What Does “Net Carbs” Mean on Low-Carb Products?

The net carbohydrate content is designed to reflect the amount of carbohydrates a product contains that will cause blood sugar levels to rise. There is no legal definition of “net carbs”. In calculating the net carbohydrate content, many food companies subtract the number of grams of dietary fiber, as well as other carbohydrates such as glycerin and sugar alcohols, from the number of total carbohydrates listed in the nutrition facts label. According to FDA regulations, all ingredients must be listed on the label, which is why the manufacturer must still list all the carbohydrate foods and amounts.

The idea is that the glycerin and the sugar alcohols do not raise blood sugar as quickly or as high as the regular carbohydrates, such as sugar, honey, or fructose. Insulin is what stores sugar as fat, so less insulin means less fat storage. Although it is true that these alternative sweeteners do not impact insulin in the same way, most still supply calories. The potential of less insulin production is also why many of these products are considered safe for diabetics to consume.

Some authorities still recommend that carb-conscious consumers look at the total number of carbohydrates in the nutrition facts label and then subtract only the dietary fiber in order to get an idea of how many net carbohydrates are in the product. Unlike sugar alcohols and glycerin, dietary fiber does not make a significant contribution to the calorie content of foods because it is not readily digested by the body.

Other terms that might be seen on low-carb product labels are “effective carbs” or “low-impact carbs”. These terms essentially mean the same thing - the number of carbs that supposedly will not affect blood sugar. However, there are reports that blood sugar is affected by these ingredients to some degree. Each person is affected differently, so it is important to pay attention to your individual response.

Terms and Definitions

Glycerine, also known as glycerol or glycerin, is a thick liquid used by food manufacturers to improve taste, add moisture, and impart sweetness. Glycerine is classed as a carbohydrate, but does not impact blood sugar levels the same way as carbohydrates like cane sugar. Consequently, it can be used as a sweetener alternative. It is 0.6 times as sweet as cane sugar and contributes 4.32 cal per gram (while all other carbohydrates contribute 4 calories per gram). Chemically, it is one of the most common alcohols found in human metabolism. It is also found naturally in animal and plant products, and is the backbone of triglycerides (fats) and phospholipids.

Sorbitol is a sugar alcohol. Sugar alcohol is neither a "sugar" nor an "alcohol". In this case it is used in the scientific definition, "of a processed liquid." Sugar alcohols, which include sorbitol, xylitol, maltitol, mannitol, and erythritol, are found naturally in berries, apples, and plums. They also are produced commercially from carbohydrates such as sucrose, glucose, and starch. Most sugar alcohols are approximately half as sweet as sucrose. As a group, sugar alcohols are incompletely absorbed and metabolized, and consequently contribute fewer calories than other carbohydrates. Sugar alcohols affect blood glucose levels less dramatically than sugar and therefore require little or no insulin for metabolism. Thus, sugar alcohols are often used in foods for diabetics. Keep in mind, sorbitol has been implicated in cataract formation. Additionally, sugar alcohols in general can cause uncomfortable gastrointestinal bloating, cramps, and diarrhea when taken frequently.

Stevia is a no-calorie herbal shrub, native to Paraguay and Brazil, that has been enjoyed for its sweetness and medicinal properties for centuries. In its natural form (green plant in leaf or powder form or dark liquid), this naturally sweet herb is approximately 10 to 30 times sweeter than common table sugar. The refined stevioside forms (white powder or clear liquid extract) can range anywhere from 100 to 300 times sweeter than table sugar. This sweetener does not possess any of the adverse effects associated with sugar consumption, and may actually have some health-giving attributes. The sweetness
and taste of all forms of stevia can vary due to where and how it was grown, processing methods, and if it is dilated or “blended” with fillers like maltodextrin. Extensive research indicates that stevia is extremely safe.6,7 This sweet herb is heat-stable and can be used for such things as tea, lemonade, smoothies, breakfast grains, and baked goods.

**Sucralose**, aka Splenda™, is a no-calorie sugar substitute is derived from sucrose (sugar) through a process that selectively substitutes three atoms of chlorine for three hydrogen-oxygen groups on the sucrose molecule. This makes sucralse a chlorocarbon, a substance that has long been known for causing organ, genetic, and reproductive damage. The Merck Manuel and OSHA Hazardous Waste Handbook states that chlorine is a carcinogen. Sucralose has also been shown to cause swelling of the liver and kidneys.9 The structure of the sugar molecules is changed so that it is up to 600 times sweeter than sugar. There are limited human studies and no long-term studies of this product. Overall, substituting this sweetener for sugar in your diet will not make your diet healthier. Vitamin Cottage only carries one product with this sweetener, the Ultra Lo Carb 2 bar by Country Life (Bio Chem).

**Xylitol** is made from wood or other plant–products, and is a sugar alcohol (as mentioned above). Since this product is metabolized differently than sugar, it may be used safely for diabetics and hypoglycemics. Bacterial salivary organisms do not feed, grow, or ferment on xylitol as they do on other simple sugars. "Sugar-Free" chewing gum contains xylitol because it does not produce the bacterial support for increase of cavity-causing acids, particularly when it makes up 60% of the product. Keep in mind, some resources say sugar alcohols can stimulate hunger and cause addictive allergies similar to sugar.5

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