



# EPILEPSY & The Facts

## Nutrition and Epilepsy

### Do people with epilepsy require a special diet?

It is important that people with epilepsy follow a nutritious, well balanced diet. Good nutritional habits and a healthy lifestyle are important in obtaining optimal seizure control. However, no special diet is prescribed for epilepsy itself.

To avoid dietary deficiencies, ensure proper intake of nutrients through a diet containing adequate folic acid (commonly found in raw and slightly cooked fruits and vegetables), calcium and magnesium (dairy products are the richest source), Vitamin B12 (animal and dairy sources), and vitamin K (leafy green vegetables and cereal grains). Vitamin D is found in fish oils and flesh, supplemented milk, and is made in the body in response to sunlight. Rules for a healthy diet are outlined in “Canada’s Food Guide”.

If you have some other condition in addition to epilepsy, that requires a special diet (diabetes, for example), it is important that you follow the diet needed for that disorder.

### Can high or low blood sugar lead to seizures?

In extreme cases. Nevertheless, blood sugar level should be steady and moderate for people with epilepsy. Sweets, caffeine and alcohol all cause blood sugar levels to fluctuate and should be avoided. High fibre—whole wheat toast or a bran muffin—helps control fluctuations of blood sugar. Protein is also important in the metabolism of certain brain chemicals and hormones.

### Do anticonvulsants affect nutrients in the body?

The medicines that control seizures may interfere with the body’s ability to use certain nutrients including vitamin D, vitamin K, calcium, magnesium, manganese and folic acid. While this problem is in most people who take medications, it is usually mild and causes no harm. Those most vulnerable to vitamin deficiencies include: people on large doses of medication or multiple drugs; the elderly; growing children; pregnant women; alcohol abusers; and those who follow poor dietary habits.

### What about calcium and magnesium to control epilepsy?

It is true that if the body is depleted of these substances convulsions may occur. However, unless you have some other disease that affects these substances, you will not have problems with them if you eat a balanced, general diet.



## **What about other vitamins and minerals?**

As stated above, the use of anticonvulsants may have an adverse effect on vitamins. Problems can generally be avoided with a proper diet. However, in rare cases, more serious problems may arise. For example, anemia can result from severe folic acid deficiency. Weak bones are related to inadequate amounts of vitamin D.

Vitamin deficiencies can be discovered by medical examination and laboratory screening. Vitamin supplements can be prescribed as necessary. Please note that self diagnosis is discouraged. Extreme, self-prescribed “megavitamin” therapy will do no good and could be harmful. For example, excessive folic acid intake may actually decrease seizure control.

## **Is it important to eat regularly?**

Yes, some individuals are sensitive to missing meals. If meals are missed or delayed, seizure frequency may increase. Therefore, regular meals and balanced diets are recommended.

## **Can caffeine, alcohol or smoking cause problems?**

These substances are best considered drugs rather than part of the diet. Like other drugs they can do harm, particularly if taken too often or in large amounts. Alcohol is of special concern. When used frequently or in large amounts, alcohol may interfere with the anticonvulsant medication and may lower seizure threshold. Having a seizure while smoking could lead to fire.

## **Do food allergies cause epilepsy?**

Allergies do not cause epilepsy. However, they may aggravate a pre-existing seizure problem.

## **What is the “Ketogenic Diet”?**

This special, high fat diet approximates the metabolic circumstances of starvation. This state (in which the excessive fats produce chemicals called ketones) has been effective in controlling seizures in young children when anticonvulsants proved ineffective. The diet seldom works in children over 16 years of age and is not effective for all seizure types. The majority of caloric intake is obtained from fatty foods. It is quite unpalatable and difficult to maintain. Overall, it is reserved for children with epilepsy who are unresponsive to anticonvulsants.

Another version of the diet has recently been developed - the medical chain triglyceride (MCT) diet.

## **Who should I speak to about nutrition and epilepsy?**

You and your physician are most familiar with your particular condition. Please consult him/her for more advice on epilepsy and diet, or to be referred to a nutritionist.