Low Carb or Low Fat?

By Angela Dowden — January 31, 2020

There’s been endless debate about which is the best way to eat, and many an extreme diet created in both camps to line the pockets of dodgy doctors. However, if a new study published in JAMA Internal Medicine is anything to go by, it’s just not worth getting worked up about.

Nutritional studies are notoriously fraught with problems — rigorous randomized controlled trials are almost impossible to carry out in a way that will accurately answer dietary questions, people misremember or lie about what they eat in dietary surveys and trying to control for confounding factors in observational studies is a monumental pain in the proverbial.

Nevertheless, a just-published collaboration [1] between researchers in China and from Harvard University and New York’s Albert Einstein College of Medicine makes a really decent attempt at assessing the association between lower carbohydrate or fat diets and the risk of dropping down dead (within the time parameters of the study period — obviously we all have to die).

Whether the results are meaningful or “meh” depends on your point of view, but are worth a look anyway.
The study in question was an observational one with all the associated methodological flaws, but the numbers involved were large, increasing the statistical power and validity of the results.

Altogether, 37,233 American adults (mean age, 49.7 years, 52.6% female) were involved in the analysis, which included over 297,768 person-years of follow-up, during which 4,866 participants in the study died.

Efforts the researchers used to control for some of the limitations of an observational study included accounting for confounding factors, doing sensitivity analyses and checking for potential reverse causality.

And the results? Overall neither low carbohydrate nor low fat was associated with total mortality.

That wasn’t quite all the story though: “unhealthy” low carbohydrate and low-fat diets were associated with higher total mortality, whereas “healthy” low carbohydrate and low-fat diets were associated with lower total mortality.

For the record, high-quality carbohydrates in this research were whole grain cereals, fruits, and non-starchy vegetables. Fats that were counted as high quality were those with a higher proportion of polyunsaturates from plant sources, and a lower proportion of saturates from animal sources.

If the associations in this study are causal, it would suggest that when following a healthy dietary pattern, it matters not a jot whether your diet is lower in carbs or lower in fat.

Shock horror or barely a raised eyebrow? In truth, it’s not a very new or surprising message given humans have a remarkable ability to adapt to different types of diet, including varying proportions of fat and carbohydrate.

Neither will the study silence the hardcore keto/Atkins/paleo crowd, who will say — with some legitimacy — that this study has nothing to say about a very low carb diet as the cut off for “low” carb was less than 47% of energy, ie. more modest to moderate than rock bottom.

You could also just as easily conclude from this study that the reductions in mortality gained from healthy diets were just too small to focus efforts on.

Moreover, if you’re really wedded to your low-quality carbohydrates (defined as refined grains and added sugar, fruit juice, and potatoes) this study showed these foods weren’t associated with premature mortality — just total mortality. A tongue-in-cheek assessment would be that packing in the cookies, white bread and sodas might mean you don’t make it to 95, but you could still die happy in your late 70s.

Eating as sensibly as you are able, without obsessing about the exact makeup of your diet and enjoying what you eat has always seemed a good rule to follow. This study would appear to do nothing to change that message.