

# THE GLYCEMIC INDEX (GI)

## DESTROYS THE CONCEPT OF FAST SUGARS AND SLOW SUGARS

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### An approach that is more in line with physiological reality

For years, carbohydrates were distinguished only by their chemical structure. So-called simple or fast sugars (glucose, sucrose, fructose, etc.) were opposed to so-called complex or slow sugars (starchy foods). It seemed logical that simple sugars (small molecules) were rapidly absorbed contrarily to complex sugars which were digested slowly while gradually releasing their glucose into the blood.

The GI calculation now demonstrates that the potato, whether fried or mashed, is no more a slow sugar than bread, white rice or Corn Flakes®. These foods cause a sudden rise in blood sugar that is just as high as with pure glucose.

### The GI shows us that things are not so simple...



All simple or complex carbohydrates cause a spike in blood sugar 30 minutes after ingestion. Only the amplitude of this peak is larger or smaller. This amplitude therefore depends on various other factors.  
**The GI reflects this amplitude.**



To put it simply, the **GI** is a classification of foods based on the elevation of blood glucose they produce when they are eaten.  
The higher the index, the more the food causes a rapid rise in **blood sugar**. This simultaneously causes significant insulin secretion, since its role is to lower blood sugar.



A high GI food **quickly causes a drop in blood sugar** following the effects of insulin. This decrease in sugar then increases hunger.  
**High GI foods are therefore more likely to foster weight gain because they stimulate hunger.**

### GLYCEMIC INDEX



The GI is used to measure the flow rate into the blood of carbohydrates that are found in foods compared to glucose which serves as a benchmark. The GI therefore measures the influence of the sugar found in foods on blood sugar levels. It compares the glycemic power of each food, measured directly after ingestion. In plain language, if the GI for corn is 70, this corresponds to 70% of pure glucose.



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**Be careful, it is very complicated to calculate the GI** of a food since it varies according to several factors:

- Its biochemical structure
- Its molecular structure
- Its composition
- How it is prepared
- The time of day when it is ingested

**The glycemic load,  
a better calculation alternative?**

**Indeed, it seems that the glycemic load (GL) calculation is a better alternative** because, in addition, it takes into account the amount consumed and the proportion of carbohydrates contained in the food by multiplying the amount of carbohydrates in the food by its GI, divided by 100. **The GL therefore jointly considers the quality and quantity of foods consumed that influence blood sugar levels.**



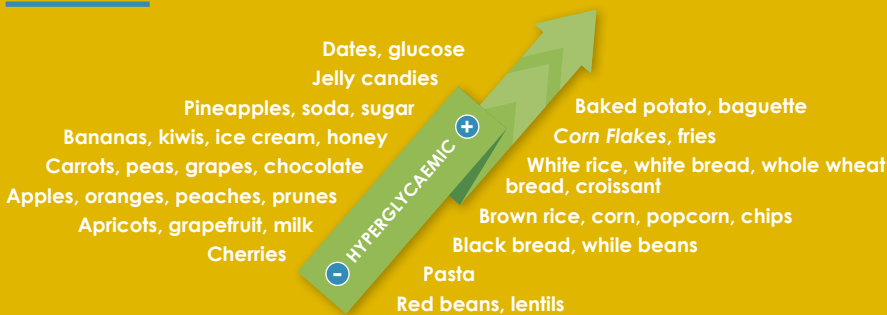
**Concretely...**

Baked potato	IG: 95
Fries	IG: 82
Mashed potato	IG: 73
Boiled potato	IG: 63

Although they do not replace the basic tips for a healthy and balanced diet, the GI or GL can be useful tools to guide you in making good food choices in a complementary fashion with a diet plan and carbohydrate calculation.

Educate yourself!

**Glycemic index for common foods**



Finally, the best way to know the glycemic response to a food or a meal is to check blood sugar levels before and 2 hours after the meal.

**ABOVE ALL, DO NOT HESITATE TO CHECK WITH YOUR NUTRITIONIST TO LEARN MORE!**

**FOR MORE INFORMATION:**

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