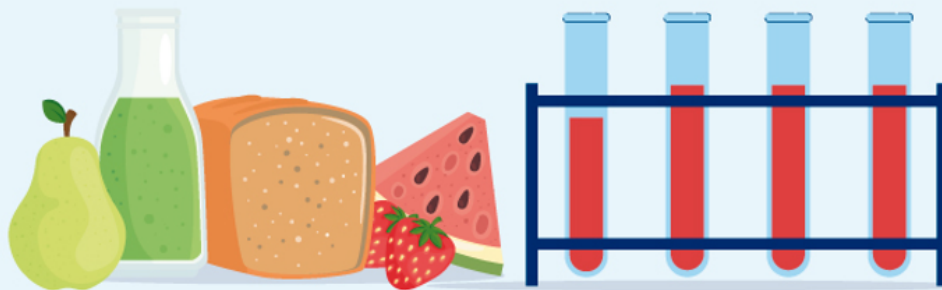


Understanding the Glycemic Index

What is the Glycemic Index?

Ranks carbs from 0 to 100 according to how much they cause the blood sugar to rise after they're eaten.



Susan Bowerman M.S., RD, CSSD, CSOWN, FAND – Sr. Director, Worldwide Nutrition Education and Training, Herbalife Nutrition

The glycemic index might be a popular concept, though one that is not all that easy to grasp. Since it relates to the overall quality of your diet and also has implications for weight management, it is important to understand this concept and how it can help you make better choices.

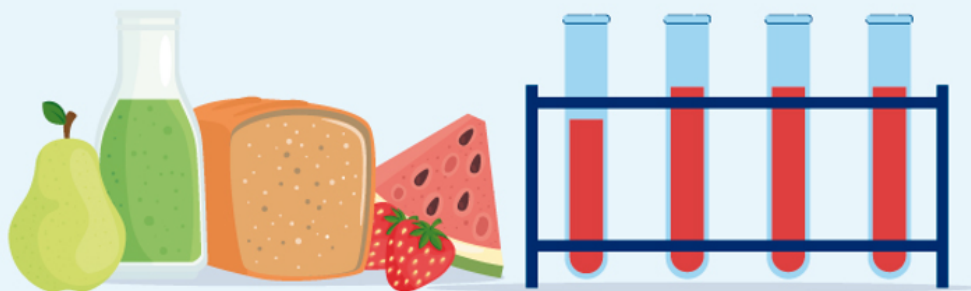
The glycemic index looks at the effects of carbohydrate-containing foods on sugar levels in your bloodstream. Whenever you eat and digest carbohydrate-rich foods – like fruits, vegetables, grains, and sweets – the end result is a rise in your blood sugar (blood glucose).

This sugar in your blood is important: it's the primary fuel for your brain and muscles and is, in large part, what keeps you going mentally and physically throughout your day.

But not all carbohydrate-containing foods cause your blood sugar to rise to the same degree – and this is where the glycemic index (or GI) comes in. The GI ranks foods according to how much and how rapidly they cause the blood sugar to rise after they're eaten.

What is the Glycemic Index?

Ranks carbs from 0 to 100 according to how much they cause the blood sugar to rise after they're eaten.



How Was the Glycemic Index Established?

The first paper on the glycemic was published almost 40 years ago and described how a small group of healthy people were used to establish the index.

The volunteers were fed 62 different foods in an amount necessary to supply 50 grams of carbohydrate (which varies a lot from food to food – it takes about 60 baby carrots but a mere handful of cooked white rice). Then, their blood sugar measurements were taken several times over a 2-hour period.

The effect of each food on blood sugar was compared to the effect of 50 grams of pure glucose (the form of sugar in your bloodstream), which was given a value of 100. Foods that caused the blood sugar to rise quickly and steeply had a number closer to 100, while foods that caused a less dramatic rise in sugar had a lower GI. Values of 70 or more place foods in the high GI category, and low GI foods are those with a GI value of 55 or less.

Which Foods Have the Highest Glycemic Index?

Foods that are high on the GI scale are generally low in fiber but starchy or sugary. Some examples include:

- White bread
- Sweet breakfast cereals
- Noodles
- Fruit juices
- White rice

Since these foods are digested and absorbed relatively quickly, they tend to cause fairly large and rapid rises in blood sugar.

This burst of sugary energy *might* sound like a good thing – after all, we need sugar in the blood to fuel our activities, but not in such large surges. A quick spike in your blood sugar is often followed steep drop – and suddenly you're craving something sugary to boost your blood sugar levels back up. And then, the cycle starts all over again.

If you wind up snacking on sugary foods all day long, there's a good chance you'll take in more calories than you need.

Which Foods Have a Low Glycemic Index?

The lowest GI foods tend to be carbohydrate-rich foods that are whole and unprocessed. Some examples include:

- Vegetables
- Whole fruits
- Beans
- Most 100 percent whole-grain foods like brown rice, rolled oats, barley, quinoa, and 100 percent whole-grain bread have relatively low GI rankings.

Since these foods are high in fiber – which means they take longer to digest – your blood sugar

rises more gently after you eat them.

Rather than a big spike in blood sugar, these wholesome foods lead to a slower release into your bloodstream, which provides you with more sustained energy. And, thanks to their high-fiber content, they're more filling, too, so a diet that emphasizes low GI foods can be a good strategy for weight control.

Glycemic Index Isn't the Whole Story

If you use the GI as a guide to choose what to eat, it can steer you towards foods that are less carb-heavy – like whole grains and veggies – with fewer calories per bite. But you should know that this isn't always the case.

Some foods – like ice cream – have a low glycemic index because their high-fat content slows digestion, which means they don't cause a big spike in blood sugar after they're eaten. On the basis of GI alone, you might conclude that ice cream was a good thing to include in your low GI diet – but it's high in calories and fat.

On the other hand, some healthy foods have a high glycemic index value which can be a bit misleading if you don't consider portion size. That's because the effects of a food on your blood sugar depend not only on how quickly that food makes your blood sugar rise, but also on the amount of carbohydrate it delivers in a serving.

Take watermelon for example: you'd need to eat 5 servings of watermelon to get the 50 grams of carbohydrate needed to determine the GI.

Since a typical serving contains only 10 grams of carbohydrate or so, it doesn't really raise your blood sugar all that much. This is where the concept of glycemic load, or GL, comes in. The GL of a food is a calculation that takes into account both the GI and the amount of carbohydrate per serving. So while watermelon has a relatively high GI of 80, it has a low glycemic load; the same holds true for carrots. If you were to focus on GI values alone, you might end up omitting some healthy foods unnecessarily.

That's why it's better to look at the glycemic index of your diet as a *whole*, rather than getting hung up on individual foods. In general, though, choosing foods with a low GI should steer you away from calorie-dense foods, and more towards those that are nutrient-dense.

Using the Glycemic Index to Reduce Your Overall Carbohydrate Load

To cut back on high GI foods and reduce the carbohydrate load of your diet overall, here are some switches you can easily make:

- Instead of white rice and potatoes, switch to brown rice or other whole grains like cracked wheat, barley, millet, or quinoa. You can also go for beans, lentils or sweet potatoes.
- Rather than drinking a lot of calories from high GI fruit juices, eat whole fresh fruits.
- Have berries on cereal, or a whole piece of fruit for a snack or dessert.
- Switch from refined white breads, crackers, and snack foods to products that are made

with 100 percent whole grains. Whole and lightly processed low GI foods are bulkier and more filling than their refined cousins, which means they retain their natural vitamins, minerals, and healthy antioxidant phytonutrients, too. And that means that you get more nutrition for your calories.

By swapping out the high glycemic index foods and replacing them with more low GI items, you can greatly reduce the overall carbohydrate load of your diet, which can help you with calorie control while providing a healthy nutrient boost.