VIEWS AND REVIEWS

NO HOLDS BARRED

Margaret McCartney: Promising miracle diet fixes isn't fair on anyone

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In the world of nutrition, “low carb and high fat” diets are a growing trend. Big claims are made, including from doctors, that these can “save your life,” “reverse type 2 diabetes,” and, of course, help you lose weight.¹⁻⁴ So, should GPs start recommending low carbohydrate diets to people who want to lose weight or who have type 2 diabetes?

Criticism of the status quo is reasonable. By its nature, diet research contains many uncertainties, with few long term randomised controlled trials. But doctors, researchers, and guideline committees can surely aspire to do better.

Many in the low carb lobby have been highly critical of current government dietary guidance. Some legitimately criticise conflicting or weak evidence underpinning some guidelines. But we should be just as critical of the evidence for low carb diets, which should include clear definitions. We must prove that such diets lead to the benefits their proponents claim. We shouldn't simply use anecdotes as the basis for changing practice, leaving it to others to find actual evidence.⁵

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For long term weight loss, a 2015 systematic review published in the *Lancet* found that low carb diets were no better than low fat diets. The difference between the two was statistically but surely not clinically significant—an average of 1.15 kg after a year.⁶ For type 2 diabetes, a 2011 systematic review found no consistent differences in weight and glycated haemoglobin (HbA_{1c}) between low fat and low carb diets.⁷

Several randomised controlled trials have been reported since then. An Australian trial in 2015 compared low fat and low carb diets, containing the same number of calories, in obese people with type 2 diabetes. Participants were offered fortnightly individual meetings with a dietitian, exercise classes three times a week, and key foods or food vouchers. Both groups lost weight, marginally more in the low carb group, but the difference in HbA_{1c} between the groups did not reach significance.⁸

A 2017 systematic review, meanwhile, found no long term difference between high and low carb diets in glycaemic control, weight, or low density lipoprotein cholesterol. The low carb diet did, however, allow for more people to use less medication: the average improvement was 0.34% lower HbA_{1c}.⁹

None of this negates the experience of people who dedicate themselves to a major dietary change of the low carb type and are successful in the long term. It does mean, however, that there isn't one big, miracle diet fix. A 2013 systematic review found that low carb diets were as good as a Mediterranean diet.¹⁰ The authors concluded that “there may be a range of beneficial dietary options for people with type 2 diabetes.”

Surely this is the offer we should make to patients. We need light, not heat. While it's long been known that bariatric surgery may effectively halt type 2 diabetes, the question is whether the same effect can be achieved with diet alone. A study of 11 patients who followed a very low calorie diet for eight weeks showed that fasting glucose returned to non-diabetic levels,¹¹ but a longer term, larger study is yet to report.¹² And the environment, poverty, inequality, and work all affect what (and how) we eat.

Promising an easy solution in the form of uncertain science isn't fair on anyone. And replacing one set of flawed guidelines with another is not progress.

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