

CHOOSING LOW GLYCEMIC INDEX FOODS

The glycemic index is a ranking of foods based on their potential to raise blood glucose. The impact a food will have on blood glucose levels depends on many other factors, for instance: ripeness, cooking time, fiber and fat content, time of day, blood insulin levels, and recent activity. Therefore, this index is not to be used in isolation. The total amount of carbohydrate, amount and type of fat, fiber and salt content, as well as the caloric value are also very important. The glycemic index is a useful, additional tool to help you improve your blood glucose levels. The following are some general tips to get you started:

1. Limit **FRUITS** to 2 to 3 servings per day. Limit high sugar fruits such as pineapple and papaya. **Fruit juices are not recommended** since they are devoid of fiber and high in sugar that can quickly raise blood glucose. Berries have the lowest glycemic index and are therefore most acceptable.
2. Most **VEGETABLES** are allowed in larger quantities since they have low sugar content. Exceptions are some of the “starchy” vegetables, including white potatoes and winter squashes. “Starchy” vegetables should be eaten in smaller amounts.
3. Avoid all highly refined **GRAINS**, including white flours, white breads, bagels, crackers, pretzels and chips. Commercially baked goods, such as cakes and cookies, as well as pancakes and waffles, should also be avoided. Refined grains are devoid of many nutrients and have a higher glycemic index, as compared to less-refined, whole grains.
4. **VEGETARIAN PROTEIN** sources that have little to no sugar and hence, have a low glycemic index include egg whites or egg substitute, tofu, nonfat cottage cheese and nonfat cheese. Nuts and seeds are also a good source of protein with a low glycemic index, but should be eaten in very small amounts due to their high fat content. In contrast, vegetarian protein sources that contain carbohydrates have a moderate glycemic index and should be consumed in moderate amounts; these include legumes, soy beans, soy milk, tempeh, vegetable burgers, nonfat milk and nonfat plain yogurt without added sugar.
5. Drink 8 to 10 glasses of water per day.
6. Do not skip meals. Three small meals with snacks in between are best to maintain moderate blood glucose levels throughout the day, while avoiding the highs and lows.
7. No soft drinks. No fast foods. No fried foods.

GLYCEMIC INDEX (GI) OF FOODS

(italicized words fall in the high range of category)

GOOD CHOICE

(Low GI: 55 or less)

PLEASE AVOID/LIMIT

(High GI: 70 or higher)

(Moderate GI: 56-69)

Breads

Rye kernel bread	Whole wheat spelt bread	White bread, wheat bread
Barley kernel bread	Whole-grain pumpnickel	Bagels, baguettes
Whole wheat kernel bread	Cracked-wheat kernel bread	Middle Eastern flatbread
Natural Ovens	100% whole wheat bread	Natural Ovens English Muffin
100% Whole-Grain	Healthy Choice 100% Whole Grain/Hearty 7 Grain	bread
	Corn tortillas, wheat tortillas	Hamburger buns
	Oat bran bread	Gluten-free white bread
	Pita bread	Rice bread

Breakfast Cereals

All-Bran	Toasted muesli	Cheerios, Rice/Corn Chex,
Fiber One	Bran Chex	Instant Oatmeal/Cream of Wheat
Rice bran	Oatmeal (slow cook)	Grapenuts, Grapenuts Flakes
Oat bran	Kashi Go LEAN	Rice Krispies, Cornflakes
	Kashi Good Friends	Bran Flakes, Corn Bran
	Nutrigrain	Total, Shredded Wheat
	Raisin Bran	Puffed Wheat, Corn Pops
	Mini Wheats, whole wheat	Sugary cereals, Granola
	<i>Special K</i>	Weetabix

Cereal Grains (cooked)

Pearled/cracked barley	Rolled barley	Millet
Whole kernel wheat/rye	Basmati rice	White rice
Buckwheat, brown rice	Long grain rice (boiled	Quick-cooking rice
Bulgur (cracked wheat)	10 minutes)	Jasmine white rice
Buckwheat groats	<i>Cornmeal</i>	Parboiled rice
<i>Semolina</i>	<i>Couscous</i>	

Dairy

Plain lowfat/nonfat yogurt	Lowfat/nonfat fruit yogurt	Frozen yogurt
Nonfat milk, soy milk		Tofu frozen dessert

Fruit

Apple, Berries	Apple juice (unsweetened)	Cranberry juice cocktail
Cherries, Grapes	Banana	Canned peaches in syrup
Grapefruit	Cantaloupe, Kiwi	Dates, Raisins
Orange	Mango	Watermelon
Peach, Pear	<i>Pineapple</i> , Papaya	AVOID FRUIT JUICES
Plum, Dried apricots	Orange juice (unsweetened)	
	Grapefruit juice (unsweetened)	
	Carrot juice (fresh)	

GOOD CHOICE
(Low GI: 55 or less)

(Moderate GI: 56-69)

PLEASE AVOID/LIMIT
(High GI: 70 or higher)

Legumes

Chickpeas/garbanzo beans Navy beans
Lentils, Romano beans
Black-eyed beans/peas
Pinto beans, Black beans
Baby lima beans
Kidney beans
Soy beans, split peas
Mung beans

Navy beans (pressure
cooked 25 minutes)
Canned baked beans
Broad beans

Pasta

Fettuccini, egg-enriched Capellini
Spaghetti, protein-enriched Spaghetti (cooked al dente)
Spaghetti, whole meal Macaroni (boiled 5 min)
(whole wheat) Linguini
Udon noodles

Rice noodles/pasta
Spaghetti (boiled more than 20 minutes)
Gnocchi

Vegetables

Asparagus, Broccoli, Beets
Brussels sprouts, Green peas
Bok choy, Cabbage, Sweet corn
Carrots, Cauliflower, Yam
Dark leafy greens, *Sweet potato*
Eggplant, Mushrooms,
Peppers, Romaine lettuce,
Spinach, Snow peas, Summer squash
Tomatoes, Tomato juice, Zucchini

Instant potatoes
Russet potato
New potato
French fries
Winter squash
Pumpkin

Soups

Tomato Black bean, Green pea
Lentil Split pea
Minestrone

Snack Foods

Peanuts Rye crispbread crackers Jelly beans, Life Savers, Mars Bars,
Almonds Power Bar Muesli bars, Popcorn, Corn chips,
Walnuts Breton wheat crackers Potato chips, Pretzels, Melba Toast,
Nuts and seeds Water/soda crackers, Rice cakes
Breakfast cereal bars, Cookies
Skittles, Gatorade

Sugars

Fructose, Lactose Sucrose Maltose, Glucose, Honey
Agave Nectar, light
(90 or 97% fructose)

References

Brand-Miller, J. Diets with a low glycemic index: from theory to practice. Nutrition Today 1995; March:1-13.

Foster-Powell K, Brand-Miller, J. International tables of glycemic index. Am J Clin Nutr 1995; 62:871S-93S.

Foster-Powell K, Holt SHA and Brand-Miller JC. International table of glycemic index and glycemic load values. Am J Clin Nutr 2002; 76: 5-56.

Mendoza R. Revised glycemic index (GI) and glycemic load (GL) values. 2002. <http://www.mendoza.com/gilists.htm> accessed 11/28/05.

Raloff, J. The new GI tracks. Science News April 8, 2000: 1-7.