – and sugar cravings – had reduced. So had his weight, and after eight months, he's down to 105kg, which considering he hasn't given up other carbs or high-fat meals, he attributes entirely to the absence of sugar.

"I feel a lot more alert in the afternoons and I can't eat as much as I used to," he says. "The longer I do it, the easier it is to not eat stuff with sugar. The cravings just aren't there."

He says that he doesn't even much like the taste of very sweet things now. On a recent weekend away with his wife, he thought he'd treat himself to a chocolate mousse. "It tasted incredibly rich, to the point where you had to wash your mouth with water to get the taste out."

Though his wife has since abandoned the sugar-free diet because she's pregnant, Marshall says he's happy to keep going. Sticking to the new plan has also been made easier by the fact two of his IT colleagues at Auckland University, David Glen and Chris Groom, are on similar programmes.

Glen says his father recommended the sugar-free way after reading Gary Taubes' *Why We Get Fat: And What to Do About It*. "I laughed at him and said all the research says a high-fat diet and meat is not good for you and we should be eating more carbs." But after getting the book himself, and hearing other experts whose views he respected give the idea credence, he began reducing his sugar and carb intake.

While he didn't have Marshall's prodigious appetite for sweets, Glen, 34, says he often felt hungry on the way home and if he was filling up the car at a petrol station he'd buy a bag of jelly beans or chocolate. He'd have three coffees a day with a couple of teaspoons of sugar in each, and his diet was high in carbs. "I was pretty much living on bread and pasta and supplementing that with orange juice."

Lured by Subway's low-fat claims, he'd have a six-inch roll from the chain almost every day. "I'd have that between 12 and 1pm but by 3 o'clock I'd want more. My hands would be shaky and I was very hungry all the time. I was struggling to make it between meals without feeling shaky and horrible. My blood sugar levels tested normal but going between meals was getting harder. I felt unwell and needed a sugar hit."

Now he has two or three scrambled eggs for breakfast, and lunch consists of cheese, nuts, cold meats and vegetables including celery, lettuce and tomato. He's given up potatoes and kumara. And, in another change likely to give nutritionists heart palpitations, he's switched from skim milk to cream in his coffee and from olive oil to butter. "The carb content of cream is very low, but milk, with its lactose, is very high."

In the first two months, he lost



JUSTIN LAMBERT

15kg and then dropped another 7kg over the next three months.

Watching Glen's progress was colleague Chris Groom, who was so impressed he decided to give it a go too and has eliminated bread, pasta and potatoes from his diet. Now an avid reader of ingredient panels, Groom has been taken aback by the sugars in even savoury products, including peanuts and bacon.

He's lost 10kg in the past six months, and like the others, reports feeling less hungry. "I think sugar and carbs create hunger so the less I eat, the less hungry I seem to get. I forget to eat. Before it was more like a rollercoaster – sugar would keep you going but then you'd crash."

**"I feel a lot more alert in the afternoons and I can't eat as much as I used to. The longer I do it, the easier it is to not eat stuff with sugar. The cravings just aren't there."**

**IT professional Donovan Marshall (above).**