

## 14. Are all carbohydrates created equal?

No. Carbohydrates used to be classified as simple or complex based on the speed of digestion. This type of classification assumed that 'simple' carbohydrates (lollies, soft drink, cordial, honey, etc.) were digested quickly and 'complex' carbohydrates (breads, cereal, rice and pasta, fruit and vegetables) were digested slowly. Research has progressed significantly and we know that there is more to it than digestion speed.

As carbohydrate foods are digested and absorbed, the blood glucose level rises and this promotes the release of insulin. Insulin promotes the storage of glucose into cells and lowers blood sugar levels.

Research has shown that a carbohydrate food can be classified according to how quickly it is digested and more importantly, how quickly it is absorbed into the bloodstream as glucose. This classification is known as the Glycemic Index (GI). Simply stated - low GI foods are digested and absorbed slowly and high GI foods quickly.

When carbohydrates are tested, the food under scrutiny is eaten and their effects on blood glucose levels are measured. All foods are compared to 50g of glucose, which has a GI of 100. A GI of 60 means that a carbohydrate-containing food raises blood sugar levels to 60% of pure glucose. Since a meal you eat may contain several carbohydrates the GI of a meal is approximately the average of the GI foods in the meal. Many other aspects of a meal can affect the overall GI including fat, fibre, protein, cooking methods and food preparation.

The GI of some foods may surprise you. Rice Bubbles® have a higher GI than cordial. Multi-grain bread has a higher GI than white chocolate.

This doesn't really change our nutrition advice. If you eat minimally processed and higher fibre foods such as fruits and vegetables and wholegrain cereals with minimal 'treats', your diet is likely to be mostly low GI. This is because they are not easily converted to glucose and take longer to be absorbed. Carbohydrates with higher fibre content tend to be more filling, allowing you to better control your appetite and body fat.

## 15. Is raw or brown sugar better for you than white sugar?

No. It is often thought that raw or brown sugar is the 'wholemeal' variety of sugar. However, all sugar is 100% carbohydrate and provides kilojoules or calories but little else. Apart from flavour, there is no advantage in replacing raw and brown sugar or honey for white sugar. One teaspoon of sugar contains 80 kilojoules, which is equal to two jellybeans. Consider that when you are next about to spoon sugar into your coffee.

The average Australian consumes 45 kg of sugar per year.