



Diet Therapy For Epilepsy



Northeast Regional Epilepsy Group

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Back To Basics

Exercise

- Adults should be physically active for at least 30 minutes most days of the week, children for 60 minutes.
- Sixty to 90 minutes of daily physical activity may be needed to prevent weight gain or sustain weight loss.



New Food Pyramid

Oils

- Most fat should be from fish, nuts and vegetable oils.
- Limit solid fats, such as butter, margarine or lard.
- Keep consumption of saturated fats, trans fats and sodium low.
- Choose foods low in added sugar.

CATEGORY

Grains

Vegetables

Fruits

Milk

Meat and beans

RECOMMENDATION

Half of all grains consumed should be whole grains.

Vary the types of vegetables you eat.

Eat a variety of fruits. Go easy on juices.

Eat low-fat or fat-free dairy products.

Eat lean cuts, seafood and beans. Avoid frying.

DAILY AMOUNT

6 oz.

2.5 cups

2 cups

3 cups

5.5 oz.

Based on a 2,000 calorie diet.

Recommended nutrient intakes at 12-calorie levels can be found on mypyramid.gov.

The “Norm”

- # Balanced Diet
 - # 50-60% Carbohydrates
 - # 10-15% Protein
 - # 25-30% Fat
-

Diets For Epilepsy

- # Think The Opposite!
 - # Fats Encouraged
 - # Carbohydrates Limited
 - # Flip That Pyramid Around!
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Contenders

- # Ketogenic Diet
- # Modified Atkins Diet
- # Low Glycemic Index Treatment



Common Goal

Ketosis!



Ketosis

- # Number One Source Of Energy – Glucose
 - # Back Up Plan – Fat
 - # Ketones Produced
 - # Tested In Blood And Urine
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Old Faithful

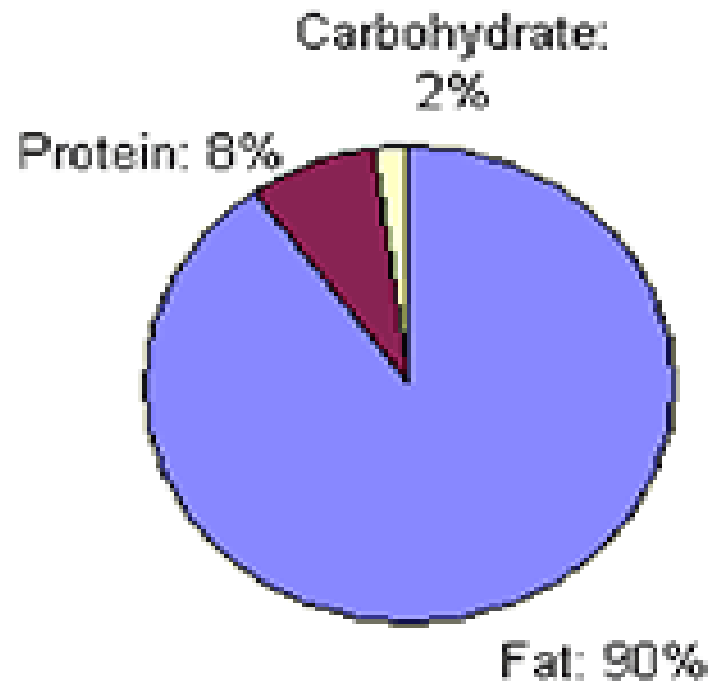
The Ketogenic Diet



Details

- # Based On Ratio
 - # Food Must Be Weighed
 - # Requires Hospital Admission
 - # Calorie Restricted
 - # Protein Restricted
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Breakdown



Meals



Runner Up

Modified Atkins Diet



Modified Atkins Diet

- # Very Low Carbohydrate
 - # Very High Fat
 - # No Fluid Restriction
 - # No Protein Restriction
 - # Difficult With Gtube Fed Patients
 - # No Weighing Food
 - # No Ratio
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Carbohydrates

Cereal, And Apples, And Yogurt Oh My!

- Starches
- Fruit/Fruit Juice
- Milk/Yogurt
- Sweets



Protein And Fat

Meat

Eggs

Fish

Cheese

Oil

Butter And Margarine

Cream



How Many Grams?

- # 1 Slice Of Regular Bread?
 - # A Piece Of Whole Fruit?
 - # 1 Cup Of Pasta
 - # 1 Glass Of Milk
 - # 1 Tablespoon Ketchup
 - # 1 Tablespoon Peanut Butter
 - # ½ Cup Cooked Corn
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10 Grams

- # 1 Stick Regular Chewing Gum
- # 2/3 Slice Standard White Bread
- # 1/3 Small Fruit (Baseball Sized)
- # Slightly Less Than 1 Cup Of Milk



Meal Ideas

- # Cheesy Chicken
- # Garlic Chicken
- # Shrimp Scampi
- # Pork Rind Nuggets
- # Creative Omelets
- # Sausage And Peppers



Snack Ideas

- # Cheese Stick
- # Cheese “Crackers”
- # Hard Boiled Or Deviled Egg
- # Cold Cuts
- # Sugar Free Jell-O
- # Raw Vegetables



The Up And Coming

The Low Glycemic Index Treatment



Similarities

- # Low Carbohydrate
 - # High Fat
 - # High Protein
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LGIT

- # **Glycemic Index:** An indicator of the ability of different types of foods that contain carbohydrate to raise the blood glucose levels within 2 hours
 - # **Controversial**
 - # **Limited Research**
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Low Glycemic Index Treatment

- # Allows Foods Based On Glycemic Index
 - # Typically Allows ~30-50 Grams CHO/Day
 - # High (70 and Above)
 - # Medium (56 to 69)
 - # Low (55 and Below)
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High Glycemic Index

- # 70 And Above
- # White Bread/Rolls
- # Instant Potatoes
- # Pretzels
- # Sugary Candy
- # Corn Chips



Medium Glycemic Index

56 To 69

Raisins



Pineapple



Shredded Wheat

Brown Rice

Steamed Potatoes

Apricot



Low Glycemic Index

- # 55 And Under
- # Peanuts
- # Beans
- # Plain Yogurt
- # Cherries
- # Green Leafy Vegetables
- # Sweet Potato



Compare And Contrast

	<i>Ketogenic Diet</i>	<i>Modified Atkins Diet</i>	<i>Low Glycemic Index Treatment</i>
High Fat	Yes	Yes	Yes
Low Carbohydrate	Yes	Yes	Yes
Protein Restricted	Yes	No	No
Calorie Controlled	Yes	No	Yes
Fluid Restriction	No	No	No
Hospital Admission	Yes	No	No
Medical Supervision	Yes	Yes	Yes
Measuring Foods	Scale	Scale/Estimation	Scale/Estimation
Possible Side Effects	Yes	Yes	Yes
Approximate Ratios	4:1, 3:1, 2:1, 1:1	Approximately 1:1	Approximately 1:1
Vitamin And Mineral Supplements	Yes	Yes	Yes

Side Effects

- # Constipation
 - # Kidney Stones
 - # Acidosis
 - # Poor Growth
 - # Irritability
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Outcome

- # Varies With Individual
 - # Typically Helps $\sim 1/3$ Patients
 - # 1-2 Years
 - # Research In Progress
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Resources

- # The Charlie Foundation
 - # Johns Hopkins University
 - # Massachusetts General Hospital
 - # Ketocalculator
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Thank You!



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