

Glycemic Index

The Glycemic Index is a numerical system of measuring how fast a carbohydrate triggers a rise in circulating blood sugar - the higher the number, the greater the blood sugar response. So a low glycemic index food will cause a small rise, while a high glycemic index food will trigger a dramatic spike of insulin which can then produce hypoglycemia and eventually diabetes if allowed to continue.

There are two published glycemic indexes, one based on white bread as being 100 and one based on glucose as 100. Although they are both correct, I have chosen to work with the glucose-based because it makes more sense to me - we are talking about sugar and not white bread, even though it too has a very high index.

| Flour Containing Products | |
|----------------------------------|---------|
| No sugar/whole grain bread | 55 |
| White bread | 90 |
| Whole wheat bread | 80 |
| Waffles | 76 |
| Donuts plain | 76 |
| Kaiser rolls | 73 |
| Melba toast | 70 |
| Most cakes & pastries | 65 - 75 |
| Rye flour bread | 64 |
| Hamburger/hot dog bun | 80 |
| Cheese pizza | 60 |
| Pita bread | 57 |
| Pumpernickel bread | 50 |
| Oat bran bread | 48 |

| Pasta | |
|-----------------------------|----|
| Rice pasta | 92 |
| Gnocchi | 67 |
| Macaroni & Cheese | 64 |
| Spaghetti, durum | 55 |
| Instant noodles | 47 |
| Linguine | 46 |
| Macaroni | 45 |
| Spaghetti, white | 49 |
| Spaghetti, wholemeal | 37 |
| Vermicelli | 35 |
| Fettuccine | 32 |
| Spaghetti, protein enriched | 27 |

The reason macaroni & cheese has a higher glycemic index value than the combination

of macaroni and cheese by themselves is because the processed cheese used in macaroni & cheese has sugar added to it.

Because of the volume of pasta eaten at one time, the index is somewhat mis-leading. It is important to mix a large quantity of meat or cheese with your pasta to make it an acceptable food.

See how protein enrichment changes the index of spaghetti dramatically.

| Cereal Grains | |
|-------------------------------|----|
| Rice, white, instant - 6 min. | 90 |
| Tapioca, boiled w/milk | 81 |
| Millet | 71 |
| Cornmeal | 69 |
| Barley, rolled | 66 |
| Rice, brown | 50 |
| Sweet corn | 55 |
| Buckwheat | 55 |
| Wheat, quick cooking | 54 |
| Barley, cracked | 50 |
| Rice, parboiled | 48 |
| Rice, instant - 1 min. | 46 |
| Wheat kernels | 41 |
| Rye | 34 |
| Barley, Pearled | 25 |

Please note the differences in cereal grains in the way they are presented, such as in rice and barley. The more some of them are cooked, the more they affect blood sugar.

| Beverages | |
|----------------------------|----|
| Gatorade | 95 |
| Soft drinks (sodas) | 68 |
| Diet soda with caffeine | 30 |
| Skim milk | 40 |
| Soy milk | 30 |
| Cows milk whole | 30 |
| Diet soda without caffeine | 0 |

| Breakfast Cereals | |
|--------------------------------|----|
| Rice Chex | 89 |
| Cornflakes | 83 |
| Corn Chex | 83 |
| Rice Krispies | 82 |
| Post Flakes | 80 |
| CocoPops | 77 |
| Total | 76 |
| Cheerios | 74 |
| Puffed Wheat | 74 |
| Golden Grahams | 71 |
| Cream of Wheat | 70 |
| Shredded Wheat | 69 |
| Sustain | 68 |
| Grapenuts | 67 |
| Nutri-grain | 66 |
| Life | 66 |
| Oatmeal | 61 |
| Bran Chex | 58 |
| Kelloggs Mini-Wheats | 57 |
| Muesli | 56 |
| Kelloggs Honey Smacks | 55 |
| Oat Bran | 55 |
| Special K | 54 |
| Bran Buds | 53 |
| Red River Cereal | 49 |
| All-Bran | 32 |
| Kelloggs All Bran Fruit & Oats | 39 |
| Rice Bran | 19 |

| Fruits | |
|------------------|----|
| Watermelon | 72 |
| Pineapple | 66 |
| Cantaloupe | 65 |
| Raisins | 64 |
| Mango | 56 |
| Banana | 54 |
| Kiwifruit | 53 |
| Orange juice | 52 |
| Grapefruit juice | 8 |
| Pineapple juice | 6 |
| Grapes | 46 |
| Oranges | 44 |
| Peach, fresh | 42 |
| Apple juice | 41 |
| Plums, fresh | 39 |
| Apples, fresh | 38 |
| Pear, fresh | 37 |
| Apricots, fresh | 30 |
| Grapefruit | 25 |
| Cherries | 22 |
| Prunes | 29 |

| Root Vegetables | |
|------------------------|----|
| Parsnips | 97 |
| Potato, baked | 85 |
| Potato, instant | 83 |
| Potato, french fries | 75 |
| Potato, boiled | 73 |
| Potato mashed | 70 |
| Rutabaga | 72 |
| Beets | 64 |
| Sweet potato | 50 |
| Yam | 50 |
| Carrots | 49 |

| Legumes | |
|----------------------|----|
| Broad beans | 79 |
| Butter beans | 54 |
| Lentils, canned | 52 |
| Kidney beans, canned | 52 |
| Baked beans, canned | 48 |
| Romano beans | 46 |
| Pinto beans, canned | 45 |
| Chick peas, canned | 42 |
| Black-eyed beans | 41 |
| Pinto beans | 39 |
| Navy beans | 38 |
| Garbanzo beans | 33 |
| Split Peas | 32 |
| Butter Beans | 31 |
| Kidney beans | 29 |
| Lentils | 29 |
| Soya beans | 18 |

Note difference between canned and home prepared!

| Fresh Vegetables | |
|---|----|
| Pumpkin | 75 |
| Sweet corn | 55 |
| Peas | 48 |
| (For more, see Legumes & Root Vegetables) | |

| Specialty Foods | |
|---------------------------|-----|
| Tofu Frozen Dessert | 115 |
| Cactus jam | 91 |
| Breadfruit | 68 |
| Taro | 54 |
| Sustagen Hospital Formula | 43 |
| Fish fingers | 38 |
| Sausages | 28 |

| Snack Foods | |
|--------------------|-----|
| Dates | 100 |
| Pretzels | 81 |
| Jelly beans | 80 |
| Corn chips | 74 |

| | |
|---------------------|----|
| Skittles | 69 |
| Muesli Bars | 61 |
| Popcorn | 55 |
| Potato Chips | 55 |
| Most Jams & Jellies | 50 |
| Peanut M&M's | 32 |
| Peanuts | 15 |

| Dairy | |
|------------------------|----|
| Yogurt, sweetened | 63 |
| Ice Cream | 61 |
| Ice Cream, low fat | 50 |
| Chocolate milk w/sugar | 34 |
| Skim milk | 40 |
| Whole milk | 30 |
| Yogurt, no sugar | 14 |

| Soups | |
|---------------------|----|
| Black bean soup | 64 |
| Split pea soup | 60 |
| Lentil soup, canned | 44 |
| Tomato soup | 38 |

I know there are many more soups, but these are all that have been tested. Any soup with potato in it would most likely have a high to very high rating.

| Cookies & Crackers | |
|-------------------------------|----|
| Puffed Crispbread | 81 |
| Morning Coffee Cookies | 79 |
| Rice Cakes | 77 |
| Vanilla Wafers | 77 |
| Graham Wafers | 74 |
| Wheat Thins | 67 |
| Rye Crispbread | 65 |
| Shortbread | 64 |
| Chocolate Chip Cookies | 64 |
| Oatmeal Cookies w/o Raisins | 55 |

| Sugars | |
|--------------------------|-----|
| Maltose | 105 |
| Maltodextrin | 105 |
| Glucose | 100 |
| Sucrose (table sugar) | 64 |
| High fructose corn syrup | 62 |
| Honey | 65 |
| Lactose | 46 |
| Fructose | 22 |
| Agave Nectar | 10 |
| Artificial Sweeteners | 0-5 |
| Stevia | 0 |

I must comment that although fructose has a very low glycemic index, it rarely is found

in a food as fructose but as “high fructose corn syrup” which has a glycemic index almost identical with table sugar. Fructose causes high triglyceride levels if used in any quantity. High triglycerides cause insulin insensitivity which leads to adult onset diabetes, the very thing we are trying to avoid! Therefore I have always been very cautious in suggesting the use of fructose as a sweetener. Also, look at common table sugar (sucrose) the glycemic index is 64 - but it is pure carbohydrate which is quickly converted to glucose! (I recommend the use of *Stevia* as a natural sweetener and for baking use *Kurlu*, the granulated sugar-substitute I formulated for Let’s Talk Health.

What Does This All Mean?

I can only imagine the incredulity that you must have as you look over these numbers. Some foods or drinks that you thought were loaded with sugar do not really cause the sugar spikes that were imagined. Of all people, I must confess that I was also a bit shocked on reviewing this. I didn’t believe it at first, because of my strong beliefs founded on years of reading, studying and practicing nutrition and healing.

But there it is, and it will be particularly confusing to all those who followed my advice to avoid almost all fruits and fruit juices if they have cancer, based upon the fact that cancer cells are absolutely dependent upon sugar. AND my opinion has not changed! If you read the next paragraph, it will explain why.

I have long recommended cantaloup and watermelon in limited quantities for my patients. Yet, according to the glycemic index watermelon has a score of 72 while grapes have a score of 46. But if you eat 1/2 cup of grapes you will have 36 grams of carbohydrates (sugars) while 1/2 cup of watermelon will only offer 5 grams of carbohydrate (sugar). And therein lies the need for full education. A person who has diabetes or cancer might avoid watermelon and consume quantities of grapes on the assumption from this chart that the high score for watermelon indicates it is an unwelcome food and the grapes, because of a lower glycemic index, were preferable. I have checked out several of the fruits and fruit juices to authenticate this contradiction.

| | Gl. Index | Grams of Carbs |
|--------------|------------------|-----------------------|
| Orange Juice | 52 | 27 |
| Apple Juice | 41 | 30 |

What does this example show? Orange juice has a considerable higher glycemic index than does apple juice, indicating it will cause blood sugar to rise faster than apple juice. On the other hand, apple juice has more grams of carbohydrates overall so they are probably equal from a practical viewpoint. **EAT THE WHOLE FRUIT INSTEAD!**

So...

My advice to cancer patients and diabetics remains what it has been for years: be careful about the amount of fruit you eat under any circumstances and avoid fruit juices because they are absorbed so quickly. Your body does not need these concentrations of carbohydrates which do not contain protein or fat.

I believe the real value of this index is to get an idea as to the glycemic index of vegetables, pastas, breads and other foods normally consumed. In general, my feeling is to stay away from any food which has a glycemic index above fifty almost all the time, but you can “sin” once in a while (but no more than one day a week). Occasional use of foods up to 55 is ok.

This does not apply to the individual who does not have problems with weight, diabetes, hypoglycemia or cancer. Although not beneficial or desirable, you can probably eat what you wish - but beware! Your body was not designed to eat refined carbohydrates, except in very small quantities. You will eventually pay the price if you continue to eat “foodless” foods.

Chronic degenerative disease is the result and it will strike you wherever you are genetically weak. The chronic degenerative diseases are picking up speed at an epidemic rate - and I am sure you do not wish to be a statistic. Consider carefully what you consume. Meat, fish, eggs, dairy products were put on this earth for man and contain the proteins and fats necessary for cell replacement, repair and rejuvenation. Pure seeds, beans and nuts can replace these foods to some extent for the vegetarian. Of all foods, the carbohydrates are the least necessary - not that they are inherently bad - at least not until you consume them in preference to the building block foods. Complex carbohydrates have a value in our eating pattern and can be the source of energy but they are all too often used to excess by those who not only cannot tolerate them, but also impede healing.

May God Bless Your Efforts In Your Search For Better Health!

KWD

Just a quote you might want to consider:

“I couldn’t believe what I was reading! The cholesterol paradigm is collapsing under the weight of good science and common sense. Reuters Health reports: A relative high amount of fat in the diet may be a boon to a heart patients. Researchers at the State University of New York at Buffalo found that when 11 healthy but sedentary adults followed a very-low-fat diet, “good” cholesterol (which is supposed to be protective) dropped and “bad” cholesterol levels went up. When they were put on a high-fat diet the findings were reversed with the good guys increasing and the bad guys decreasing.”

“What have I been preaching all these years?? Butter, eggs, meat, cheese, fish are the sustainers of life! There has never been one case of heart disease or stroke caused by cholesterol and the whole gigantic cholesterol hysteria is a massive fraud cooked up to sell pills to lower one of the most important ingredients of good health. What is now heresy - eat fat to stay healthy - will soon become the norm because it is true and it works! Of course you have to stay away from the incomplete, refined oils because they are not a part of Nature’s fats as presented in the foods they are used in. Hydrogenation makes these fats literal poisons - deep frying with them creates destructive, oxidative changes.”