

Position Paper on Net Carbs

March 25, 2004
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Definition of net carbs

A number of food products have appeared in the commercial market to address the increasing popularity of low-carbohydrate diets for weight loss. Some products are claiming or implying that they are “low carb”, “reduced carb” or “carb-free”. A seal containing a specific amount of “net carbs” is sometimes displayed on the package. In this context, the term “net carbs” refers to the amount of carbohydrate remaining after subtracting other carbohydrates that are claimed to have “minimal impact on blood glucose compared to sugar”, like fiber and polyols (sorbitol, mannitol, xylitol and others). Essentially, the perception conveyed is that net carb counting breaks carbohydrates down into those that pass quickly into the bloodstream (“bad”) and those that do not (“good”). The net carb approach suggests that these products may assist with weight loss since the carbohydrates that have been substituted in place of sucrose (and other simple and complex sugars) have negligible effects on blood glucose levels.

Regulatory status on net carbs

Net carb labeling is not regulated by the U.S. Food and Drug Administration (FDA). Therefore, there is no legal definition of a ‘net carb’. The U.S. FDA has sent warning letters to manufacturers who make various low-carbohydrate claims on their products (see FDA warning letters in reference section). On February 2, 2004, the Grocery Manufacturers of America (GMA) submitted a petition to the U.S. FDA to establish new regulations for claims about carbohydrate content. Additionally, the consumer watchdog organization, the Center for Science in the Public Interest (CSPI), announced its support of GMA’s request and has called on the FDA to regulate implied low-carb claims. Various media sources have stated that the FDA expects to come out with their claims on carbohydrates in summer of 2004.

Metagenics advocates a balanced diet consisting of healthy carbohydrates

Metagenics’ position on “net carbs” labeling of products is that this claim may be misleading and confusing to the consumer. The most effective strategy for sustained weight loss continues to be a balanced diet, which includes healthy, low-glycemic index carbohydrates such as fiber, and sufficient exercise.

As an alternative to “net carbs” labeling, Metagenics supports the use of glycemic index and glycemic load for determining the effect of specific carbohydrates on blood glucose levels. There are numerous scientific publications on this topic, which is in contrast to the lack of scientific scrutiny applied to the “net carbs” concept.

Glycemic Index/Load

Rather than using the term, “net carbs” which is unapproved legally and (potentially) misleading, it may be more accurate to use “glycemic index” and “glycemic load” to reflect carbohydrates that have an effect on blood glucose levels. The glycemic response of a carbohydrate-containing food, classified using the glycemic index, is a quantification of this response relative to glucose (Wolever et al., 1991). The glycemic load, which is derived by multiplying the amount of carbohydrate consumed in the diet by its glycemic index, has been proposed as a measure of the overall ability of a diet to influence glucose and

insulin levels.

It has been suggested that reducing postprandial glucose and insulin may be beneficial in individuals with insulin resistance (Wolever and Mehling, 2003). Plasma glucose and insulin levels can be affected by the amount and/or the source of dietary carbohydrate. Fructose is an example of a carbohydrate with a relatively low impact on plasma glucose levels (glycemic index = 19) (Brand-Miller et al., 2003). A diet with a low glycemic load is associated with a reduced risk of developing diabetes (Salmeron et al., 1997a; Salmeron et al., 1997b) and coronary heart disease (Liu et al., 2000).

Fiber

Fiber-containing foods tend to have low glycemic index values. Despite the fact that fiber is an important source of carbohydrate due to its numerous, recognized health benefits, the average dietary intake of fiber in the U.S. continues to fall well below the American Heart Association recommendation of 25-30 grams per day (Howarth et al., 2001). Intake of fiber may be related to body weight regulation due to its effects on satiety and hunger (Yao and Roberts, 2001; Howarth et al., 2001). Additionally, there are studies to support the role of fiber in the prevention of cardiovascular disease and type 2 diabetes (Pereira and Ludwig, 2001).

References

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FDA Warning Letters:

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