# **Diet and Nutrition**



### How does diet affect epilepsy?



Although there is little evidence that your diet has a direct effect on seizures, a balanced diet provides essential nutrients and keeps our energy levels steady, helping us to stay healthy. This may help reduce the risk of seizures for some people with epilepsy.

A balanced diet may also help you to keep a regular sleep pattern and keep active, both of which are good for overall health. Getting enough sleep may help to reduce the risk of seizures for some people. A diet that suits you may help you to feel positive, more able to focus, and more in control of your life and decisions about managing your epilepsy.

#### What is a balanced diet?

A balanced diet is generally made up of carbohydrates, fats, proteins, vegetables, and fruit, and plenty of fluids. Research continues into what makes a healthy diet, but the NHS advise that, for the general population, people should try to:

- Eat at least five portions of fruit and vegetables every day;
- Base meals on potatoes, bread, rice, pasta, or other starchy carbohydrates;
- Eat some beans, pulses, fish (including one portion of oily fish a week), eggs, meat, and other protein foods;
- Have some dairy or dairy alternatives (such as soya drinks and yoghurt);
- Choose unsaturated oils and spreads, and eat in small amounts:

- Eat foods high in fat, salt, and sugar less often and in small amounts;
- Drink plenty of fluids the government recommends six to eight glasses a day; and
- Cook from scratch (using fresh ingredients) wherever possible.

The NHS also has information on healthy eating for vegans and vegetarians.

Visit nhs.uk/live-well/eat-well/how-to-eat -a-balanced-diet

#### **Knowing what we eat**

Media reports and recommendations about what to eat can be confusing or contradictory. Also it can be hard to know what our food contains.

'Traffic light' labelling on supermarket food is one way to help you see what is in food. This uses red, amber, and green labels for high to low levels of our recommended daily amount of calories, sugar, fats, and salt. Seeing at a glance the foods with more green labels than red can help you make your own choices about following a balanced diet.

The NHS publishes The Eatwell Guide which shows how much of what we eat overall should come from each food group to achieve a healthy, balanced diet. Visit nhs.uk/live-well/eat-well/the-eatwell-guide

#### **Preparing food**

Making your own meals gives you more control over what you are eating. If you have seizures, some things may help make cooking safer. These include:

- using a kettle tipper, and wire baskets inside saucepans, to avoid lifting containers of hot water;
- using hob rings at the back of the hob, and turning pan handles to the side; and
- using a microwave rather than an oven.

Visit epilepsysociety.org.uk/safety-and-risk

#### **Vitamins and mineral supplements**

Vitamins and minerals are nutrients your body needs in small amounts to work properly and stay healthy.

Eating a healthy, balanced diet is an important part of maintaining good health and can help you feel your best. This may reduce the risk of seizures for some people with epilepsy. Helpline 01494 601400 Confidential, national call rate. Information and emotional support. Visit epilepsysociety.org.uk/helpline for opening hours. For most people, a varied, healthy diet will provide most of the vitamins and minerals they need. Taking unnecessary supplements can be harmful. However, Government advice is that everyone (especially children under four years old) should consider taking a daily vitamin D supplement during the autumn and winter.

Vitamin D helps regulate the amount of calcium and phosphate in the body and helps the immune system. These nutrients are needed to keep bones, teeth, and muscles healthy. Sunlight is the main source of vitamin D, and most people should be able to make all the Vitamin D they need from sunlight from about late March to the end of September.

Vitamin D is also found in a small number of foods including egg yolks, red meat, liver, oily fish such as salmon, sardines, herring, and mackerel, and fortified foods such as some breakfast cereals and some fat spreads.

# Visit nhs.uk/conditions/vitamins-and-minerals/vitamin-d

Some anti-seizure medications (ASMs) can reduce bone density, making bones weaker and more likely to break. To help prevent this, doctors may suggest a bone density scan, and prescribe vitamin D. You can ask your doctor for more information about this.

Visit epilepsysociety.org.uk/osteoporosis -and-epilepsy

#### Pregnant, planning a pregnancy, or breastfeeding?

Pregnant women, or those planning a pregnancy, need to avoid taking too much vitamin A, (found in liver and fish oil supplements like cod liver oil), as large amounts of vitamin A can harm an unborn baby. Your GP or midwife can give you more information about this.

Visit nhs.uk/conditions/vitamins-and-minerals
/vitamin-a

The Department of Health recommends that pregnant or breastfeeding women take a daily supplement of vitamin D.

All pregnant women or those who are planning to get pregnant, are advised to take a daily supplement of folic acid (a type of vitamin B). For women with epilepsy, a higher dose of 5mg daily is recommended, as soon as they start trying for a baby and for at least the first 12 weeks, and for the whole pregnancy if their doctor feels this is necessary. This strength of folic acid is only available on prescription but will be free of charge.

Visit epilepsysociety.org.uk/pregnancy-and-epilepsy Visit nhs.uk/pregnancy/keeping-well/vitamins -supplements-and-nutrition

Every effort is made to ensure that all information is correct at the time of printing. Please note that information is intended for a UK audience. This information is not a substitute for advice from your own doctors. Epilepsy Society is not responsible for any actions taken as a result of using this information.

# Can any special diets help prevent seizures?

The ketogenic diet is a medical treatment carried out under the supervision of a dietitian and an epilepsy specialist. This diet can help some people with poorly controlled seizures by using specific proportions of fat, carbohydrate, and protein to affect how the brain works. This diet should **not** be started unsupervised.

Visit epilepsysociety.org.uk/ketogenic-diet

## Can any foods trigger seizures?

There is currently no evidence that any type of food consistently triggers (sets off) seizures in people with epilepsy, except for rare types of 'reflex epilepsy' where seizures are triggered by eating very specific foods.

Some people feel that some colourings and preservatives, such as monosodium glutamate (MSG) or artificial sweeteners can trigger their seizures, but there is no high quality evidence for this. Many foods labelled 'low-fat' contain these kind of ingredients.

Grapefruit juice and pomegranate juice do not trigger seizures, but they can make the side effects of some ASMs more likely, including carbamazepine, diazepam, and midazolam. The patient information leaflet for your medication will say whether to avoid drinking these.

Caffeine, found in tea, coffee, cola, and some energy drinks has a stimulating effect on the central nervous system. The relationship between caffeine, seizure control, and ASM is complex and not fully understood. Some reports suggest that caffeine may increase the likelihood of seizures happening for some people.

Caffeine may also affect how well ASMs work in controlling seizures. However, in some cases it appears that caffeine can protect against seizures. You may want to speak to your specialist if you have any concerns about the effect caffeine may have on your seizure control.

Epilepsy Society is grateful to Dr Natasha Schoeler, Senior Research Fellow and Specialist Paediatric Dietitian, UCL Great Ormond Street Institute of Child Health and Great Ormond Street Hospital for Children, who reviewed this information.

For a printed copy of this information contact our helpline.

Epilepsy Society Chesham Lane, Chalfont St Peter, Buckinghamshire SL9 0RJ



