### What is the GI?

Carbohydrates are one of the best sources of energy for our bodies. The simplest form of carbohydrate is glucose, which is:

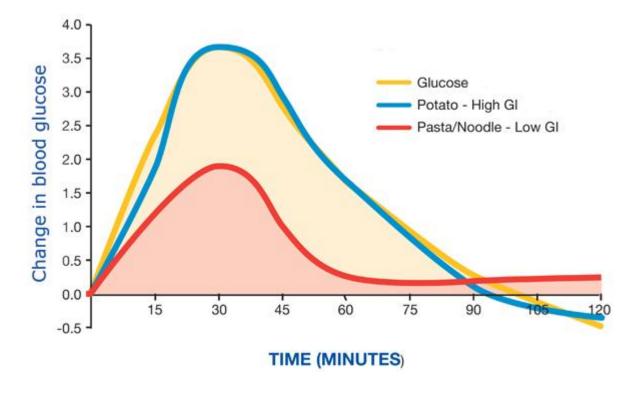
- A universal fuel for most organs and tissues in our bodies.
- The only fuel source for our brains, red blood cells and a growing foetus, and is
- The main source of energy for our muscles during strenuous exercise.

Surprisingly, most of us don't eat too much carbohydrate, but all too often we eat the wrong kind, because not all carbohydrates are created equal. This is where the glycemic index or GI comes in. It's about recognising the 'smart carbs' - the low GI ones - and making sure we include them in our main meals and snacks.

The GI is simply a dietary tool that helps us differentiate between the various carbohydrate foods we eat and how our bodies use them.

- Carbohydrates with a low GI (55 or less) don't make our blood glucose levels rise very high for very long. They
  provide sustained energy.
- Carbohydrates with a high GI (70 or more) are the ones that cause our blood glucose levels to go higher for longer. High blood glucose may cause damage to vital organs.

Research has shown that if we eat too many high GI foods and not enough low ones, we are at risk of developing significant health problems.



For more on the GI, visit: www.glycemicindex.com

## **Good sources of carbohydrate**

Carbohydrate foods come mainly from plants - cereal grains, legumes, fruit and starchy vegetables. Some dairy foods like milk and yoghurt also contain carbohydrate. Common sources of carbohydrate include:

- Bread
- Breakfast cereals
- Rice
- Pasta
- Noodles
- Fruits and their juices such as apples, pears, oranges, plums, peaches and nectarines, berries and bananas
- Starchy vegetables such as potatoes, sweet potatoes, yams, taro, sweet corn, parsnips, pumpkin and carrots
- Legumes (pulses) such as beans, chickpeas, lentils and split peas
- Dairy foods like milk, yoghurt, ice cream and their alternatives
- Sugars, honey and confectionery
- Starchy snack foods like potato and corn chips

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# The health benefits of low GI eating

The scientific evidence supporting the health benefits of a healthy low GI diet is overwhelming. We know from over 25 years of research from around the world that healthy low GI diets:

- Help to fill you up and keep you feeling satisfied for longer, avoiding over eating or too much snacking.
- Lower your insulin levels which makes fat easier to burn and less likely to be stored.
- Help you to lose body fat and maintain lean muscle tissue.
- Reduce your triglycerides, total and 'bad' (LDL) cholesterol.
- Increase your levels of 'good' (HDL) cholesterol.
- Reduce your risk of developing type 2 diabetes.
- Help to manage your blood glucose levels and reduce your risk of developing diabetes complications.
- Reduce your risk of developing cardiovascular disease.
- Reduce your risk of developing certain eye diseases.
- Improve your skin
- Sustain your energy levels longer, improving both mental and physical performance.

Low GI eating really is for everybody, every day, every meal.

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## Health organisations support for the GI

Knowing the GI of foods is of particular value to people with diabetes who need to manage their blood glucose levels carefully. Perhaps unsurprisingly, diabetes organisations such as Diabetes Australia, Canadian Diabetes Association, European Association for the Study of Diabetes, Juvenile Diabetes Research Foundation and the South African Diabetes Association encourage an understanding and use of GI in meal planning.

However, lowering the GI of diet can also lead to better health for everybody through improved heart health and helping to manage appetite.

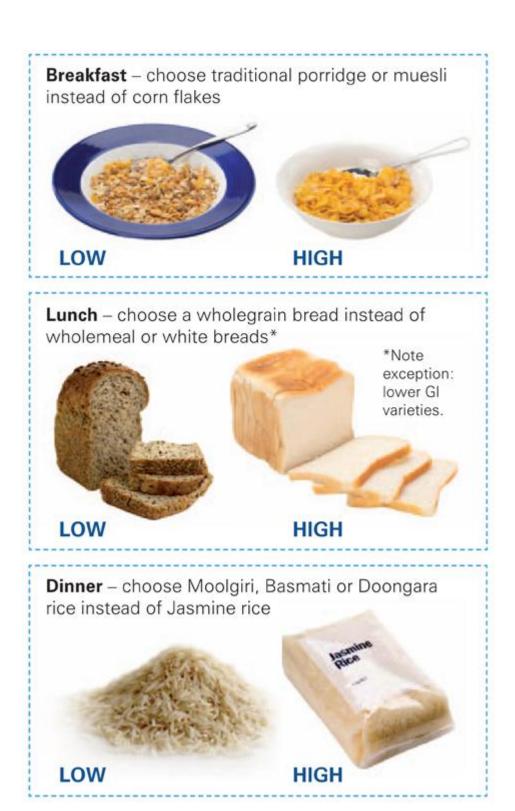
Health and nutrition authorities from around the world recommend that everyone use the GI as a tool when looking for healthy food choices:

- In 1998, the World Health Organisation and Food and Agriculture Organisation recommended that the glycemic index of carbohydrate foods be a factor in food choice.
- The Dietary Guidelines for Australians specifically recommend the consumption of lower GI cereal-based foods: "Eat plenty of cereals, breads and pastas preferably wholegrain ... with a lower glycemic index ... ".
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## Using the GI is easy

It's all about balance. To achieve any of the health benefits of low GI eating, you need to make sure that you include plenty of low GI 'smart' carbs as part of a healthy balanced diet. How?

**Step 1.** Swap high GI foods for low GI ones in the same food group. There are plenty to choose from. The foods you choose should also be low in saturated fat, moderate in sodium (salt) and high in fibre. Foods that meet all of these requirements carry the GI Symbol.



**Step 2.** Consume at least one serving of a low GI carbohydrate food at each meal and choose low GI carbohydrate foods for your snacks.

**Step 3.** Keep your eyes on that serving size. Be conscious of the quantity of carbohydrates you eat. Eating too much food, even healthy choices, will most likely pile on the pounds/kilos.

**And get moving**. Make sure you include at least 30 minutes of planned exercise like walking, swimming or riding a bike in your daily routine, plus 30 minutes of incidental exercise like using the stairs instead of the lift or going over to talk to a colleague instead of sending an email.

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## Some things to keep in mind about the GI

#### The GI only applies to carbohydrate-rich foods

It is not possible to obtain a GI value for foods which contain almost no carbohydrate. These foods include meats, fish, chicken, eggs, cheese, most nuts, oils, cream, butter and most vegetables.

#### The GI is not intended to be used in isolation

The GI of a food does not make it good or bad for you. High GI foods such as most potatoes and wholemeal breads still make valuable nutritional contributions to your diet. And low GI foods such as pastry that are high in fat (usually saturated fat) are no better for you because of their low GI. The nutritional benefits of different foods are many and varied, and we suggest you base your diet on a wide variety of foods that are low in salt and saturated fat, high in fibre and have a low GI.

### You don't need to avoid all high GI foods

There is no need to eat only low GI foods. While you will benefit from eating low GI carbs at each meal, this doesn't have to mean excluding all others. A meal that includes a high GI food such as a typical potato and a low GI food such as sweet corn will result in a lower GI overall.

#### You don't need to add up the GI each day

The GI value of a food can be altered by the way it is processed or cooked, so we don't believe it is possible to calculate a precise GI value for recipes or to predict the GI of a menu for the whole day. That's why we prefer simply to categorise foods as low, medium or high GI in most circumstances. We have also seen the benefits people gain by simply substituting low GI foods for high GI foods in their everyday meals and snacks without more complicated dietary changes.

#### Are foods containing sugar excluded?

Not all sugars are the same. Many foods naturally high in sugars are very nutritious like fruit, milk and yoghurt. Unfortunately food labels don't help you distinguish between the low or high GI sugars or tell you whether the sugars are naturally occurring or added. It's more useful to focus on a food's overall

GI (rather than the sugars), and if you need to watch your blood glucose levels, also look at total carbohydrate. Therefore nutritious foods high in sugar are not excluded.