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 benefits of a low-carb approach to diabetes. 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 glucose to normal in every patient, sometimes blood glucose does return to normal. In any case, ingesting carbohydrate raises blood glucose.

Ms. Warshaw goes on to say, "Second, an adequate amount of carbohydrate is an important component of a healthy eating plan." However, an adequate amount of carbohydrate is not a healthy eating plan. An adequate amount of carbohydrate is likely to require a great deal of insulin supplement 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., M.D., stated, "The conclusion is that doctors 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 - is that we teach medical students at Downstate Medical Center is that there is no biological requirement for carbohydrate.

It is true that your brain needs glucose, but glucose can be supplied by the process of gluconeogenesis; that is, glucose can be produced from non-carbohydrate sources. In fact, the liver produces enough glucose to meet the needs of the brain at all times. Studies have shown that the liver can produce up to 180 grams of glucose per day. This value is not to be taken as a hard limit, but rather as a general indicator of the amount of glucose produced by the liver. Studies have also shown that the liver can produce enough glucose to meet the needs of the brain during times of fasting and exercise. In fact, the liver produces enough glucose to meet the needs of the brain during times of fasting and exercise.

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The second thing we teach medical students is that almost all the increased caloric intake during the ongoing epidemic of diabetes is from carbohydrates. People generally have not increased their consumption of fats or saturated fats. However, we have almost doubled the caloric contribution from carbohydrates. It is not only the absolute caloric intake that has increased, but also how the energy is distributed among the different macronutrients.

So what is Ms Warshaw's complaint? Well, she points out that "studies that compare low carb diets to conventional diets have shown that low carb diets result in more weight loss, a lower incidence of type 2 diabetes, and have an impact on the incidence of some cancers. However, 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 eating that way for the rest of your life. Triglycerides and HDL (healthy cholesterol) were much better on the low carb diet than the low fat diet (Figure 2).
Reference [3] is important for showing the general health benefits of low carb diets even when a diet is initially intended for weight loss. I don't know of any study on any other diet that shows such good effects on controlling glucose and insulin.
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.