

## The Problems with the Glycemic Index

The Glycemic Index (GI) rank carbohydrate containing foods according to how much they raise blood glucose levels. It sounds great, but there are a number of problems.

### 1. THE GLYCEMIC INDEX IGNORES THE EFFECT OF FRUCTOSE AND HIGH FRUCTOSE CORN SYRUP

Fructose, found in sugar, fruit and sweeteners like high fructose corn syrup can only be metabolized in the liver, where it causes fatty liver. As a result, it has very little effect on blood glucose levels. That's why the glycemic index of watermelon is 71 and a Snickers bar is only 51.

However, there are long term consequences of eating too much fructose – insulin resistance, which causes high insulin levels which may drive weight gain.

### 2. THE GLYCEMIC INDEX IS ALWAYS BASED ON A 50 G SERVING

The GI may not reflect a realistic serving size. For example, 50g of carrots is about a dozen full-sized carrots. That's a lot of carrots to eat all at once! There is actually very little sugar in a single carrot, and even less if you cook it.

### 3. COMBINATIONS OF FOODS

Different foods can greatly impact the glycemic response of other foods if consumed together. The GI fails to consider the amount of fibre, water, vitamins and minerals in foods.

Fibre, an indigestible carbohydrate, slows down the rate of digestion of the other foods. A grain like quinoa can cause large spikes in blood glucose levels when eaten alone. When consumed with fibre containing vegetables like broccoli, carrots, red peppers, the blood glucose rises more slowly.

### 4. DELAYED GLYCEMIC EFFECT

The GI is only based on a timeframe of three hours. However, certain foods such as alcohol sugars, have a delayed glycemic effect. They impact blood glucose levels much later on after they are consumed.

### 5. IGNORES NON-CARBOHYDRATE CONTAINING FOODS.

The GI only has relevance for foods that contain carbohydrates, and is useless for foods that are primarily protein and/ or fat, such as meat or eggs.

### 6. IGNORES INSULIN EFFECT

The GI measures only the effect on raising blood glucose, but not blood insulin. It is primarily the hormone insulin that drives weight gain.

