Choosing the right carbohydrate is very important. Experts encourage people to choose foods that are nutrient dense, meaning that for the amount of calories in the food it has a high amount of nutrients, vitamins, minerals etc. Regardless of which type and form of food people choose, the carbohydrates that are consumed will be digested into glucose. Glucose enters the bloodstream, causing a temporary rise in blood glucose levels. This representation of the average change in blood sugar levels over a set period of time, relative to the levels after consumption of a control food is the food’s glycemic index.

The Glycemic Index assigns each food a number on a scale of one to 100, in comparison with pure glucose which has a reference score of 100. So a food that would have an index number of 20 would raise blood sugar levels less than a quarter (20%) of what an equal amount of glucose does. To get this number, the glycemic index is assessed by having a group of people eat a specific amount of a single food (usually 50 grams of digestible carbohydrate).

The Glycemic Load is based on the glycemic index (GI) of a food; the glycemic load was developed because not every food is eaten in a “serving” of 50 grams. Glycemic Load (GL) gives a more accurate picture of a food’s effect on blood sugar, in the typical serving size.

It looks really good in theory, using the glycemic index and glycemic load for enabling meal and diet planning. However, it is not as easy and straight forward as it looks.

Here are some things to consider:

- GI value of food varies depending on:
  - how ripe the food is
  - how it is cooked
  - how the food is processed
  - if food is eaten alone or with other foods

The idea behind using the Glycemic Index is that low GI foods (foods that don’t raise blood sugar as high) can help control appetite, weight and could help with diabetes. The basis of this claim is that high GI foods raise blood sugar levels, cause excess insulin to be secreted and lead to the storage of fat. According to the American Dietetic Association studies do not prove this theory.

Glycemic index and glycemic load have potential for being a valuable clinical tool, however it requires further research, and many claims associated with glycemic index and glycemic load have not been proven.