

the **CrossFit** JOURNAL ARTICLES

Glycemic Index

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For several decades now, bad science and bad politics have joined hands to produce what is arguably the most costly error in the history of science—the low-fat diet. This fad diet has cost millions unnecessary death and suffering from heart disease, diabetes, and, it increasingly seems, a host of cancers and other chronic and debilitating illnesses.

Gary Taubes, the esteemed science writer, has written two brilliant and highly regarded pieces on exactly this subject. The first appeared in *Science Magazine* in 1999 and the second in the *New York Times* just this summer (July 7, 2002).

A new age is dawning in nutrition: one where the culprit is seen not as dietary fat but as excess consumption of carbohydrate—particularly refined or processed carbohydrate. In fact, there's an increasing awareness that excess carbohydrates play a dominant role in chronic diseases such as obesity, coronary heart disease, many cancers, and diabetes. This understanding comes directly from current medical research. Amazingly, the near-universal perception that dietary fat is the major culprit in obesity has no scientific foundation. (See Taubes, above.)

There's a family of popular diets and diet books based on decreasing carbohydrate consumption. Most of them are excellent.

Chief among these books are Barry Sears's *Enter the Zone*, Michael and Mary Dan Eades's *Protein Power*, Robert Atkins's *Dr. Atkins' Diet Revolution*, Loren Cordain's *The Paleo Diet*, and Heller's *The Carbohydrate Addict's Diet*. Each of these is an honest and accurate chronicling of the effects of the low-fat, fad diet, and each offers a rational, effective regimen for avoiding dietary ills. For those technically inclined, the mechanism by which excess carbohydrate causes disease state is known as hyperinsulinemia. Hyperinsulinemia is the chronic and acute elevation of insulin as a result of habitual consumption of excess carbohydrate.

The list of ills linked to hyperinsulinemia is staggering and growing. Just recently, colorectal cancer was added to the probable list of hyperinsulinemia-mediated diseases. The evidence linking excess carbohydrate consumption to hyperinsulinemia and coronary heart disease is compelling, if not overwhelmingly convincing.

Additionally, excess consumption of carbohydrate may soon be shown to be linked to Alzheimer's, aging, cancers, and other disease through a process known as glycosylation. At any rate, a search on Google for "hyperinsulinemia" reveals hundreds of ills linked to this metabolic derangement. The rapidly growing awareness of the consequences of elevated blood sugar is one of the more promising avenues of medical advancement today.

Though frightening, the diseases brought about through hyperinsulinemia can easily be avoided by minimizing carbohydrate consumption—specifically carbohydrate that gives substantial rise to blood sugar and consequently insulin levels.

There is a singular measure of carbohydrate that gives exactly this information: the glycemic index. Glycemic index is simply a measure of a food's propensity to raise blood sugar. Avoid high-glycemic-index foods and you'll avoid many, if not most, of the ills associated with diet.

[David \(Rick\) Mendosa has published one of the most complete glycemic indices available anywhere, with a listing of over 750 common food](#)



Glycemic Index

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[items giving values based on glucose's score of 100.](#)

We can increase the ease and utility of such a list by dividing commonly eaten foods into two groups—one of high-glycemic foods, “bad foods,” and one of low-glycemic foods, or “good” foods. This is the rationale behind the CrossFit Shopping List, at right.

You may notice that the “good” foods are typically meats, vegetables, fruits, nuts, and seeds, whereas the bad foods include many manmade or processed foodstuffs. There are some notable exceptions, but the trend is certainly instructive.

High-glycemic, or “bad foods,” are typically starchy, sweet, or processed foods such as bread, pasta, rice, potato, grains, and desserts.

More than a few observers have pointed out that low-glycemic foods have limited shelf life and are found on the perimeter of the grocery store, whereas high-glycemic foods have a longer shelf life and are typically found within the grocery store's aisles.

Though this approach is an oversimplification of much of nutritional science, it has the power to deliver nearly all of the benefits offered by more detailed and elaborate regimens such as those by Sears, the Eadeses, Cordain, Atkins, and the Hellers. Eat more of the “good” foods and less of the “bad” ones and you'll garner much of what the more responsible eating plans offer. Many of our friends and clients have radically transformed their health through this single tool.

"Good" Foods Low-Glycemic		"Bad" Foods High-Glycemic	
Water	Apple	Acorn Squash	Cereal
Oatmeal	Grapes	Baked Beans	Cornstarch
Eggs	Plum	Beets	Croissant
Protein Powder	Shrimp	Black-eyed Peas	Croutons
Peanut Butter	Mayonnaise	Butternut Squash	Doughnut
Tahini	Plain Yogurt	Cooked Carrots	English Muffin
Olives	Deli Meat	Corn	Granola
Beef	Ham	French Fries	Grits
Cheese	Soy Milk	Hubbard Squash	Melba Toast
Salsa	Spirulina	Lima Beans	Muffin
Black Beans	Tempeh	Parsnips	Noodles
Kidney Beans	Egg Substitute	Peas	Instant Oatmeal
Ground Turkey	Oil	Pinto Beans	Pancake
Soy Sausage	Peanuts	Potato	Popcorn
Chicken	Swordfish	Refried Beans	Rice
Turkey Sausage	Tuna Steak	Sweet Potato	Rolls
Salmon	Tomato Sauce	Turnip	Taco Shell
Turkey	Spinach	Banana	Tortilla
Canned Tuna	Carrots	Cranberries	Udon Noodles
Canned Chicken	Orange	Dates	Waffle
Soy Burgers	Pear	Fig	BBQ Sauce
Cottage Cheese	Pineapple	Guava	Ketchup
Almonds	Brussels Sprouts	Mango	Cocktail Sauce
Macadamia Nuts	Eggplant	Papaya	Honey
Avocado	Sauerkraut	Prunes	Jelly
Tofu	Hot Dogs	Raisins	Sugar
Tomato	Chickpeas	Fruit Juice	Maple Syrup
Lettuce	Lamb	Vegetable Juice	Teriyaki Sauce
Onion	Pork	Bagel	Chocolate
Mushrooms	Dill Pickles	Biscuit	Corn Chips
Cucumber	Soy Beans	Bread Crumbs	Ice Cream
Blueberries	Asparagus	Bread	Potato Chips
Milk	Cantaloupe	Steak Sauce	Pretzels
Broccoli	Strawberries	Bulgur	Saltine Crackers
Zucchini	Peach	Sweet Relish	Molasses