Low Carbohydrate Diets: Why You Don't Want the "Experts" to Tell You What to Eat

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25 December 2008
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Diabetes may be described as a disease of glucose intolerance: high blood glucose is both the characteristic indicator and the cause of complications. The loss of control of glucose metabolism is what makes a low carbohydrate diet a good therapeutic approach, and it's why I'm astonished that experts encourage people with diabetes to eat carbohydrates and then "cover" them with insulin [1].

I am also surprised to hear negative reactions to carbohydrate restriction from people who have actually seen the results. It is not that interesting to me. A more appropriate rebuttal is the remarkable story of a Type 2 diabete who, after starting on a low carbohydrate diet, was able to get off all her medications within a few months. I used this as a case study in my personal rebuttal to Hope Warshaw's recent article, "Why You Don't Want to Go Low Carb or Vegan," April/May 2007.

Ms. Warshaw's argument is that "avoiding carbohydrate, as some low carb diets suggest, does not entirely return blood sugar to normal. Even when blood glucose levels return to normal, people are still heavy. To lose this weight, one must lose fat as well. To do this, one must continue to eat a low carbohydrate diet." Ms. Warshaw goes on to say, "Second, an adequate amount of carbohydrate is an important component of a healthy eating plan. A diet with less than 100 grams of carbohydrates per day is considered to be low in carbohydrates. This is in the same ballpark as injecting insulin? And how healthy is an eating plan that requires medication?"

At the 2004 Brooklyn conference on the Nutritional and Metabolic Effects of Low Carbohydrate Diets, William Yancy, Jr., who is Director of Medicine at Duke University Hospital, remarked with regard to diabetes, "If you are interested in treating diabetes, you should not put diabetic patients on a low carbohydrate diet without first reducing their medication. Of course, if you are taking medication, you should reduce carbohydrates only with medical supervision. It strikes me as odd that what most experts know about metabolism - diabetes is, after all, a metabolic disease - they do not take into account that the number of people with diabetes who are eating fewer carbohydrates is on the rise. It is true that your brain needs glucose, but glucose can be supplied by the process of gluconeogenesis; that is, glucose can be synthesized from other substrates, including fat. In fact, it is estimated that thirty and seventy percent of your blood glucose comes from gluconeogenesis. There is no requirement for dietary glucose."
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Figure 1A. Macronutrient consumption during the diabetes epidemic. Data from National Health and Nutrition Examination Surveys.

Figure 1B. Incidence of diabetes by year. Data from National Center for Health Statistics.

The second thing we teach medical students is that almost all the increased caloric intake during the ongoing epidemic of diabetes is from carbohydrates. (Of course, almost everything increased except red meat and eggs.)

So what is Ms Warshaw's complaint? Well, she points out that "studies that compare low carb diets to conventional diets show better weight loss, decreased triglycerides, and higher HDL (healthy cholesterol)". But studies of low carb diets that last longer than six months do not show significantly more weight loss.

Something's wrong here. Because low carb diets do the same as traditional diets after one year, then you don't want to be doing a low carb diet longer than six months.
Reference [3] is important for showing the general health benefits of low carb diets even when a diet is not perceived as being difficult. I don't know of any study on any other diet that shows such good effects on controlling glucose and insulin without the side effects of the low-calorie diet. If we had been describing a drug, everybody would have rushed out to buy stock in our pharmaceutical company.
Ms. Warshaw's complaint is that these studies "show that many study subjects drop out of the study and are unable to ... compliance rather than to dissuade people from a strategy that actually works for the many people who follow it?

You might want to think twice before you let Ms Warshaw tell you what you don't want to do. "You'll have type 2 diabetes ... for example, D-solutions (http://www.dsolve.com/) and Dr. Richard Bernstein's forum (http://www.diabetes-book.com/).

I am most concerned that if Ms. Warshaw really had something positive to offer, she wouldn't need to dissuade people from making their personal choice. Candy followed by insulin is not good enough.

5. JS Volek, RD Feinman: Carbohydrate restriction improves the features of Metabolic Syndrome.