



# glycemic INDEX

## Definition

The glycemic index (GI) is a rating system for carbohydrates based on how high the blood sugar rises in response to a fixed quantity (50g.) of a carbohydrate food compared to a standard of sugar in the first two hours after consumption. It compares carbohydrates gram for gram for each food, providing a number based on the effect on blood sugar. Carbohydrates that are rapidly digested have the highest GI and those that are slowly digested have a low GI. A food with a low GI is thought to create a lower insulin demand, better long-term blood glucose control, and a reduction in blood lipids, while a food with a high GI is thought to create a high insulin demand. In a person with a sensitivity or allergy to a low glycemic food, a high insulin demand can be created. Therefore, the GI should be used as a guideline along with avoiding foods that cause sensitivities or allergies. The GI is an attempt to simply minimize insulin-related problems by identifying and avoiding foods that have the greatest effect on blood sugar (glucose levels). While this information is valuable, it is also incomplete because the GI only refers to foods eaten alone and doesn't take portion size into account. The Glycemic Load (GL) is a better measure of a food's effect on blood sugar since it takes both the GI and the portion size into account. In reality, there are limitations to both the GI and the GL when selecting which foods to eat. Diet is much more complex than this. Other drawbacks are that the same foods may vary in their GI's, humans are the test subjects and people digest carbohydrates differently and have different insulin response to carbohydrates. The preparation of food also affects the GI.

It is also especially important to remember that while tests for GI tests are usually done on individual foods, we often consume those foods in combination with other foods that contain certain levels of protein, fat, and fiber that will generally reduce the GI of the individual foods in the meal.

When considering the strengths and weaknesses of the GI, remember that the real goal is to control blood sugar and insulin levels. In general, balancing macronutrients enough with the lower glycemic carbohydrates to produce a satiation effect from the meal is the ideal goal.

### Foods with a Low Glycemic Index

#### FRUITS

•	bananas	(51)	•	apples	(40)	
•	blueberries	(40)	•	prunes	(29)	
•	cherries	(22)	•	raspberries	(32)	
•	grapefruit	(25)	•	tomatoes	(38)	
•	green grapes	(43)	•	oranges	(51)	
•	pears	(33)	•	plums	(24)	

*Note: As far as fruits go, the sweeter the taste, generally the higher the glycemic index.* 

•	asparagus	(15)	•	lettuce	(15)
•	broccoli	(15)	•	mushrooms	(10)
•	cabbage	(10)	•	onions	(10)
•	carrots	(49)	•	peppers	(15)
•	green peas	(48)	•	spinach	(15)
•	beets	(64)			

## BEANS

•	kidney beans	(29)	•	lentils	(30)
•	garbanzo beans	(34)	•	lima beans	(32)

## OTHER CARBOHYDRATES

<ul> <li>sourdough bread</li> </ul>	(52)	•	brown rice	(55)
• rye bread	(58)	•	whole grain bread	(50)
• oatmeal	(48)	•	pita bread	(57)
• couscous	(65)	•	spaghetti	(41)
• corn	(60)	•	barley wheat	(25)
• whole grain-				
-pumpernickel bread	(46)			
OTHER FOODS				
• dairy products		•	meat	
• eggs		•	nuts	
• seeds				

These foods all contain a low glycemic index.

\* For gluten-free choices, see our Gluten-Free booklet.

set goal	ACTION PLAN:					
develop plan	goal:	ac	tion:			
take action						
score your success						
	plan:					
	SUCCESS score:	scale: 1 (lov	vest) - 10 (highest)			
		current s 30 day s	core			

60 day score \_\_\_\_\_