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Glycemic Index and Glycemic Load

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Glycemic Index

The ***glycemic index*** (GI) tells you how carbohydrate foods raise blood glucose compared to either glucose alone or white bread.

- Glycemic index ranges from 0 to 100, where 100 is pure glucose (sugar).
- GI is based on 50 g of carbohydrates from each food.
- The lower a food's GI, the slower blood sugar rises after eating that food.
- The higher a food's GI, the quicker blood sugar rises after eating that food.
- Glycemic index considers effects of the carbohydrate content of food but **not** the overall nutritional value of a food.
- GI is determined using reference lists, charts, or books. An individual cannot calculate a glycemic index independently.

Glycemic index (GI) level of a food	Assigned GI value
Low GI	55 or less
Medium GI	56 to 69
High GI	70 or higher

Research is mixed on whether choosing foods based on their glycemic index helps control your blood sugar over time. Speak with your healthcare provider to determine if and how you should use glycemic index to manage your blood glucose.

Glycemic Index (GI) of Select Common Foods

Food	GI value
100% whole grain bread	51
Apple	39
Baked beans	40
Baked russet potato	111
Banana, ripe	62
Brown rice	50
Carrots	35
Corn tortilla	52
Grapes	59
Green peas	51
Ice cream, regular	57
Instant oatmeal	83
Macaroni	47
Microwave popcorn, plain	55
Milk, full fat	41
Milk, skim	32
Oatmeal	55
Orange	40
Peach	42
Peanuts	7
Raisins	64
Spaghetti, white, boiled	58
Sweet potato	70
Watermelon	72
Wheat tortilla	30
White bagel	72
White pita bread	68
White rice	89
White wheat flour bread	71
Whole wheat bread	71

Glycemic Load

Glycemic load (GL) takes into account the GI of a food and how much of that food you eat (planned portion size). GL can be calculated for any size serving of a single food, a mixed meal of several foods, or an entire day's meals.

Glycemic load = (carbohydrate content in grams x GI) / 100

Glycemic load (GL) level	Assigned GL value
Low GL	10 or less
Medium GL	11 to 19
High GL	20 or higher

References

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