



# WHAT'S THE FUSS AROUND GLYCAEMIC INDEX?

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According to the GI Foundation of South Africa (GIFSA), the Glycaemic Index (GI) is a system that ranks carbohydrate containing foods based on how they affect blood glucose (blood sugar) levels. The GI of a specific food is determined by comparing the Blood Glucose Response (BGR) of that food with the BGR of glucose. Glucose is used as the reference food as it is absorbed quickly from the small intestine and results in the greatest and most rapid rise in blood glucose. Foods are ranked on a scale from 0 – 100, according to their actual effect on blood glucose levels. Pure glucose has a GI of 100.

Low GI foods mean that your body digests and absorbs glucose (sugar) more slowly and steadily, this leads to a more suitable after meal blood glucose level. Low GI foods also keep us fuller for longer. Whereas high GI foods are the opposite, the body digests and absorbs glucose quickly and results in high blood glucose levels. Therefore high GI options should be eaten less<sup>1</sup>.

## WHY THE GLYCAEMIC INDEX IS IMPORTANT

The body needs a constant flow of glucose for energy and works best when your blood sugar levels are kept relatively constant. If your blood sugar drops too low, you become tired and hungry. And if it goes too high, it causes an increase in insulin in your body to help lower the glucose but this can have negative long term effects on your body.

When you eat high GI foods you may feel an initial elevation in energy and mood as your blood sugar level rises. But this is followed by a cycle of increased fat storage due to insulin response, lethargy, and hunger. In the case of people living with diabetes, it is even more important because their body's inability to secrete or use insulin causes their blood sugar to rise too high which can lead to complications<sup>1, 2</sup>.

Therefore the importance of Glycaemic Index is simply to minimize insulin-related problems by knowing which foods have the greatest effect on your blood sugar level and try to avoid them.

## FACTORS INFLUENCING THE GI OF FOOD

There are many factors that influence the GI of food. These can include but are not limited to:



- The higher the fat, protein and fibre content of a food, the lower the GI of a food.
- As a fruit or vegetable ripens and storage time is increased, the higher the GI increases.
- Processing of food increases the GI (cooking method and time).
- Food eaten alone vs. combined with other foods
  - when high GI foods are eaten in combination with low GI foods, it results in balanced blood glucose levels.<sup>2</sup>

## HOW TO LOWER GI OF FOOD

It's great to know about GI but how do you make sure that your meals are low GI? Here are a few recipe changes that you can make to ensure your meals are low GI and will provide you with constant energy to face your day.

### Smoothie:

When making delicious fruit smoothies it's important to balance the high GI of over ripened fruit. You can do this by adding FUTURELIFE® HIGH PROTEIN Smart food™.

Here is an example of a recipe to get you started:

#### Ingredients

- 3/4 cup frozen berries (blueberries, raspberries, blackberries, strawberries, or mixed berries)
- 1/2 cup fat free vanilla yogurt
- 1 cup cold water
- 50g (5 heaped tablespoons) of Original flavour FUTURELIFE® HIGH PROTEIN Smart food™

#### Method

Add all the ingredients to your blender and blend together on full power until smooth. Serve and enjoy.

### Lunch

When packing your lunch box, make sure you choose a high fibre, low GI bread such as the FUTURELIFE® Smart Bread™. Make sure that the filling to your bread is not a sweet spread. Some great examples for alternative fillings include:

- Chicken mayo made with yoghurt instead of mayo
- Grilled vegetables that can be cut thinly

### Snacks



When you are on the go it's easy to reach for a high GI snack like crisps. To ensure that you keep your energy levels constant, rather keep a supply of FUTURELIFE® High Protein SmartBars and FUTURELIFE® High Protein LITE SmartBars. These are low GI and great as an on the go meal or snack.

## CONCLUSION

As a general rule, foods with a lower GI tend to be high in fibre and less processed. So, make sure that you include low GI carbohydrates as part of a healthy balanced diet.

## REFERENCES

1. <https://www.gifoundation.com/>
2. <http://www.diabetes.org/food-and-fitness/food/what-can-i-eat/understanding-carbohydrates/glycemic-index-and-diabetes.html?referrer=https://www.google.co.za/>