

LOW GLYCEMIC DIET

How to follow a low-GI diet

Make an Internet search for any fad diet and you are likely to get as many hits claiming it is nonsense as those claiming it revolutionises weight loss. But, here's the thing about low-GI; it's not a fad and there are no medical journal articles or scientific studies that say it isn't a healthy dietary concept. Eating low-GI is a key nutrition message that goes hand-in-hand with other healthy eating guidelines such as eat less saturated fats and eat more fruit and vegetables.

The Glycemic Index (GI) was devised about 20 years ago when researchers looked closer at the dietary recommendations for diabetics; which was to eat more complex carbohydrates (starch) because they took longer to process and digest than simple carbohydrates (sugar). What the researchers discovered was that the effect of a carbohydrate on blood-glucose levels was not determined by the sugar or starch. For example, we now know that the effect chocolate has on blood-glucose is actually lower than potatoes. That doesn't mean chocolate is healthy — but I'll get to that later.

"GI is a ranking (from 1 to 100) which measures the effect of a food on your blood-glucose level over the two hours after the food is eaten," explains Joanna McMillan-Price, a Sydney nutrition scientist and co-author of *The Low GI Diet* book.

"You get a bell-shaped curve when you eat food containing carbohydrates; the blood-glucose rises and as your body produces insulin it pushes the glucose out of the blood and into tissues, and then you see the blood-glucose level falling." McMillan-Price explains that when eating high GI foods, you get a very high bell curve response with a dramatic drop. With a low-GI food, there is a slower and steadier rise in the blood-glucose level.

How does low-GI promote better health?

"Research has shown that very high glucose levels after meals, called glucose spikes, are damaging to our arteries and various blood vessels, and they promote far too much insulin to be around," explains McMillan-Price.

Eating low-GI foods means you avoid those spikes and dramatic falls in blood-glucose so you get a much steadier stream of energy. You, therefore, reduce your risk of heart disease and other chronic diseases that are implicated by those blood-glucose fluctuations.

How low-GI contributes to weight control

High GI foods are bad for weight control for two reasons, says McMillan-Price. Firstly, the glucose spikes stimulate hunger because you are getting that dramatic drop in glucose, 90 minutes to two hours after eating. By eating low GI foods you feel fuller for longer and are, therefore, not as likely to go searching for snacks every two hours.

Secondly, insulin is a storage hormone that stockpiles nutrients for later use by the body. A high-GI diet causes a lot of insulin to be produced and when you have too

much insulin in your body too much of the time, it makes it easier to store fat and harder to burn it.

Applying the low-GI concept to your diet

McMillan-Price says the recommendation is that at least two meals a day should be accompanied by a low-GI food. "It doesn't mean you should never eat high-GI foods, but preferably put most meals together with a low GI food," she says.

However, don't be worried into thinking you need to know the GI value of every food. Healthy foods such as fruits and vegetables, except potatoes, should be eaten daily regardless of their GI. Simply knowing the low, medium and high varieties of the major carbohydrate foods in your diet — breakfast cereals, breads, rice, pasta — and choosing the low-GI ones is sufficient to produce healthy benefits.

If you simply can't go without certain high GI favourites occasionally, like jasmine rice, serve just a small portion and add a low GI alternative, like a lentil dahl. It is also worth considering the content of your plate. Half your plate should be vegetables, and the other half split into two quarters containing protein and low GI carbohydrate.

Now, getting back to the low GI of chocolate, just because something has a low GI doesn't mean you should indulge, says McMillan-Price. "Low-GI has been misunderstood by some people who think it is the be all and end all," she says. "Don't use the GI as the first step in choosing what foods you should be eating. The GI should come after you've looked at whether something is a good food that has low levels of saturated fat and is nutrient-rich ... and then the GI becomes a tool to choose which is the best carbohydrate from these sources."

So, it's not necessary to know the GI of a chocolate bar because it's clearly an energy-dense food without many nutrients that is not going to aid weight loss.

What is the GI symbol?

Foods carrying the GI symbol must meet specific nutritional criteria and have their GI measured using the approved method. The program, designed to help consumers choose low-GI foods, is run by the non-profit company Glycemic Index Ltd, whose members are the University of Sydney, Diabetes Australia and the Juvenile Diabetes Research Foundation.

Glycemic Index Ltd explains that when you see the GI Symbol on a food label, you will find the GI value near the nutrition information panel along with the words 'high', 'medium' or 'low'. You will also know that the food meets the program's nutritional criteria, which generally means it is a good nutritional choice for that food group.

The GI table

High — 70 or more, Medium — 56 to 69 inclusive, Low — 55 or less

Instead of .

Long-grain white Jasmine rice (109)
Buttercup Wonder White bread (80)
Ricegrowers, brown rice pasta (92)
Dried rice noodles (61)
Skippy cornflakes (93)
Uncle Tobys instant porridge (82)
Boiled potato (Sebago 87, Desiree 101)
White bagel (72)

Try ...

Ricegrowers Doongara white rice (55),
Mahatma long-grain white rice (50)
Burgen Oat Bran and Honey bread (49),
Tip Top 9 grain bread (43)
White capellini pasta (45),
Egg fettuccine (40)
Fresh rice noodles (40),
soba noodles (46)
All Bran Fruit and Oats (39),
Kelloggs Guardian (37)
Regular porridge (58)
Baked sweet potato (46)
Salmon sushi (48)

Simple meal ideas for GI diet

Simple meal ideas For variety, try these simple meal ideas:

Breakfast

- Porridge with low fat milk or soy drink and topped with honey, OR
- PerforMAX® toast with a scrape of Canola margarine and vegemite, fruit spread or peanut butter, OR
- Low fat fruit yoghurt or plain low fat yoghurt topped with fresh fruit, OR
- Toasted Burgen® bread topped with baked beans or a poached egg, OR
- Guardian® with low fat milk or soy drink and topped with fresh strawberries or sliced banana.

Light meals

- Try your favourite sandwich filling with Burgen® bread, OR
- Home made minestrone or lentil soup with a grainy roll, OR
- Have a bowl of pasta with a chunky tomato based sauce (eg: Dolmio) and a sprinkle of parmesan cheese, OR
- Eat a fresh garden salad with 4-bean mix (or bean salad) and a slice or two of Ploughman's Wholegrain Loaf®, OR
- Prepare a fruit salad with your favourite fruit and top with low fat yoghurt.

Main meals

- Grill your favourite lean meat or chicken and serve with potato, sweet corn and peas, OR
- Stir fry some lean beef or pork strips and mixed vegetables and serve with fresh wheat noodles or Basmati or Doongara rice, OR
- Prepare some lasagne with lean mince, fat reduced cheese and add 3-bean mix for extra variety, OR
- Make your favourite curry and serve with Basmati or Doongara rice and pappadams, OR
- Team a barbequed chicken with steamed sweet corn cobs, grainy bread roll and a tossed salad

Glycaemic Index Tables

Finding the GI spot!

Foods only appear on the GI index if they contain **carbohydrate**. This explains why you won't find foods like fresh meat, chicken, fish, eggs and cheese in GI lists. However, you may find some processed foods like sausages or chicken nuggets in a GI list because they contain flour!

Low Glycaemic Index foods (55 or less)

Include some of these foods in each meal or snack, but go for low-fat choices where possible, such as skimmed milk. If you want to lose weight, you'll also need to watch your portion sizes. That means sticking to small servings of pasta and noodles, limiting yourself to two slices of bread with a meal, and having only a couple of squares of chocolate or a small handful of peanuts!

Table 1 - Low GI Foods

Food	GI
Roasted and salted peanuts	14
Low-fat yoghurt with sweetener	14
Cherries	22
Grapefruit	25
Pearl barley	25
Red lentils	26
Whole milk	27
Dried apricots	31
Butter beans	31
Fettucine pasta	32
Skimmed milk	32
Low-fat fruit yoghurt	33
Wholemeal spaghetti	37
Apples	38
Pears	38
Tomato soup, canned	38
Apple juice, unsweetened	40
Noodles	40
White spaghetti	41
All Bran	42
Chick peas, canned	42
Peaches	42
Porridge made with water	42
Lentil soup	44
Oranges	44
Macaroni	45
Green grapes	46
Orange juice	46
Peas	48
Baked beans in tomato sauce	48
Carrots, boiled	49
Milk chocolate	49
Kiwi fruit	52
Stoneground wholemeal bread	53
Crisps	54
Special K	54
Banana	55
Raw oatbran	55
Sweetcorn	55

Medium Glycaemic Index foods (56 to 69)

You may include a few of these foods each day, but again limit portion sizes if you want to lose weight.

Table 2 - Moderate GI Foods

Muesli, non toasted	56
Boiled potatoes	56
Sultanas	56
Pitta bread	57
Basmati Rice	58
Honey	58
Digestive biscuit	59
Cheese and tomato pizza	60
Ice cream	61
New potatoes	62
Coca cola	63
Apricots, canned in syrup	64
Raisins	64
Shortbread biscuit	64
Couscous	65
Rye bread	65
Pineapple, fresh	66
Cantaloupe melon	67
Croissant	67
Shredded wheat	67
Mars bar	68
Ryvita	69
Crumpet, toasted	69
Weetabix	69
Wholemeal bread	69

High Glycaemic Index foods (70 or more)

Swap these foods for those with a low GI value or eat them together with a low GI food. Having a jacket potato with baked beans, for example, will lower the GI value of that whole meal.

Table 3 - High GI Foods

Mashed potato	70
White bread	70
Watermelon	72
Swede	72
Bagel	72
Branflakes	74
Cheerios	74
French fries	75
Coco Pops	77
Jelly beans	80
Rice cakes	82
Rice Krispies	82
Cornflakes	84
Jacket potato	85
Puffed wheat	89
Baguette	95
Parsnips, boiled	97
White rice, steamed	98