

The Glycemic Index of Foods



WHAT IS IT?

The glycemic index is a value assigned to foods based on how slowly or how quickly those foods cause increases in blood glucose levels. Foods low on the glycemic index (GI) scale tend to release glucose slowly and steadily. Foods high on the glycemic index scale tend to release glucose rapidly. Low GI foods tend to foster weight loss, while high GI foods help with energy recovery after exercise, or to offset hypo- (or insufficient) glycemia.

WHY IS IT HELPFUL?

Foods are ranked on a scale of 0 to 100, with pure glucose (sugar) given a value of 100. In general, the more processed a food is, the higher its GI value, and the more fiber or fat in a food, the lower its GI value. The American Diabetes Association, on the other hand, says that the total amount of carbohydrate in a food, rather than its glycemic index or load, is a stronger predictor of what will happen to blood sugar. Following the principles of low-glycemic-index eating is likely to be beneficial for people with diabetes. But reaching and staying at a healthy weight is more important for your blood sugar and overall health. If you are curious, try eating a higher GI food and checking your blood sugar to see how it affects you, as everyone is different and certain foods can affect people in different ways!

GLYCEMIC INDEX (GI) AND GLYCEMIC LOAD (GL) OF COMMON FOODS^(7,8)

LOW (55 OR LESS), MODERATE (56-69) AND HIGH (70 OR MORE) GI FOODS^(9,10)

LOW GI

MEDIUM GI

HIGH GI

FRUITS

STARCHY FOODS — BREADS, CEREALS AND BAKED GOODS

Apple muffin	Arborio rice	Brown rice
Barley, pearled, boiled	Bagel	Bran Flakes
Bulgur	Baguette	Calrose rice
Gluten-free, low-GI, white bread	Basmati rice	Corn Flakes
Gluten-free muesli	Brown rice	Dark rye
Noodles	Couscous	Donut
Oat bran bread	Cornmeal	Gluten-free, multigrain bread
Porridge, quick oats	Cream of wheat	Glutinous rice, boiled
Pumpernickel	Crumpet	Instant rice
Pasta (most types)	Croissant	Jasmine rice, fragrant
Popcorn	Fruit loaf	Lebanese bread
Quinoa, boiled	Hamburger bun	Millet, boiled
Rice, long grain, 15 m boiled	Muesli, natural, fruit	Pretzels
Rye, whole, cooked	Pancake (home-made)	Puffed wheat
Semolina, steamed	Pita bread	Rice cakes
Sour dough	Polenta	Scones
Sponge cake, plain	Spelt bread	Sticky rice
Wild rice	Tapioca	Sushi rice
Wholemeal barley bread	Udon noodles	Waffles
Wholemeal rye bread	White rice with low-fat milk	Waxy rice, boiled
	Wholemeal bread	White bread

STARCHY FOODS — LEGUMES

Legumes, such as kidney, soy, baked bean, lentils, haricot, butter, black-eyed, chickpeas	Broad beans, frozen, reheated	
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STARCHY FOODS — STARCHY VEGETABLES

Sweet corn, cooked	Frozen French fries, baked	Kumara, boiled
Taro, peeled, boiled	New potato, canned, microwave 3 minutes	Other potatoes
Yam, peeled, boiled	Swede, peeled, boiled	
	Sweet potato, (Ipomoea batatas), boiled	

MILK AND MILK SUBSTITUTES

Cream	Milk, condensed	Rice milk
Custard	Sweet oat milk, calcium enriched	
Ice creams		
Milks		
Smoothies		
Soy milks		
Yogurts		

HIGH GI

Lychees, canned	79
Watermelon	80/72

MEDIUM GI

Raisins	66
Pineapple	51-66
Rockmelon	70/65
Apricots, cnd, syrup	64
Cherries (dark)	63
Dates, not spec	62
Figs, dried	61
Mango	60
Bread fruit	60
Kiwi fruit	58
Sultanas	56
Pawpaw	60/56
Tropical fruit salad	54

LOW GI

Plums	53
Bananas	51
Strawberry jelly	51
Grapes	43-59
Oranges	31-48
Orange juice	46
Peach	28-56
Apple juice	44
Apples	28-44
Pears, canned	25-44
Pears, raw	33-42
Figs, raw	41
Strawberries	40
Apricots, dried	31
Prunes	29
Grapefruit	25
Lemons/limes	-
Raspberries	-
Rhubarb	-

Note: The less ripe the fruit, the lower the GI

GLYCEMIC LOAD

Glycemic Load (GL) is like the glycemic index, but it is a little more advanced. Glycemic load takes into account both the quality (high or low on the index) and the quantity (how many servings/ g of CHO you eat). If you eat a low glycemic food, but you eat a lot of it, it will have a greater impact on your blood glucose than if you ate a little! You can calculate glycemic load with this formula:

$GL = (GI \times \text{the amount of carbohydrate}) \div 100$

A Low GL = 1-10. A moderate GL = 11-19. A High GL = 20+. The goal is to eat a meal with the lowest GL possible.

Let's try an example:

- A banana has a glycemic index of 51
- There are 27 g of carbohydrates in a banana.
- So the Glycemic Load of a banana = $(51 \times 27) / 100 = 13.8!$

TEST YOURSELF!

The Glycemic Index and the Glycemic Load are relatively new topics. Your glucose response to a food might vary a bit from someone else's! It's best to try out some of these foods, and then test your blood glucose. See which foods you best respond to and include more of those to improve your blood sugar management. Ask your diabetes educator when to check your BS to determine the glycemic index of a food.

TIPS AND SUMMARY

- The glycemic index is a measure given to a food from 0-100 to determine its impact on your blood glucose.
- Foods high on the glycemic index are typically more refined or processed foods.
- Foods low on the glycemic index are those that are high in fiber and/or fat.
- Add protein or fat to any meal to slow digestion and reduce glycemic load.
- Choose foods low on the glycemic index to help improve weight and blood sugar management.
- The glycemic index of foods can vary a bit from person to person so test your sugars after certain foods to determine your relative response.