

Against the grains

It's taken a lifetime to realise it but **Professor Tim Noakes** now believes the overconsumption of refined carbohydrates may be toxic for the body.



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I am not one to shy away from controversy. But I suspect that this column will attract more unfavourable comment than perhaps anything else I have recently written. Yet the message could be life-changing for some.

It has taken me 61 years to suspect that bread and cereals – the biblical staff of life – as well as rice, pasta and refined carbohydrates may not be healthy for me personally as I had always believed.

My attention to this possibility was piqued by the release of the most recent 2010 US Dietary Guidelines. These guidelines promote the concept of the Food Pyramid built on 6-11 daily servings of bread, cereals, rice and pasta. Although Americans now follow these guidelines more closely than ever, obesity has become the single greatest medical problem in the US. Thus the question: is this epidemic linked in some way to this increased carbohydrate intake? I decided to investigate.

First, I learned that cereals and grains have been a staple of the human diet for only the past 20 000 years, whereas we began to eat meat perhaps 2.5 million years ago.

More interestingly, this change from a protein- to a cereal-based diet produced a reduction in average human height and the first appearance of nutritional-deficiency diseases, including beriberi, pellagra and scurvy. These diseases led to the discovery of vitamins only in the early 1900s.

The second is the burgeoning literature written by those who experiment with low-carbohydrate diets. Some suggest that we humans evolved our current size and especially our large brains over the past two million years only because we found sustainable novel sources of high-protein foods, especially meat and fish.

Such high-energy sources are especially important during infancy and early childhood when brain size increases rapidly. As a result, the human intestine is especially well designed for digesting high-protein foods and bears more resemblance to that of the carnivorous lion than to that of our nearest living relatives, fruit- and plant-eating chimpanzees. Perhaps humans are really closet carnivores. Third, low-carbohydrate weight-loss diets produce results at least as good

as those achieved with the traditional low-fat, high-carbohydrate diets. No published evidence shows that these unconventional diets will produce undesirable health consequences.

Fourth, I learned that protein is a potent appetite suppressant, perhaps because a too-high-protein diet is toxic to humans. As a result, low-carbohydrate diets with increased protein do not cause the frequent sensations of hunger and privation that accompany calorie-restricted, high-carbohydrate diets.

This absence of hunger is more likely to encourage compliance and sustained weight loss. In contrast, there may be an addiction, especially to rapidly-assimilated carbohydrates like sugar and refined carbohydrates, that drives the overconsumption of all foodstuffs, fat included, and hence leads to weight gain.

Thus, my untested theory is that it is the unrestricted intake of especially refined and hence addictive carbohydrates that fuel an overconsumption of calories, not a high-fat intake as is usually believed.

There is a saying that to find the root cause, follow the money trail. If a low-carbohydrate intake is more healthy than we might expect, then why is that fact hidden? The answer is that some very large industries, including the soft-drink, sugar and confectionary industries (all of which produce high-carbohydrate products with minimal nutritional value) do not want us to know this.

Finally, I submitted myself to an experiment of rigorously avoiding all bread, cereals, rice, pasta and refined carbohydrates and replacing that nutritional deficit with healthy meats, fish, fruit, vegetables and fats, including nuts.

Five months later, I am at my lightest weight in 20 years and I am running faster than I have in 20 years. For the first time since I ran heroic weekly mileages in training have I learned exactly how to maintain an ideal body weight without any sense of privation. And with only as much exercise as I want to do. Even my friends are impressed. They agree that not even the most expensive cosmetic surgery could have produced such a remarkable change. 😊