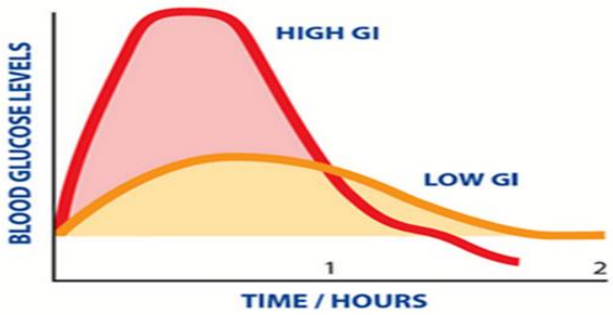
A CLOSER LOOK AT THE GLYCAEMIC INDEX and GLYCAEMIC LOAD

The Glycaemic Index (GI) was created by comparing the blood glucose levels of volunteers after eating 50g carbohydrate portions of different foods. Each food was given a GI rating depending on how fast the carbohydrate affected the blood glucose and insulin levels. Foods containing carbohydrates that are easily digested and release glucose rapidly into the bloodstream have a high GI; foods containing carbohydrates that break down more slowly, releasing glucose more gradually into the bloodstream, have a low GI.

Pure glucose is generally used as the 'standard' at 100 and the GI ranges are as follows:

- Low GI is less than 55 (see example list below).
- Medium GI is 55-70.
- High GI is 70-100.

The 'Glycaemic' Principle



The Glycaemic load (GL) is more relevant to real life in that it relates the GI to an **actual portion** of food eaten.

$$\frac{GI}{100} \times \text{grams of carbohydrate in portion} = \text{GL value}$$

Low GL=10 or less Moderate GL= 11-19 High GL=20 or more

NOTE: Just to complicate things further, fats and proteins consumed at the same meal as a portion of carbohydrate will slow down the absorption of glucose from that carbohydrate portion i.e. the food mix really can make a difference. For example, a jacket potato (a high GI food) eaten with a mix of cheese (providing fat and protein) and salads (providing fibre and oil in a dressing) will have a more moderate impact on blood glucose than if the same potato were eaten alone.

Is it important for me?

It is not advisable to get too hung up on GI numbers and **only** eat foods with a low GI. Just include them more often in your meals and use higher GI versions in smaller portions. This is more readily referred to as 'lowering the glycaemic load' or Low GL eating. If more of our meals are based on **moderate quantities of slower carbohydrates**, more stable blood glucose levels (and more stable insulin levels) are likely to be achieved. This can help to maintain energy levels throughout the day – avoiding peaks and troughs that lead to fatigue and a tendency to need a quick carbohydrate fix at frequent intervals.

Low GI carbohydrate containing foods GI=55 or less	
Breakfast cereals	Breakfast cereals & mueslis containing whole (not flaked) grains: e.g. whole rolled oats. All-Bran™
Breads	Grainy breads containing whole seeds or nuts e.g. Burgen ™ pumpernickel, stoneground, wholewheat and rye breads
Other grain/starchy foods	Durum wheat pasta Egg pasta and noodles Glass and cellophane noodles (pea / bean flour) Bulgar wheat, buckwheat, quinoa, amaranth, pearl barley Brown, red and wild rice
Starchy vegetables	Sweet potatoes, yams
Vegetables	All green vegetables, onions and leeks All salad vegetables and herbs Sprouted seeds and bean sprouts Carrots , artichokes, celeriac Avocado
Fruits	Apples, pears, stone fruits; nectarines, plums, peaches, apricots and soft fruit such as strawberries, blueberries and other berries Citrus fruit Fruit and vegetable juice (take care over quantities) Dried apples, pears, apricots, mango, prunes
Nuts, seeds and pulses	All nuts and seeds All dried beans and pulses Canned beans
Dairy products	Milk, yogurt and ice cream

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