

The Glycemic Index: Good Carbs, Bad Carbs

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One of the most frequent dietary suggestions I have received is to eat "low glycemic foods." The Glycemic Index (GI) is a numerical ranking of foods showing how quickly they are broken down into sugars after a meal as compared to a standard (usually glucose). While the index can be a useful tool (similar to calorie counting), the GI rating of any one food also depends on a variety of other factors. "People think that a food has a definitive glycemic index, but it depends on how the food is processed [or not], stored, ripened, cut and cooked," states Xavier Pi-Sunyer, an obesity expert at Columbia University, College of Physicians and Surgeons in New York.

First, all foods are made up of proteins, fats and carbohydrates. These three nutrients are essential to our bodies and so is the proper daily intake. It is important for us to make better choices about food, especially carbohydrates — a fuel for our bodies. Our goal should not be to restrict any essential part of a healthy dietary plan, such as carbohydrates, but to choose them well.

DEFINITION OF GLYCEMIC INDEX

The glycemic index (GI) expresses the rise in blood glucose elicited by a carbohydrate food as a percentage of the rise in blood glucose that would occur if the same individual ingested an equal amount of carbohydrate from white bread or glucose. Increased use of low GI foods such as legumes, barley, pasta and whole intact grains (e.g., cracked wheat) may help improve blood glucose control and allow carbohydrate intake to be increased without raising serum triglycerides.

What is a "good carb"? We should be eating a variety of carbohydrates consisting of fresh vegetables, fruits and whole grains instead of those that have been highly processed, e.g., sweetened cereals, cakes, cookies or candy. You may have heard that it is best to eat *complex* carbohydrates and not *simple* sugars. While this is not a bad place to begin, it is not the whole story. Some simple sugars are actually good for you (e.g., flavored yogurt, fruit), while some complex carbs or starches (e.g., white bread, potatoes and pastas) are not as good for you because they raise your blood sugar levels.

Since not all carbs are equal, we need to fuel our bodies with healthier choices. I have learned that it is best to eat a variety of foods in as close to their natural state as possible. This simple advice is still as true today as it was when I first heard it. When I stray too far from this advice for too long, my body and blood sugar pay the price.

Carbohydrates provide that important part of our food — fiber. It helps lower the impact of the simple sugars we eat (e.g., fructose in fruits). Remember, whole grain flours, which are rich in fiber, are much more nutritious than white flours that have been processed removing essential nutrients. Even "enriched" white flour does not restore all the nutrients removed during processing.

Jennie Brand-Miller, author of the book *New Glucose Revolution*, reminds us, "The foods that provide the most carbohydrate in the diet are the ones that need close attention (potatoes,

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breakfast cereals, breads, soft drinks) not carrots, honey or over-ripe bananas."

Do you have to give up all the foods you love? Of course not! I enjoy an occasional cookie. But, when I do, I choose a healthier alternative such as oatmeal nut cookie instead of a store-bought sugar cookie. And, occasionally, I splurge on a small amount of ice cream or chocolate, savoring every bite. But, when planning my daily diet, I choose the most nutrition I can get for my money and my health by including fresh fruits, a variety of vegetables, and wholesome whole grains. ●

Other interesting note: The role of the GI in diabetes therapy is controversial. The GI is not endorsed by the American Diabetes Association, but is recommended by the Diabetes Nutrition Study Group of the European Association for the Study of Diabetes and by the World Health Organization. There is concern that including GI information in nutrition teaching is too complicated and limits food choices.

Source: Guidelines for the Nutritional Management of Diabetes Mellitus in the New Millennium: A position statement of the Canadian Diabetes Association.

Low Glycemic Index Foods

(Choose these foods more often)

Food	Glycemic Index
Popcorn	79
Oatmeal (slow-cook oats)	70
Parboiled rice	68
Pumpernickel	66
All-Bran™	60
Sweet potato	54
Skim milk	46
Pasta	40-70
Lentils/kidney/baked beans	40-69
Apple, banana, plum	34-76

High Glycemic Index Foods

(Choose these foods less often)

Food	Glycemic Index
Instant rice	124
Corn Flakes™	119
French fries	107
Soda crackers	106
Potato (boiled/mashed)	104
White bread	100
Couscous	93
Ice cream	87
Oatmeal (1-minute oats)	87
Table sugar (sucrose)	83

Source: www.diabetes.ca/Section_About/glycemic.asp

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THE 2005 AWARD

The five members of the Review Panel are now evaluating applications for the third award of \$25,000 to be announced this fall. Seven researchers of the thirteen original applicants were asked to submit the requirements for Phase II of the selection process. The next Call for Applications will be issued in 2006.

See pages 4-5 of this issue of Post-Polio Health for a summary of the 2003 award given to a team of researchers at the University of Michigan, Ann Arbor.