

All Diet Options:

- Involve consuming a **high fat, low carbohydrate** intake.
- Should be **administered under medical supervision** of a ketogenic team including a neurologist and dietitian.
- **May take up to 3 months** before an improvement in seizure control is noticed.
- Requires **vitamin and mineral supplementation** and **blood work before and during** the diet.
- Should only be continued if the patient and medical team agree the **benefits are more than the risks.**
- **Common foods** include: heavy cream, butter, oils, eggs, mayonnaise, bacon and avocado.



Resources:

The Charlie Foundation to Help Cure Pediatric Epilepsy
www.charliefoundation.org

Matthews Friends Dietary Treatments for Epilepsy
www.matthewsfriends.org

The Carson Harris Foundation
www.carsonharrisfoundation.org

Atkins for Seizures
www.atkinsforseizures.com

Ketogenic Diets: Treatment for Epilepsy and Other Disorders (5th edition) by Eric Kossoff

Dietary Treatment of Epilepsy: Practical Implementation of Ketogenic Therapy by Elizabeth Neal

For More Information:

Call to schedule an appointment:

Pediatric Neurology Dietitian Scheduling:
(843) 792-3307

Adult Neurology Dietitian Scheduling:
(843) 792-3223

Which Diet is Right for Me?

Comparison of Epilepsy Diet Therapy Options

- Classic Ketogenic Diet
- Modified Atkins Diet for Epilepsy (MADE)
- Low Glycemic Index Treatment (LGIT)

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“Classic” Ketogenic

The “classic” ketogenic diet is high in fat and very low in carbohydrates (sugar). It is a very strict diet and cheating is never allowed. Meals are carefully calculated by the dietitian. The diet tricks the brain into using energy the way it does when we are starving, except with this diet, you don’t really starve. When the brain has no carbohydrates to use as fuel, the brain switches to using ketones that come from fat. The brain is less likely to have seizures when it is running off ketones. Ketones are achieved by providing a balance of fat, carbohydrate and protein typically listed as a ratio (for example, 4:1 or 3:1) of fat grams to carbohydrate and protein grams combined.

Features:

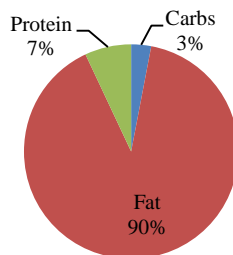
- Typically started in the hospital
- Food is measured on a gram scale
- Calories are controlled
- Normal fluid and protein needs
- Meals are scheduled
- Must follow the diet at all times – no cheating
- Very easy to use for a person who has a g-tube or infants who are formula-fed
- Vitamins and mineral supplements are necessary
- Clinic visits and blood work every 1 to 3 months
- Urine ketone checks daily

How Well Does It Work:

30% of patients have greater than 90% seizure improvement and an additional 30% have a 50% reduction in seizures

Possible Side Effects:

- Constipation
- Kidney stones
- Dehydration
- Pancreatitis
- Poor growth
- High cholesterol



Modified Atkins

MADE was developed at Johns Hopkins University as a less strict ketogenic diet. It is a good choice for those who are unable to adhere to the “classic” ketogenic diet’s strict guidelines. In this diet, ketones are achieved by reducing carbohydrates to 10 to 20 grams daily without limiting protein and still encouraging a high fat intake.

Features:

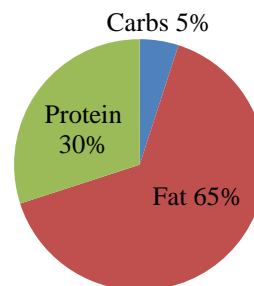
- Does not require hospital admission
- Portion sizes are estimated and/or measured with household measurements
- Calories are not controlled
- Typically used in adults, adolescents and children
- Carbohydrate counting is mandatory
- Vitamin and mineral supplements are necessary
- Clinic visits and blood work every 3 to 6 months
- Urine ketone checks daily to weekly

How Well Does It Work:

45% of patients report at least 50% seizure improvement

Possible Side Effects:

- Constipation
- Kidney stones
- Weight loss or weight gain
- High cholesterol
- Dehydration



Low Glycemic Index

LGIT was developed at Massachusetts General Hospital. This diet focuses on both the amount and type of carbohydrate eaten. Carbohydrate choices must have a glycemic index of less than 50 and are limited to 40 to 60 grams daily. These carbohydrates are always eaten with a protein and fat source. When the foods are eaten together, it slows digestion and the release of sugar into the blood. Unlike the other two diet options, the LGIT does not make the brain run off of ketones but focuses on low and stable blood sugar levels.

Features:

- Does not require hospital admission
- Portion sizes are estimated and/or measured with household measurements
- Less rigid than “classic” ketogenic diet
- Calories are not controlled
- Typically used in adults, adolescents and children
- Carbohydrate counting is mandatory
- Vitamins and minerals supplements may be needed
- Clinic visits and blood work every 6 months
- No urine ketone checks

How Well Does It Work:

54% of patients report at least 50% seizure improvement

Possible Side Effects:

- Weight loss or weight gain

