

# Perspective

## No sugar! I'm an economist

Economists are getting in on the obesity debate by bringing in the tools of data analysis and behavioural economics.

Deirdre Macken

Rory Robertson is an economist on a mission and this time sugar is in his sights. Sugar, he says, was making him fat; it's making the world fat and no nutritionist is going to deter him from making the world have another look at it.

The nutritionist in his sights is the well-respected Jennie Brand-Miller and her paper, *The Australian Paradox*, which concludes that sugar isn't a culprit in the obesity epidemic.

"It was for me," says Robertson. "Cutting out sugar had a profound effect on my eating and it did for thousands of others. So when I read a story about the sugar paradox, I thought, 'who are these people?'"

Professor Jennie Brand-Miller asks the same question of Rory Robertson.

Robertson isn't known for his expertise in diets. Like most economists, he is more informed about gross domestic product than the Glycaemic Index but, like other economists, he is turning his attention to one of society's biggest health costs – obesity.

The entry of economists into the health debate is upsetting some traditional gatekeepers (see box) but it's also providing new insights into the way we eat and why we eat that way.

An economist's guide to eating reads something like this. Buy expensive wine, you'll drink less of it. Serve dinner on a bread plate, it will look like heaps. Place a public bet on yourself losing weight, it will triple the incentive. And have thin friends – they will be your benchmark for a healthy weight.

We should insert a warning here: these guides haven't been endorsed by any health body. But those who are familiar with concepts like availability, framing and contagion will recognise what's going on with the small plates, pricey wines and thin friends.

Economists are bringing the tools of data analysis, behavioural economics and quirky regressions to our eating habits. And the result is a slew of new books: *An Economist Gets Lunch* by the renowned economist, foodie blogger, Tyler Cowen; *Heavy! The Surprising Reasons America is the Land of the Free – And the Home of the Fat* by economist, Richard McKenzie, and the upcoming *Culinary Intelligence* by a foodie with a strategic approach, Peter Kaminsky.

These, combined with several economic studies on why people get fat and how some stay thin, are adding a novel twist to the health

challenge of the Western world. But what does an economist know about nutrition?

That's what Brand-Miller, asked recently of an analysis done by Rory Robertson. To which, one could respond that nutritionists haven't solved the obesity problem so why not give economists a go.

Indeed, a quick survey of prominent Australian economists shows that most believe they are well equipped not just to propose financial solutions but to explore how we got fat and what strategies we can use to trim down.

Paul Frijters is an economist from the University of Queensland and he's recently studied links between happiness and eating behaviour – evidently people who eat more fruit and vegetables are happier but whether it makes them happy or they eat it because they're happy isn't clear. He defends the entry of economists into the debate by pointing out obesity is now a big cost on the community.

"By and large we put it in the basket of individual taste but we become concerned when costs are imposed on others and the costs of the obesity epidemic are increasingly borne by community," he says. "A few years ago in the US, it was calculated that every obese person costs an extra \$US2000 a year in extra health costs. That's when economists wake up."

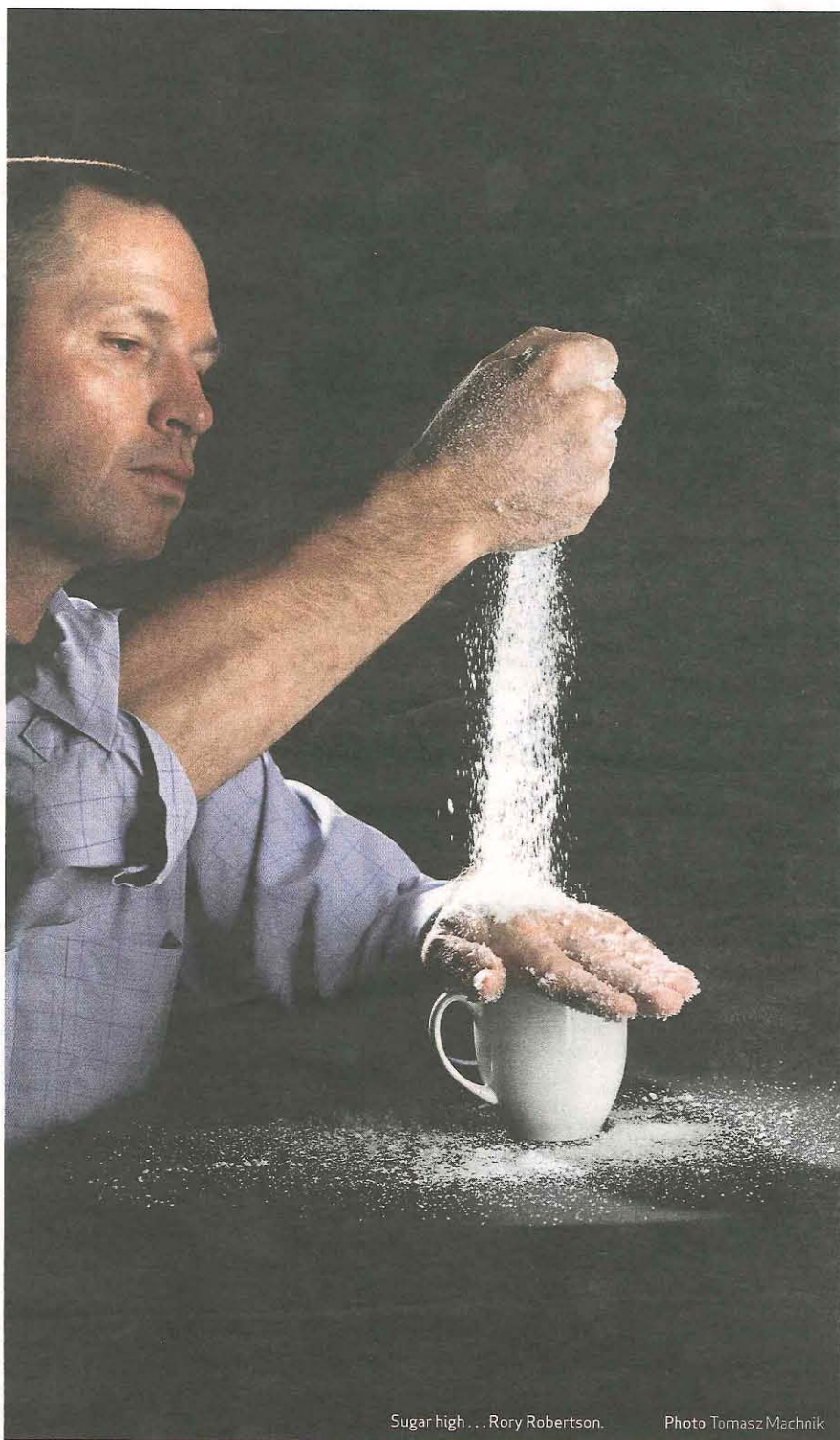
But the fiscal load on the community is only the starting point. Economists bring a different mindset to problems and if there is one consistent theme in how they look at the weight problems of the world it is this – they look at the behaviour of eating, whereas many health scientists focus on what we're eating.

Deborah Cobb-Clark a professor from the Melbourne Institute of Applied Economic and Social Research says that the behaviours that influence our money decisions are the same behaviours that are behind our eating decisions.

"When you have a model for how people make decisions about food, it gives you better insights," she says. "For instance, people know the food message, they know the health benefits of eating well and they will tell you why they shouldn't eat chocolate sundae while they are eating it."

"So, what's going on? It's a struggle between the immediate benefits and long-term benefits that's going on in their mind. And that is not that different to people's savings behaviour. We have two parts of the brain – rational and impulse – and we make both rational and impulsive decisions about food in the same way we do about savings."

It's no surprise then that people who are sensible about savings are also sensible with portion control. Both Frijters and Cobb-Clark point to the established fact that people who are successful and happy also tend to be fit and relatively trim, whereas the opposite is true of



Sugar high... Rory Robertson.

Photo Tomasz Machnik

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poorer people. Health professionals have offered many reasons for this – poorer people can't afford good food, they aren't as well informed about food choices or they don't live in areas where they can exercise easily.

Economists offer a few extra insights into the class divide of health.

Cobb-Clark's research using HILDA [Household, Income and Labour Dynamics in Australia] data suggests it's all about feeling in control of your life.

"People who believe they are in control of their lives will make investments in themselves and will have good outcomes," she says.

But, she adds, the reasons men invest in themselves are different to the reasons women do.

"Men's health investments seem to be linked to the expectation it will affect their health," she says.

"Women are highly motivated by body image."

Another insight into control comes from the commitment site, stickK.com, which was developed by a couple of economists. This site lets people make public commitments about their goals, holds them to account (through friendship groups) and rewards them if they reach their goals.

According to a study in 2008, those who have a financial incentive to lose weight are five times more likely to succeed and, according to the stickK research, 70 per cent of people who bet on themselves on the site, reach their goal.

Yet another theory comes from the Australian-born, Europe-based economist, Andrew Oswald.

In a recent paper, he said weight levels were contagious and "people subconsciously keep up with the

## Obesity epidemic

## Sweet revenge

The fight between economist Rory Robertson and nutritionist Jennie Brand-Miller over the role of sugar in the obesity epidemic illustrates the divide between traditional experts in the field and the newcomers. Robertson says he was "stuck on the path to obesity" when he read the book *Sweet Poison* and decided to cut sugar out of his diet. He lost 10 kilos, got his appetite control back and his cravings disappeared. He was pretty pleased until, a month into the diet, he read about the sugar paradox.

*The Australian Paradox*, written by Jennie Brand-Miller and Alan Barclay from the University of Sydney, proposed sugar wasn't to blame for obesity because sugar consumption was dropping in the decades that obesity rose.

Robertson was intrigued, looked at the data they used and concluded that the data didn't support their thesis: there has been an increase in sugar consumption, not a decrease. The dispute has raged across group email missives for months and is now being waged in the journal *Nutrients*, which published Brand-Miller's defence and is considering publishing Robertson's critique.

While it is too complex to canvas the different positions here, the comments of both protagonists expose the conflicts between different disciplines engaged in the same field.

Robertson says "like most economists, all I've done for the last

25 years is look at data and yet a lot of the response to my criticism has been, what does an economist know about obesity? I assume that's why [my argument] hasn't got traction, because I'm an economist, not a scientist. And, yet, I'm arguing empirical evidence, not nutrition."

Brand-Miller does, indeed, question an economist's expertise to tackle nutrition. "The only mistake we made was to assume we were writing for a nutrition-trained audience," she says. "The amount of refined sugar in food has decreased and he doesn't understand that because he is not a nutritionist. An economist wouldn't understand the difference between a sugar-sweetened soft drink and an intensely-sweetened soft drink (artificially-sweetened one)." Robertson says he does.

Brand-Miller does see a role for economists in solving the obesity problem; one that runs along traditional roles. "We'll solve the problem of obesity if we bring it down to dollars and cents and people have to pay the costs they impose on the health system," she says. "There should be economic incentives to be healthy."

Robertson also sees a role for economists, even if he is pointed in how he expresses it. "What do economists bring to the debate: knowledge of data, a respect for facts and an ability to see the big picture?"

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weight of the Joneses". Using data from 29 countries, he found highly educated people saw themselves as fatter than those with low education, even though they were mostly thinner. This is probably because they mix with thinner people and therefore hold themselves to a thinner standard.

So peer group pressure makes those in thinner networks more aware of their extra weight and therefore more pressured to lose it. What matters, he says, is relative weight.

Many economists are engaged in developing financial solutions to the broad obesity problems but some economists take a different approach to the costs and benefits of food, in particular, the real cost of food (to our body) and the concept of wasted food.

Andrew Reeson, a behavioural economist at the CSIRO, commits heresy when he says focusing too much on price is one of our biggest mistakes.

"As an overly price-conscious consumer I find I'm easily suckered into 'upsizing' on value-for-money grounds," he says.

"But while I may reduce the average price paid per chip, I am only wasting money and, worse, I am sure to eat the unnecessary chips rather than leaving them on the plate as my gut instinct overrules my rational thinking.

"As decision-makers, we hate losses and I (like many others) am inclined to view food left on the plate as wasted while food which I have eaten, regardless of whether I needed it or enjoyed it, is not."

Reeson says we can take the argument about the real value of food beyond chips and into more executive choices, like wine. He recalls a wealthy friend boasting about a good value bottle of wine. But what is the best value?

"As a sensible person, he limited his wine consumption so each glass of wine he consumes within his quota is itself a scarce commodity.

Given this quota, he needs to think not just about 'value for money' but also 'value for quota'.

"He may do better to spend twice as much money on a slightly better bottle of wine."

Those who believe economists are only interested in saving money are clearly out of date. But in the food world, scarcity has been turned on its head. Food is no longer scarce, what is scarce is control. One book that tackles this in detail is the upcoming *Culinary Intelligence* by Peter Kaminsky. His approach to eating is very strategic.

"If I had to reduce culinary intelligence to one guiding principle, it would be maximising flavour per calorie," he says.

To this end he sets out to find the steak that gives the most flavour per mouthful (grass-finished rib-eye, aged for three weeks); he finds that the most value in a dessert comes from the first few bites and the most value from a soft drink is in the first 10 per cent of your consumption.

Obviously, if they're talking about soft drinks, dessert and steak, these messages won't get a tick from many health scientists. But the messages from economists are more concerned with what we bring to the table rather than what's on the table.

One of the most commonly mentioned tactics for eating well is based on the availability theme. A diet developed by economists at the Southern Methodist University relies mostly on manipulating the choices a person is faced with daily.

For instance, if you prepare a salad for dinner before you leave for work, you are planning your meal while your brain is still in rational mode. Then when you come home hungry and find a salad ready to go, you're more likely to eat that order a pizza while your brain is in an impulsive mode.

Paul Frijter's household works off the same principle. "We employ several strategies in our family for good eating," he says. "In order to

limit our intake of sweets, we don't buy any in our weekly shopping and hence only have sweets when they are provided at functions.

"We batch-cook with lots of vegetables so every evening we will have a defrosted meal that is reasonably healthy; we only buy cereal for breakfast and make the kids sandwiches for lunch. Having said this, we all love fatty, sugary and salty food so we still eat too much bad stuff whenever we get the chance so we limit the opportunities to cheat."

Deborah Cobb-Clark also works on the same principle of making it hard to eat the wrong stuff.

"My husband likes to eat candy and nuts so even though I can't keep them out of the house, I keep them out of sight," she says. "So my husband has lots of hiding spaces for his candy around the house."

She adds that she tries to quieten the impulsive urges around food by delaying consumption.

"Delay eating it for 30 minutes and then if you still want it then, have it because in that time the biological urge is over."

She also subscribes to the theory of buy the best and eat less. "My problem is with chocolate so if I have it, I buy the best because then I can eat a small amount and satisfy the chocolate craving."

Andrew Reeson is big on pre-commitment. "My eating decisions are much better made in advance," he says. "I pre-commit by ensuring that I only have (reasonably) healthy foods available at home.

In the supermarket on the weekend I can decide rationally what I should eat next week; in the café at lunchtime I probably can't. So I shop once a week, take my lunch to work each day and make sure I don't have enough change for the chocolate machine."

The eating habits of economists might not end up in a best-selling diet book but they do expand our understanding of eating and provide a few nudges for avoiding chocolate fudge sundaes.

## Economist diet tips

- Buy best quality indulgences such as wine, cheese or chocolate. You will consume less but enjoy more.
- Choose foods based on their *umami*. They are taste bombs but not necessarily calorie bombs.
- Avoid restaurants with happy, performing staff. Chances are all the effort has gone into theatrics, not the food.
- Use small plates. It will make servings look bigger.
- Shop and cook ahead of when you consume because your rational mind will be in charge.
- Hang out with thin people because you'll feel relatively fat, even if you're not that fat.
- Eat only the first few bites of something sweet because the enjoyment return on kilojoules goes down with each mouthful.
- Make a public commitment to lose a certain amount of weight and put some money on the commitment.