

South Warwickshire



NHS Foundation Trust

Warwickshire Dietetic Service

The Glycaemic Index

What is the Glycaemic Index?

The Glycaemic Index (GI) is a ranking of foods based on their effect on blood sugar (glucose) levels.

Carbohydrate containing foods are given a GI number (between 0 and 100) according to their effect on blood glucose levels. Glucose is used as the baseline (GI 100) and other foods are measured against this.

Foods with a **low GI** are broken down more slowly into glucose and therefore the rise in blood glucose after eating them is slower. Foods with a **high GI** are broken down quickly into glucose and therefore produce a quicker rise in blood glucose. The table on page 3 gives examples of high, medium and low GI foods.

What are the benefits of slow acting carbohydrates?

Choosing slowly absorbed carbohydrates can help:

- Keep your blood glucose levels stable.
- Control your appetite by making you feel fuller for longer, with the result that you eat less helping with weight loss.
- Enhance energy and concentration levels.
- Improve levels of 'good' (HDL) cholesterol.
- Contribute towards a healthy diet which could help protect against heart disease, strokes, cancer and other longer term health conditions.

Does anything else affect GI?

The following can affect the GI of a food:

- Physical form of a food e.g. wholegrains and high fibre foods act as a physical barrier that slows down the absorption of starchy carbohydrate. Mashing foods and juicing drinks can raise the GI.
- Type of starch e.g. the starch in pasta, porridge and basmati rice is digested more slowly.
- Type of fibre e.g. the fibres in oats, fruit, beans and lentils slow down the rate of digestion.
- Processing and ripeness of fruit e.g. as bananas ripen they have a higher GI.
- Cooking methods e.g. frying foods can lower the GI.
- Fat and protein slow down the absorption of carbohydrate.

Are all low GI foods healthier choices?

No, not all low GI choices are healthier options. Fat slows down digestion and the absorption of glucose e.g. chocolate and crisps have a medium GI but this is because of their high fat content and they are not a healthier choice.

What is the Glycemic Load?

Glycemic load (GL) accounts for the amount of carbohydrate in a portion of food together with the GI e.g. watermelon has high GI, but a low carbohydrate content and so it won't push up blood glucose levels very quickly unless large quantities are eaten. For this reason it is important not to focus exclusively on GI and to think as well about the overall balance of the diet.

Can I get hold of a list of GI values for all foods?

There are books and websites that give a long list of GI values for many different foods. These lists can have limitations.

The GI of a food only tells you how quickly or slowly it raises the blood glucose when the food is eaten on its own. In practice, we usually eat a mixture of foods at meals. Cutting out all high GI foods is not the answer, instead try to include some more low and moderate GI foods in your meal as well.

Glycaemic Index

The table below gives the GI rating for some common foods:

	Low GI Foods	Moderate GI Foods	Higher GI Foods
Breads	Granary, multigrain, rye, pumpernickel, wholegrain breads. Multigrain crackers Fruit loaf Oatcakes Oatmeal crackers Chapatis	Wholemeal bread Pitta bread Muffins (English) Crumpet Croissant Ryvita	White, brown bread Gluten free bread Baguette Bagel French stick Pretzels Water crackers Naan bread
Breakfast cereals	Porridge, Oatibix, Unsweetened muesli, All Bran, Sultana Bran, Special K	Puffed and Shredded Wheat, Weetabix, Branflakes Cereal bars	Cornflakes, Rice Krispies, Cheerios, Sugar Puffs, Coco pops
Potatoes, pasta, rice	Sweet potato Pasta Noodles Spaghetti Basmati rice	New potatoes in their skins	Instant potato Jacket potato Mashed potato Chips White and brown rice Jasmine rice
Grains, beans and pulses	All pulses e.g. beans, lentils, chickpeas. Hummus Buckwheat, quinoa, barley	Couscous, millet	
Fruit and vegetables	Apple, pear, citrus fruits, plums, prunes, grapes, berries, cherries, dried apricots, salad, vegetables	Dried fruit, mango, banana, melon, pineapple	Watermelon, dates, parsnips, pumpkin, swede
Milk and dairy foods	Milk, cheese, Yoghurts, fromage frais, custard	Ice cream	
Sugary/snack foods	Dark chocolate, plain popcorn, sponge cake, nuts	Digestives, rich tea biscuits, crisps, rice cakes, sucrose, honey, jam	Sweets, doughnut, iced cakes, wafers, glucose
Drinks	Sugar free squash	Fruit juice	Lucozade, cola, lemonade and other full sugar drinks

Menu suggestions

Breakfast

- Oat-based breakfast cereals such as porridge or unsweetened muesli
- Granary or wholegrain toast with topping of choice

Lunch

- Jacket potato and baked beans
- Lentil based soups
- A sandwich made with seeded or wholegrain bread
- Pasta or basmati rice salad with low fat dressing

Evening meal

- Try basmati rice, sweet potato, new potatoes or noodles with your meal
- Include more vegetables/salad
- Add beans, pulses (dhal), buckwheat, bulgur wheat and pearl barley to soups, casseroles and mince dishes

Snacks (optional)

- Yoghurt (choose plain or diet varieties)
- Plain popcorn
- Oat cakes
- Rye bread and fruit loaf
- Fruit
- Nuts and seeds

The above information is based on Diabetes UK recommendations.



The charity for people with diabetes

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Equality Statement

At South Warwickshire NHS Foundation Trust we are fully committed to equality and diversity, both as an employer and as a service provider. We have a policy statement in our Equality Strategy that clearly outlines our commitment to equality for service users, patients and staff:

You and your family have the right to be treated fairly and be routinely involved in decisions about your treatment and care. You can expect to be treated with dignity and respect. You will not be discriminated against on any grounds including age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex or sexual orientation.

You have a responsibility to treat other service users, patients and our staff with dignity and respect

Our information for patients can also be made available in other languages, Braille, audio tape, disc or in large print.

PALS

We offer a Patient Advice Liaison Service (PALS). This is a confidential service for families to help with any questions or concerns about local health services.

You can contact the service by the direct telephone line on 01926 600 054 by email:

Pals@swft.nhs.uk or by calling in person to the PALS Office which is located in the Lakin Road Entrance to the hospital.

If you have any queries about your diet, please contact us on 01926 600818, selecting option 3.

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