

MEET OUR SCIENCE

Advisors



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Have you done any specific work related to sugars, carbohydrates or nutrition, and what did you find?

A lot of my research has been on the topic of dietary fibre.

I looked at how dietary fibre is processed by the gut and the mechanisms underlying the glycemic response, which is important for diabetes and general health and energy levels.

We have also looked at how fibre is labelled on foods. My research has shown that simply listing the amount of fibre on food labels does not indicate the effects of fibre on the body - the different effects depend on fibre properties and not just the amount.

It was really interesting to then look at Australasian breakfast cereals - we found that most cereals didn't contain enough bulking fibre to produce gut health benefits, based on how these cereals are normally consumed.

From this research, I was able to develop a better way that food manufacturers can communicate the functions and benefits of dietary fibre on food labels. It's a concept called "Functional Equivalents", and they would be able to indicate, for example, the effect of a food on the blood glucose response (which is important for diabetics), and the bulking ability of a food for gut health. It will help consumers make better food choices at the supermarket.

How about sugar research specifically?

I've done some kiwifruit research recently. We found some real potential for the use of kiwifruit in partial exchange for starchy staple foods (particularly in Asian meals) to help reduce the glycemic response while improving nutrient intake. The added fructose intake from 2 kiwifruits per day had no adverse effects either.

What is your favourite sweet food?

Dark chocolate with nuts is my favourite sweet food - it's not too sweet, slightly bitter and I enjoy the nut and chocolate taste combination.

It's usually an occasional treat as part of a healthy diet, but it can be hard to resist, and I've been known to eat a whole packet of dark chocolate.

Where do you see a gap in our scientific knowledge on sugars, carbohydrates and nutrition?

For my area of work, I think we need more information on the role of different dietary components in glucose intolerance. There's still so much we don't know.

It would also be good to explore how different diets affect blood glucose control, for example, high protein/low carbohydrate diets, high protein/high fat/low carbohydrate diets, and high carbohydrate/high protein/low fat diets. This is in view of the fact that our bodies are physiologically able to handle dietary carbohydrates, including fructose, and our primate ancestors probably consumed a high sugar (fruit) diet.