

High Crab Dinner

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That's right, "High crab dinner." I won't name the event, but recently I ran a distance race with an entry fee that included a "high crab" dinner the night before the event. Funny typo.

What's not so funny is the complexity of selecting what kinds of carbohydrates to eat pre-race, post-race, or during all the weeks and months of training leading up to a race. Most people think of bread, pasta and potatoes when they think of carbohydrates. Yes, those are classic "carbo-loading" foods, but choosing the right carbohydrates before and after running is not as simple as eating spaghetti, bread and french fries.

As the new year begins, and the peak racing season lies ahead, make a resolution that you won't carbo-load until you do some simple research into your favorite pre-race foods using the **glycemic index**, which is found at www.glycemicindex.com. Also, remember this: **Load Low; Fly High.**

What is the Glycemic Index?

The glycemic index is a numeric ranking system for carbohydrate-rich foods, and is based upon the foods' immediate effect on blood sugar (glucose). Foods that break down quickly, thus triggering a rapid rise in blood glucose, have a high GI ranking. Conversely, foods that digest more slowly, and accordingly will trigger a slower release of blood glucose, have a low GI ranking.

The benchmark for the entire glycemic index is pure glucose, which is assigned the GI of 100. Foods that have a GI of less than 55 are considered "low," and those with a GI above 70 are considered "high." Anything between 55 and 70 is considered "moderate" GI.

Generally speaking, low GI foods help with extended endurance, while high GI foods assist with recovery and with quick bursts of energy. The GI is based strictly upon scientific methods that involve blood glucose measurements taken within certain time periods after consumption of foods. In other words, you cannot tell the GI based upon the composition, preparation or caloric content of food.

Bagels and Pears: What to Eat, When

Take a look at the label on a bag of plain bagels. For one serving (1 bagel), you might see this:

Weight - 104 grams

Calories - 290

Carbohydrates - 56 grams

Now take a look at a can of pear halves in light syrup. For 3 servings (almost the whole can), you get something this:

Weight - about 380 grams
Calories - 300
Carbohydrates - 72 grams

The bagel and pears have almost the same amount of calories, but the pears have more carbohydrates. The pears are in syrup, are very sweet and almost “sugary.” But the bagel is starchy and doughy. Which one is higher on the glycemic index?

Plain bagel: 72 (high GI)
Pear halves: 25 (low GI)

The plain bagel has a GI that is almost 3 times that of the pear halves in light syrup. So how does that factor into a runner’s decision of what to eat, and when?

Load Low, Fly High

Carbohydrates are the essential energy supply for athletes before, during and after training and competition. Many athletes mistakenly subdivide carbohydrates into two categories: complex carbs (like bread, pasta, fruits and vegetables); and simple carbs (candy, honey, sugared soft drinks). The conventional thinking has long been that athletes should eat complex carbohydrates before endurance exercise, and simple carbs during and immediately after exercise.

The glycemic index reveals that foods once considered “complex” carbohydrates actually behave more like “simple” carbohydrates once consumed. For example, **rice cakes** have a GI of 91, which is almost as high as plain old **table sugar**. A **baked potato** has a GI of 78, much higher than **honey** (55).

So throw away the concepts of “complex” and “simple” carbohydrates, and remember that low GI foods, like pears and bananas, help maintain a stable blood glucose level immediately before and during exercise, and provide a slow and steady supply of energy. That’s why athletes should consume foods that are low on the glycemic index before exercise. In other words, “Load Low.”

During an event, an athlete needs a quick release of energy. Carbohydrate gels and most sports drinks are all very high GI. Think “Fly High.”

For post-exercise recovery, a combination of high and low GI foods is necessary for both short-term and long-term replenishment of muscle-glycogen and blood-glucose.

The Training Table

Of course, the runner’s diet does not begin the day before a race and end at the food tent immediately after the race. The glycemic index plays an important role throughout the year, especially when an athlete is in the midst of weeks- or months-long training. For a variety of reasons, the best approach is to fill your diet with low and moderate GI foods. Do you know of any distance athletes who run hundreds of miles every month, and never lose weight (and maybe

even gain weight)? While total calorie consumption is a major culprit in that scenario (“I ran 10 miles today, so I can eat this whole pizza”), another big factor is the *type* of carbohydrates that are consumed. High GI foods, like pizza, cause blood-sugar to spike. All that blood-sugar, with nowhere to go (i.e., no immediate exercise to fuel), is converted into fatty acids, which the body stores as body fat. That is not to say that runners should avoid high GI foods altogether. The point here is that many runners are completely unaware that their diets are full of carbohydrates in the moderate to high range on the glycemic index, and the result is a diet that promotes the creation of body fat.

Also, remember that combining foods can effect the way your body digests carbohydrates. For example, a plain bagel is a high GI food – not something you ought to have an hour before a Saturday morning long run. But if you spread peanut butter on the bagel, and chase it with a banana (GI of 51), you’ve had a fairly good low GI breakfast to keep you going well into your run. The peanut butter on the bagel “tricks” your system by slowing down the digestive process and, in turn, keeps your blood-glucose from spiking.

Tip: When you’re looking for good low and moderate GI foods, go to www.glycemicindex.com and search the database. Enter the food name and “<55” or “<70” in the glycemic field. For example, enter “bread” and “<55” and you will see several results. Likewise, enter “cereal” in the name field, and “<55” for a list of low GI cereals.

You can also perform an online search using the terms “glycemic index” and “glycemic load,” and find plenty of lists of common foods.

By the way, in case you’re wondering, I looked for “crab” on the glycemic index. The result: “Your search for crab did not find any matches.”