

## **Ketogenic Diet for Epilepsy**

Studies have found that a diet high in fat and low in carbohydrates can help reduce or prevent seizures in some people with epilepsy. The most common diet is the ketogenic diet.

This diet must be strictly followed. If the diet is helping seizures it may be used for 2 to 3 years. If the diet is not helpful, it may be stopped after a few months.

Normally, the body uses glucose (sugar) for energy. These diets force the body to use fat for energy instead. The exact reason these diets work is not yet known. Scientists continue to study these diets to better understand how they work.

### **What is a ketogenic diet?**

This diet is a high-fat, low-carbohydrate diet. Most of the calories will come from fats. This diet calls for two to four times more fat than protein and carbohydrate. A ketogenic diet meal may have:

- heavy cream to drink.
- a small portion of a protein food, like meat or eggs.
- a little bit of fruit or vegetable.
- a lot of fat, such as butter, mayonnaise and oil.

Very small portions of foods like breads, cereal and pasta may be able to be included.

Some things must be taken out of the diet. This includes desserts, candy and sweets, milk and juice. Instead, cream, water or other carbohydrate and calorie-free drinks are used. The dietician will talk with you about ketogenic desserts and sweets.

For the diet to be most effective, it is important that your child eats **all** of each meal and snack. Creative recipes can help to make the diet easier to follow.

- All meals and snacks must be made according to recipes from the dietitian.
- All foods must be weighed on a digital scale.

### **How is the diet started?**

**Do not** start this diet at home. Your child will be admitted to the hospital for 3 to 4 days. The diet is slowly increased over that time. The Neurology team will monitor your child closely to make sure the diet is tolerated.

### **Will medicines change after starting this diet?**

Most often, the diet is started along with all current medicines. Liquid or chewable medicines may need to be changed to a form with less carbohydrate. If the diet helps to improve seizures, medicines may be changed in the future.

## Are there any side effects of the diet?

Constipation is the most common side effect. The diet may also increase acid in the body. This is called acidosis. A less common effect is kidney stones. Drinking enough fluid and taking prescribed supplements will help to prevent these issues.

While on the ketogenic diet, food alone will not provide enough vitamins or minerals. Your child will need to take vitamin and mineral supplements. The healthcare provider will prescribe these.

Although this diet is high in fat, most children will not gain too much weight or get high cholesterol while on the diet.

## What follow-up care is needed while on this diet?

Routine visits in Neurology Clinic are needed. At each visit, the dietitian will look at growth and nutrition. Blood work will be done to see how the body is handling the diet. Changes will be made to the diet or medicines to get the best seizure control.

## Are there any other diets for epilepsy?

There is another diet called the Modified Atkins Diet (MAD).

- Your child does not have to start the diet in the hospital. It can be started at a clinic appointment.
- Foods do not need to be weighed.
- This diet has been shown to be helpful in controlling seizures, but it may not be quite as effective as the ketogenic diet.

## More resources on dietary therapies for epilepsy:

- Book: [Ketogenic Diets: Treatments for Epilepsy and Other Disorders](#) by Eric Kossoff, John Freeman, Zahava Turner and James Rubinstein
- [Charliefoundation.org](http://Charliefoundation.org)
- [Epilepsy.com](http://Epilepsy.com)

**ALERT:** Call your child's doctor, nurse, or clinic if you have any concerns or if your child has special health care needs not covered by this information.

**This teaching sheet is meant to help you care for your child. It does not take the place of medical care. Talk with your healthcare provider for diagnosis, treatment, and follow-up.**