The Royal New Zealand College of General Practitioners
Te Whare Tohu Rata o Aotearoa

Pork scratchings, cheese and kaimoana: a general practitioner's commentary on low carbohydrate, healthy fat eating

Marcus Hawkins BM BS, FRNZCGP

Botany Doctor Medical Practice, Botany Town Centre, PO Box 64267, Botany, Auckland, New Zealand.
Email: marcus@botanydoctor.co.nz

J PRIM HEALTH CARE
2019;11(4):308–310.
doi:10.1071/HC19078
Received 29 August 2019
Accepted 4 October 2019
Published 22 November 2019

As a doctor with over 32 years' experience both in hospital and then general practice, I have undergone a renaissance in the way that I practice medicine and made some major changes. Since graduating, I have strived to do as I was taught, attempted to keep up with change in medicine and have achieved some milestones in this regard. I assumed I was making a positive difference to the health of my patients. I am talking about the dietary guidelines that I have been following, as advocated, for over 40 years. As a side note, as a medical student, I probably only ever received a few minutes' worth of nutrition education.

So how did I come to be 'reborn' in terms of nutritional advice? It all began with Sunday lunch. My wife and I were with our friend, Richard, and his wife. We sat outside on a warm spring day, chatting and eating. Small pieces of bread were offered around to be dipped in extra-virgin olive oil or eaten with feta cheese, sun-dried tomatoes, pickles and salami. As he offered me the salami, Richard told me that it was now a major constituent of his daily food intake. Also, cheese, butter, eggs and numerous vegetables were now de rigueur for him. '*What?*' I said, '*what about your cholesterol?*' *'It's never been better'* he said, and he was losing weight. After many years of following guidelines estimating and managing cardiovascular risk, I started to feel very uncomfortable. We had a lovely time that day.

Some days later, I was surfing a TV channel for something to watch when I happened upon a documentary and decided to watch it. It was about a different way of eating. There was more than a grain of truth in the supposition that carbohydrates are detrimental to human health, and I started to research the subject. From that day on, my professional life changed.

Now, more on the dietary guidelines. In 1977 the United States (US) Department of Agriculture introduced their dietary guidelines and they spread across the various continents and were adopted by many health authorities. Not long after, the food pyramid was born. It is a matter of fact, however, that this advice was not based on contemporary medical knowledge or scientific evidence.[1] Instead, it was promulgated by some very strong personalities. The postulate at that time was that saturated fat was bad for health and would lead to heart attacks and strokes.[2] As a result, carbohydrates must replace fat to make food more palatable.

Over the last 40 years, New Zealand and other developed countries have seen a massive rise in obesity, prediabetes and diabetes.[3] These conditions often give rise to major complications (including premature heart attacks and strokes in the case of diabetes) and are an increasing financial burden on already stretched health services (Figure 1). The US is ranked first in OECD (The Organisation for Economic Co-operation and Development) countries for adult obesity and New Zealand third.[4] It is resoundingly clear that these dietary recommendations have not worked.

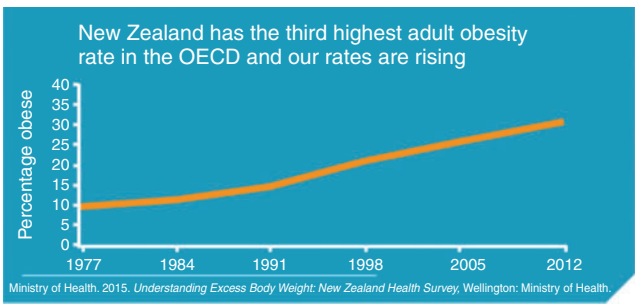
When one digs a bit deeper into the advice, some things become very clear. The weight of evidence is against dietary fat leading to heart attacks and strokes.[5,6] Cholesterol is essential and has some very important functions (cell membranes, hormones and more). The body regulates cholesterol levels – high doses lead to reduction in cholesterol.[7] Cholesterol subfractions are generally more important than total cholesterol, although the latter is unfortunately still the focus for many media and patients.

When managing obesity, prediabetes and diabetes, current advice is to reduce excess energy intake, increase exercise aiming to lose weight, if necessary, and use medication to correct the latter two conditions if not responding.[8] Many people still believe that if energy expenditure is greater than energy intake, then one must lose fat and therefore become healthier. This is a rather simplistic approach to weight loss that does not work for most people.

If blood glucose is increased over a long time, it acts essentially as a toxin.[9] That is why people with diabetes run into problems with blindness, heart disease, stroke and kidney failure among other things. The body produces insulin to reduce glucose levels – to reduce the 'toxin' to a safer level. We find ourselves treating diabetes with medication (tablets and insulin) to lower blood glucose. It is medically correct to state that the body does not require any external carbohydrate. The US Food and Nutrition Board of the Institute of Medicine states in their 2005 textbook that 'The lower limit of dietary carbohydrate compatible with life apparently is zero, provided that adequate amounts of protein and fat are consumed.'[10] Why give someone glucose (in the form of starch, carbohydrates or sugar) when their body cannot handle it, only to then give medication to control it? This makes no sense! Is it not better to avoid giving them glucose in the first place?

With the knowledge that eating fat does not make you fat, it is perfectly feasible to minimise carbohydrate intake, increase fat intake, seafood (kaimoana in the Maori language - Maori are the indigenous population of New Zealand) and, to a lesser extent, meat consumption. Studies have demonstrated the safety of low carbohydrate eating and sustainability of doing so in weight loss, diabetes improvement and diabetes reversal. The Virta Health study[11,12] shows that patients are capable of adhering to low carbohydrates, high fat or Ketogenic eating for at least 2 years. This study's results showed reductions from baseline in HbA1c (haemoglobin A1c), fasting glucose, fasting insulin, weight, systolic blood pressure, diastolic blood pressure, triglycerides and liver alanine transaminase, and HDL-C (high density lipoprotein cholesterol) increased. Use of medication declined, including insulin and sulphonylureas. There was also resolution of diabetes (reversal, 53.5%; remission, 17.6%). All reported improvements were statistically significant.

Figure 1. New Zealand obesity rates 1977–2012 (© Ministry of Health, New Zealand, reproduced under Creative Commons Attribution 4.0 International Licence).[3]



I have personally adopted the low carbohydrate, healthy fat way of eating. This involves cutting down on or avoiding the big five: bread, pasta, potatoes, rice, and fruit/starchy vegetables. The approach to low carbohydrate, healthy fat eating should be well formulated under guidance from an experienced healthcare practitioner. In terms of patients, after finding out what they are seeking, I discuss with them the philosophy of low carbohydrate, healthy fat eating, how it can apply to them and what our shared objectives might be. I provide a comprehensive list of 'what to eat' and 'what not to eat' and talk this through with them. In addition, I encourage use of a reputable online resource such as www.dietdoctor.com. This is to ensure that they maintain a balanced diet including micronutrients and sufficient non-starchy vegetables. This can be readily achieved.[13]

With appropriate counselling, advice and with ongoing support and follow up, I have seen a considerable number lose weight, reduce medication for blood pressure and diabetes, and reverse type 2 diabetes. I have had some very pleasing results, both subjective and objective, and this has translated into improved 'job satisfaction' with a sense of doing something positive. As a result, I must continue to give this advice as it would feel unethical not to do so. There will be financial savings with wider use of low carbohydrate, healthy fat diets through reduction in medication expenditure and less morbidity related to obesity and carbohydrate exposure.

This approach might not suit everybody. I am not alone in what I am doing and outside of research studies, the cohort of medical practitioners

adopting this treatment regime is increasing globally. There is mounting evidence to back-up the statements made above. What is the future? It is not to follow advice that is not scientifically supported. It is to follow logic in conjunction with good research and support from health authorities.

In summary, the low-fat diet has been a huge mistake and has led to many premature deaths and sick people. Humans do not need carbohydrates as a food source as once ingested they are broken down to glucose that makes people fat or fatter. Cholesterol is not the enemy. Low carbohydrate, healthy fat eating provides all the required energy for normal exercise requirements as well as all necessary macro and micronutrients. The obesity, prediabetes and diabetes epidemic must be reversed or better controlled. It is now time to admit that we were wrong (even if the intentions were good). It is time for change.

So, let's not feel guilty about a diet that includes pork scratchings, cheese and kaimoana.

Competing interests

The author declares no competing interests.

Funding statement

This document did not receive any funding.

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