

The highs & lows of GI

Eating low-GI foods will help maintain your energy levels throughout the day and has some other great health benefits too.

What is Glycemic Index?

Every time we eat a carbohydrate food, such as pasta, potatoes, yogurt, cereal or fruit, our bodies convert carbohydrate to glucose for energy. Once upon a time we thought all carbohydrate foods were the same. We now know there is a difference in how quickly they are digested by the body. The Glycemic Index (GI) is a measure of how quickly these carbohydrate-rich foods are broken down into glucose and raise our blood glucose levels. Foods are ranked out of 100, with slowly digested carbohydrates classified as low GI (55 or less) and quickly digested carbohydrates as high GI (70 or more)¹.

Benefits of eating the low-GI way

Eating high-GI foods can lead to energy ups and downs as the glucose reaches your bloodstream quickly (i.e. the sugar hit), but it doesn't last for long. You could find yourself reaching for more snacks to bump up your energy levels again. Low-GI foods give you more steady energy levels across the day, helping to avoid the 'slump'. With more constant energy levels, you may find you aren't as hungry⁴. "In fact, there is very strong evidence that healthy low-GI diets are the most effective way of losing body weight, and more importantly, body fat,⁵" says dietitian and author Alan Barclay. "There is growing evidence that low-GI diets can help prevent type 2 diabetes⁶, heart disease⁷ and certain cancers,⁸" he says.

How can I tell the G of a food?

Not all carbohydrate foods have their GI measured. Foods that carry the GI logo have been tested and meet the criteria set out by the GI Symbol team. So look out for the GI logo in the supermarket.



How can I lower the GI of my diet?

Getting the benefits from low-GI eating is easy! Simply swap some of your carbohydrate foods for low-GI choices using the examples in the table on page 2. An easy way to lower the GI of your diet is to include one low-GI food at each meal and snack – for example, adding a low-GI food like baked beans to a high-GI food like potato will help to reduce the overall GI of the meal. It is important to remember that portion size counts. Just because it's low-GI, doesn't mean you can eat as much as you like. Eating too many kilojoules, even if they are from low GI carbohydrates, can still lead to weight gain.

Aren't all carbs bad for me?

There are plenty of myths out there about carbohydrates. The most common one is that carbohydrates are fattening. Protein, fat and carbohydrates all contain kilojoules, and if you eat too much of any of them without burning the energy, you can gain weight. Carbohydrates are actually the preferred energy source for your brain and working muscles, plus they have half the energy of fat. So include plenty of good-quality carbs in your diet like wholegrain breads and cereals, fruit and reduced-fat dairy, but remember to watch your overall kilojoule intake as well.

GI mini-quiz

How much do you know about GI? Take our quick quiz to find out then see below to see how you did.

Q1: All low-GI foods are healthy.

True or false?

Q2: Is the GI of chicken:

- a) Low
- b) Medium
- c) High
- d) None of the above?

Q3: One of the benefits of a low-GI eating plan is:

- a) It is lower in carbohydrates
- b) It helps manage blood-glucose levels
- c) It means you don't have to count calories

















Answers to GI mini-quiz

1: False. Some foods that have a low GI, may be high in fat or salt. Therefore GI is not always an indicator of a healthier food choice. When it comes to healthy eating, the kilojoule (or calorie), fat, saturated fat and sodium content of a food need to be considered. Your choices should not be solely based on GI but also on recommendations to reduce saturated fat and increase fruit, vegetables and fibre³.

2: d) GI can only be measured in food containing carbohydrates. Chicken contains protein and fat, but not much carbohydrate, therefore it does not have a GI ranking.

3: b) Low-GI foods release glucose gradually into the bloodstream helping to manage blood glucose levels. Low-GI foods are carbohydrate foods, but they are not lower in carbohydrate than high-GI foods. Low-GI foods can have just as many kilojoules as high-GI foods, so just because it's low-GI, doesn't mean you can eat as much as you like. The overall kilojoules in your diet are still important to keep track of.

The following table shows different foods that are high, medium and low GI².

FOOD	LOW GI (GI 55 OR LESS)	MEDIUM GI (GI 56-69)	HIGH GI (GI 70 OR MORE)
BREAD	 <p>multigrain, low-GI white and sourdough breads</p>	 <p>pita and rye breads</p>	 <p>white/wholemeal bread, crumpets, English muffins, pikelets</p>
GRAINS PASTA	 <p>pasta, barley, noodles, Moolgiri rice</p>	 <p>Doongara and Basmati rice</p>	 <p>Calrose and jasmine rice, rice cakes, water crackers</p>
CEREALS	 <p>natural muesli, rolled oats, bran-based breakfast cereals</p>		 <p>most breakfast cereals like puffed rice, corn and wheat flakes</p>
VEGETABLES	 <p>corn, carrots, lentils, chick peas, kidney beans, baked beans</p>	 <p>beetroot, sweet potato, Nicola potatoes</p>	 <p>potato, parsnip</p>
FRUIT	 <p>apples, oranges, strawberries, mangoes, pears, peaches</p>	 <p>apricots, pineapple, kiwifruit, bananas</p>	 <p>watermelon</p>
DAIRY	 <p>milk, yogurt, ice cream, custard</p>		
SWEET TREATS	 <p>chocolate</p>	 <p>soft drinks</p>	 <p>lollies, cup cakes, lamingtons</p>

References:

1. Measuring the GI. Home of the Glycaemic Index <http://www.glycemicindex.com/>
 2. Diabetes Australia. Fact Sheets: The glycaemic index August 2006 http://www.diabetesaustralia.com.au/_lib/doc_pdf/resources/factsheets/GLYCAEMIC_INDEX_revised_Aug_06.pdf
 3. Australian Government Department of Health and Ageing. Australian Guide to Healthy Eating <http://www.health.gov.au/internet/wcms/Publishing.nsf/Content/health-pubhlth-strateg-food-guide-index.htm>
 4. Ludwig DS. 2000 Dietary glycaemic index and obesity. *J Nutr* 130: 280S-283
 5. Thomas DE, Elliott EJ, Baur L. Low glycaemic index or low glycaemic load diets for overweight and obesity. *Cochrane Database Syst Rev*. 2007 Jul 18;(3):CD005105.
 6. Barclay AW, Flood VM, Rochtchina E, Mitchell P, and Brand-Miller JC. Glycemic Index, Dietary Fiber, and Risk of Type 2 Diabetes in a Cohort of Older Australians. *Diabetes Care*. 2007; 30(11): 2811-2813.
 7. Beulens JW, de Bruijne LM, Stolk RP, Peeters PH, Bots ML, Grobbee DE & van der Schouw YT (2007) High dietary glycaemic load and glycaemic index increase risk of cardiovascular disease among middle-aged women: a population-based follow-up study. *J Am Coll Cardiol* 50, 14-21.
 8. Higginbotham S, Zhang ZF, Lee IM et al. Dietary glycaemic load and risk of colorectal cancer in the Women's Health Study. *J Natl Cancer Inst* 2004;96:229-33.
- © of GI Symbol, The University of Sydney, used under licence.

Nourish

April 2008

Looking after what matters



Fuel for you

Fill up and feel good with our guide to eating low-GI foods

Fuss-free cooking

Follow our easy recipes and tips for great meals at home

**\$2,000+ in prizes
to be won**
See page 19
for details

NOURISH

Looking after what matters

View NOURISH magazine online at www.nestle.com.au for more great ideas on looking after what matters...your family, your friends, your environment and, importantly yourself!