

# Ketogenic Diet for Seizures in Children



A ketogenic diet is a special type of diet that causes the body to make ketones. The diet is very high in fat, and very low in carbohydrates. It includes enough protein to help your child grow.

## Why the diet is used

The diet is sometimes used as a treatment for children with seizures when medicine isn't working well. Researchers aren't sure why the diet works. But most eligible children have significantly fewer seizures, and some become seizure-free when put on the diet. The diet doesn't work for every child. Your child's healthcare provider will determine if the diet is right for your child. Most children stay on the diet for about 2 years. The diet is then slowly changed back to a regular diet. Some children may stay on the diet for many years.

## Understanding ketones

The diet causes the body to make ketones. Ketones are chemicals made from the breakdown of body fat. During normal health and with a normal diet, the body generally does not make or need to make ketones. They are an energy source that the body uses normally during fasting states. The brain and heart work normally with ketones as an energy source. When ketones are being created in the body, this is called ketosis. Ketosis is confirmed with urine testing.

The presence of ketones is key to the success of your child's diet. Your child's diet must be strictly followed. Even one small snack that is high in carbohydrates can stop ketosis.

## What is in a ketogenic diet?

The ketogenic diet is very high in fat. About 90% of the calories come from fat. Protein is included in amounts to help your child grow. Only a very small amount of carbohydrates is included in the diet. The diet mostly includes high-fat foods such as:

- Butter
- Heavy cream
- Oil
- Mayonnaise
- Cream cheese
- Bacon
- Cheese

## Starting the diet

Your child will typically be admitted to the hospital before starting the diet. They may be in the hospital for 4 to 5 days while their body starts making ketones. In some circumstances, the diet is started as an outpatient. During this time, you'll also learn how to plan your child's diet. You may also be taught how to test your child's urine for ketones.

Fasting is not usually necessary unless urgent seizure control is needed. Once ketones are in the urine, your child may be given high-fat, low-carbohydrate shakes. These are also known as keto shakes.

## Managing the diet at home

The ketogenic diet can be very challenging to prepare. All foods must be weighed using a food scale. The diet is not nutritionally balanced. Your child will also need vitamin and mineral supplements. The dietitian will tell you how much fat, protein, and carbohydrates your child can have. This is usually divided into three meals a day.

A sample ketogenic meal is:

- 53 g eggs
- 10 g cheddar cheese
- 10 g bacon
- 21 g butter
- 60 g heavy cream
- 21 g strawberries

A sample ketogenic shake is:

- 500 g Ross Carbohydrate-free Formula (concentrate)
- 270 g heavy cream
- 13 g Egg Beaters

## Not having too many carbohydrates

While on the diet, your child will not be able to have high-carbohydrate foods such as:

- Fruit and fruit juice
- Breads and cereals
- Starchy vegetables such as corn, peas, and potatoes
- Beans
- Milk
- Soda
- Snack foods such as chips, snack cakes, and crackers
- Sweets

Carbohydrates are not just found in food and drinks. Some medicines have carbohydrates. So do some products such as toothpaste and mouthwash. Your child needs to stay away from these things. Ask your child's healthcare team for a list of medicines and other products that are safe for the diet.

© 2000-2027 The StayWell Company, LLC. All rights reserved. This information is not intended as a substitute for professional medical care. Always follow your healthcare professional's instructions  
This information is not intended as a substitute for professional medical care. Always follow your Healthcare professional's instructions. Copyright Krames LLC.