

This factsheet looks at the types of foods that make up a healthy diet and how changes to your diet may help to improve your overall health and wellbeing.

Eating irregular meals can cause changes to your blood sugar levels that can affect how you feel and how your body functions. Eating regular well balanced meals can help increase your energy levels and boost your immune system, which may help you to feel more positive and reduce the risk of seizures.

What foods make up a 'healthy diet'?

Your diet needs to include a wide variety of foods from all three of the food groups: fats, carbohydrates and proteins.

Adults should aim to eat no more than 70g of fats per day – with most of these coming from monounsaturated fats such as using olive oil in cooking and olive oil spreads. We should reduce our use of vegetable oils and increase our intake of omega 3 fats. We can consume small amounts of saturated fats but should avoid trans fats as much as possible.

Most of our diet should be made up of 'complex carbohydrates'. These include high fibre foods such as wholegrain bread, cereal, pasta and rice, along with a variety of fruit and vegetables. Try to avoid refined sugars and syrups like those found in fizzy drinks, sweets, cakes, biscuits, and adding sugar to hot drinks.

Protein can be found in meat and fish, but also in tofu (soya bean curd), dairy products, nuts, seeds, pulses and legumes (lentils and beans). It is good to choose lean cuts of meat and remove any skin as this is often where the saturated fat can be found. Oily fish such as mackerel, salmon and sardines can be a good source of protein and also contain healthy omega 3 fats.

An important way to maintain a healthy body weight is to balance calorie intake with physical exercise. Calories are units of energy that foods contain. If a food contains a high number of calories, but you do not use up all the energy (in your day-to-day activities or through exercise), then it can cause you to gain weight.

Eating '5 a day'

It is recommended that we should eat a range of different coloured fruit and vegetables each day as each colour relates to a different set of vitamins and minerals called phytonutrients. Eating this variety gives our bodies all the vitamins and minerals it needs to function well. Fruit and vegetables also contain valuable antioxidants which can help to protect the body from damage.

What is a 'balanced diet'?

A balanced diet is one that is made up of a mixture of carbohydrates, proteins and fats. It is important for everyone to eat a variety of foods from all three food groups.

- Carbohydrates release energy into the body and feed the brain.
- Proteins build and support your muscles, hormones, enzymes, red blood cells and immune system.
- Fats help you to absorb certain nutrients, warm the body, promote healthy cell function and can also be used for energy.

You may have heard of diets such as low fat diets, low carbohydrate diets, or GI diets. Some foods are better for you than others but getting the right balance of the different types of carbohydrates, proteins and fats is also important.

Fat

Some people eat too much of the wrong types of fat and become overweight. However, some fatty acids are essential nutrients, meaning that they can't be produced in the body from other nutrients and so need to be eaten in our diet in order for our bodies to function well. All other fats required by the body can be produced in the human body without being eaten.

Which fats are better for our bodies than others?

There are four types of fats that we should know about.

a) Monounsaturated fats – omega-9 fats

Omega-9 fat is the main fatty acid found in olive oil. It is also found in avocados, almonds and macadamia nuts.

Research suggests that eating omega-9 fats can lower cholesterol, reduce hardening of the arteries, improve immune function and provide protection against certain types of cancer.

b) Polyunsaturated fats

There are two main types: omega-3 and omega-6. Some foods contain both omega-3 and omega-6 fats.

Omega-3 fats

Oily fish such as mackerel, salmon, sardines, herring, anchovies and fish oil supplements like cod liver oil, all contain high levels of omega-3 which can be extremely good for you. Omega-3 fats can help you keep a healthy heart, skin, bones, boost your energy levels and your ability to deal with stress. Other omega-3 rich foods include flax seeds, hempseeds, walnuts, soya beans and pumpkin seeds.

Most people do not eat enough food containing these essential omega-3 fats. The Food Standards Agency (FSA) recommends that we should eat at least 2 portions of fish a week, including 1 of oily fish.

Omega-6 fats

Foods that contain omega-6 fats include sunflower, pumpkin and sesame seeds, pine nuts, pistachio nuts, chicken, and grapeseed, vegetable and sunflower oils.

Most people eat too much omega-6 fat from cooking with vegetable oils. Omega-6 fats are important, but as most of us eat more, not less, than we actually need, it is advised that we get our omega-6 fats from a variety of foods and not just from using vegetable oils.

c) Saturated fats

These are mainly found in animal products such as butter, cream and animal fats. Saturated fats are associated with increased 'bad' cholesterol and are thought to increase the risk of coronary heart disease - which can lead to angina, heart attacks and strokes.

Aim to eat foods that contain less than 5g of saturated fats per 100g.

d) Trans fats

Trans fats are produced by hydrogenating (chemically changing) polyunsaturated fats.

Trans fats are mostly found in processed foods such as cakes, biscuits and margarines, as they give the foods a longer shelf life. However these trans fats are extremely hard for the body to break down, and as a result they can cause a number of health problems. Trans fats can raise 'bad' cholesterol levels and decrease 'good' cholesterol levels. There is also research to suggest that diets high in trans fats can increase your risk of a number of cancers.

Aim to eat as little trans fats as you can by avoiding processed foods and by being aware of the words 'trans' or 'hydrogenated' in lists of ingredients.

Are some carbohydrates better than others?

Starchy foods and sugars, such as cane sugar and honey contain the most carbohydrates, but fruits and vegetables also contain carbohydrates.

Some foods are classed as 'low GI' and others as 'high GI'. GI stands for Glycaemic Index which means how quickly sugars are released from the carbohydrate in that particular food. High GI foods, such as biscuits and cakes, release their sugars very quickly into the blood stream which can cause your blood sugar, and energy levels, to rise rapidly but then fall quickly, causing a slump in energy levels.

In contrast, low GI foods release their sugars slowly and steadily, which results in your blood sugar, and energy levels, staying steady. Brown bread, rice and pasta have low GI levels so they help you to feel fuller for longer and also have more fibre than white versions.

This may mean that if your seizures are triggered by changes in your blood sugar, then eating low to medium GI foods may help to reduce your seizures.

High GI foods include:

Cakes, muffins, soft drinks, pizza, white bread, bagels and baguettes, many breakfast cereals, white couscous, white rice, white pasta, mashed potato, chips and dates.

Medium GI

Porridge oats, white pitta bread, croissant, digestives, crispbread, honey, mango, sultanas, bananas, raisins, ice cream, baked beans.

Low GI

Wholewheat pasta and bread, brown rice, new potatoes, sweet potatoes, noodles, wheat tortilla. Kidney beans, lentils, chickpeas and any other pulse or bean.

Milk, soya milk, yoghurt and nuts.

All vegetables, salad items and fruit (except those listed as medium or high).

What about vitamin and mineral supplements?

Vitamins and minerals are essential nutrients that your body needs, in small amounts, to work properly. For most people, a varied and healthy diet will provide all the vitamins and minerals they need. However there are groups of people who may need a little extra help, and so supplements may be beneficial. For example, all women who are planning to get pregnant, or who are already pregnant, should take a daily supplement of folic acid.

Although the majority of vitamin supplements can be taken if you have epilepsy, it is always recommended that you check with your doctor before taking any kind of supplement.

Another important vitamin is vitamin D. Vitamin D is essential to help our bodies build healthy bones and increasingly studies show that it may reduce the risk of flu and certain cancers - particularly bowel cancer. It can also reduce the risk of circulatory disease, such as heart attacks and stroke.

Sunlight is generally the main source of vitamin D, however because the UK often has poor levels of sunshine, this means we cannot just rely on sunshine to keep our levels topped up.

As most AEDs appear to affect bone density it may be beneficial to take a vitamin D supplement if you are worried that you are not getting enough of the vitamin from your diet, or from brief exposure of your skin to sunlight.

→ For more information on vitamin D visit the 'advice and prevention' section at www.sunsmart.org.uk

Can high fat diets help seizures?

The ketogenic diet can help some children with poorly controlled seizures by using high levels of fat to affect how the brain works. The ketogenic diet is a medical treatment carried out under the supervision of a dietitian and an epilepsy specialist. It is a diet that should not be started unsupervised. At present the ketogenic diet is used with children whose epilepsy is not responding to AEDs. However trials are currently being carried out using a modified ketogenic diet for use in adults.

→ For more information visit www.matthewsfriends.org

Are there any foods that can trigger seizures?

Some people wonder whether ingredients such as colourings and preservatives, monosodium glutamate (MSG), refined sugars and artificial sweeteners can affect seizures. However, there is no evidence that any type of food consistently triggers seizures in people with epilepsy (except for some extremely rare types of 'reflex' epilepsy where seizures can be triggered by eating very specific foods). However, if certain foods appear to trigger your seizures, then it may be best to avoid them.

To become an associate member call 01494 601 402 or email members@epilepsysociety.org.uk
For a fundraising pack call 01494 601 300 or email fundraising@epilepsysociety.org.uk

Epilepsy Information Services National Society for Epilepsy

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Epilepsy Helpline

01494 601 400 (national call rate)
Monday – Friday 10am – 4pm
(Translation service available)

