



What the Glycemic Index of Carbs Can Tell Us

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In recent years, researchers have looked more and more at how the type and amount of carbohydrates that we eat can affect our health. A recent study helps build the case that the kind of carbohydrates and the quantity in our diet can influence our risk for cancers of the colon, uterus and stomach. But care is needed in evaluating what the research in this area that centers around concepts called glycemic index and glycemic load really says.

Glycemic index refers to how a particular food affects the body's sugar and insulin levels. Common sense says that sugars in foods always raise blood sugar more than starches, but glycemic index testing shows that potatoes can raise blood sugar and insulin levels at least as much as pure sugar. Trying to eat foods with low glycemic index readings, however, is tricky. A food's effect on one's blood sugar depends on what else is eaten, the portion size, and how it's prepared.

The term glycemic load, on the other hand, tries to calculate the combined value of one or more foods' glycemic index readings and how much of them a person eats. It can be used to describe the effects of one food, a meal, a whole day's eating, or eating over many days. In many recent studies, the glycemic load of a person's overall diet is more significant than the glycemic index of individual foods.

For example, one recent report from the large national Women's Health Study shows that women with the highest glycemic load are nearly three times as likely to develop colorectal cancer in the next eight years than those with the lowest glycemic load. In an

earlier study, men and women with the highest glycemic load were 80 percent more likely to develop colon cancer compared to those with the lowest load.

A high glycemic load may also raise the risk of uterine and stomach cancer by 24 to more than 100 percent, compared to those with lower glycemic loads. Researchers think that diets that repeatedly raise blood sugar levels cause insulin levels to soar. Insulin and insulin-related growth factors, in turn, appear to promote the development of some cancers.

The positive link between low-glycemic-load eating habits and better health helps explain why populations around the world who eat plant-based diets that emphasize vegetables, fruits, whole grains and beans have fewer cancers and heart disease than we have in the U.S. In contrast to the low-carbohydrate diets popular here, these foreign populations eat high-carbohydrate diets. Their carbohydrates, however, are not our 24-ounce soft drinks and super-size baked goods made with refined flour.

It is important to note in the connection between glycemic load and disease that a low-glycemic diet will not in itself protect against disease. It makes a difference whether such a diet comes from ample portions of vegetables, fruits and unrefined whole grains or massive amounts of meat. Either one can have a low glycemic load value.

Some people embrace a low-glycemic diet in an attempt to lose weight. But selecting foods with a low glycemic load will not bring automatic weight loss. Whether you gain or lose weight depends on the balance between the calories you consume and the calories you burn up. It doesn't matter if you are strict and eat only meals and snacks with a low-glycemic load. If you overeat, you'll still gain weight if you don't exercise more.

In sum, the glycemic theory offers a way for people to examine and think about their

7/04 SYFYW

eating habits. But it does not lay out a plan for good nutrition. To improve what you eat and decide the appropriate amounts of food, you should turn to a nutrition authority like the American Institute for Cancer Research.

If you need help to improve your eating habits and prevent weight gain, *Shape Your Future...Your Weigh!*TM can help. Contact your local base Health and Wellness Center (HAWC) or Dietitian for more information or visit the *Shape Your Future...Your Weigh!*TM community website at <http://airforcemedicine.afms.mil/shapeyourfuture>.