Healthy Eating for People with Epilepsy and their Families

Presented by:
Sarika Sewak, MPH, RD
Jennifer White, MS, RD
UCLA Medical Center
Mattel Children’s Hospital at UCLA
Objectives

- Understand the role diet plays in overall health and well-being
- Identify components of a “real” food diet
- Learn general healthy eating tips to introduce in the new year
- Review diet therapies for treating epilepsy
Why is following a healthy diet important for everyone?

- Maintain healthy body weight
- Optimize brain function
- Reduce risk of chronic diseases such as heart disease and cancer
- Promote overall health
Why is diet of even more importance for people with epilepsy?

- May help boost the immune system
- May promote bowel regularity
- May improve sleep quality
What are the components of a balanced diet?

- Fat
- Carbohydrate
- Protein
- Vitamins & Minerals
- Water
Fat: what role does it play?

- Nutrient-dense; promote satiety
- Alternative source of fuel for brain
- Energy storage
- Protects organs and nerves from traumatic injury and shock
- Preserves body heat and temperature
- Facilitates digestive process
- Necessary for digestion, absorption and transport of fat-soluble vitamins
- Brain is the fattest organ in your body
Fats: Eat a variety!

- **Saturated Fats**
  - Butter, Coconut oil, Ghee, Mayonnaise, Heavy Whipping Cream, Crème Fraiche

- **Monounsaturated**
  - Olive oil, Avocado, Canola oil (organic expeller pressed)

- **Polyunsaturated**
  - Grapeseed oil, Sesame oil, Walnut Oil, Nut, Seeds

- **Omega-3s**
  - Fatty fish, Grass-Fed Beef, Walnuts, Chia seeds, Flaxseed
Carbohydrates: what role do they play?

- Source of fuel for body and brain
- Fiber
  - May reduce risk of cardiovascular disease
  - Helps manage blood sugar
  - Promotes healthy bowel function and gut health
  - Maintain healthy weight
Carbohydrates: Sources

- Simple (refined) and complex (unrefined)
- Starch
- Vegetables
- Fruits
- Legumes
- Dairy
- All carbohydrates are not created equal
Protein: what role does it play?

- Body’s building blocks
- Direct and regulate metabolism
- Allow movement
- Protect from infection
Protein: Sources

- Eggs
- Poultry
- Red meat (beef, pork, lamb)
- Fish and Shellfish
- Cheese
Vitamins, Minerals & Water

**Vitamins & Minerals**
- Play critical role in metabolism and maintenance of tissue function
- A well-balanced, real food based diet should be nutritionally adequate
- Supplementation may be required in certain populations
- Speak with your physician and/or dietitian about taking supplements

**Water**
- Most indispensable nutrient; makes up 60% of an adult’s weight
- Carries nutrients throughout the body, acts as a solvent, participates in chemical reactions, lubricant and shock protection and helps regulate temperature
How do I start to build a better diet?

- Eliminate simple sugars
  - These foods are rapidly absorbed in the body, increasing blood sugar

- Avoid:
  - Sweeteners
  - Sweetened beverages
  - Sweets (e.g. cake, candy, cookies, crackers, pastries, pies, ice cream)
  - Packaged and highly processed foods
  - Refined carbohydrates
Adopt a “Real” Food Diet

What is a “real” food diet?
- Diet consisting of foods in their natural states
- Fruits and vegetables (fresh or frozen); organic is ideal
- Dairy products including yogurt, milk and cheese (full-fat, unsweetened); organic is ideal
- 100% whole grain products
- Poultry, meats and seafood (unprocessed); organic is ideal
  - Grass-fed beef as possible
  - Wild caught fish as possible
  - Pasture-Raised chicken and eggs as possible
- Choose water as your primary beverage
  - Most healthy people need 2 - 2.5 liters per day
Adopt a “Real” Food Diet (continued)

- Shop the perimeters of the grocery store
- Avoid processed foods
- Read food labels
  - Choose foods with ingredients you can pronounce
  - Minimally processed foods have 3 ingredients or less
  - Avoid items with more than 5 ingredients
What are super foods?

- Rich in antioxidants
- Excellent sources of vitamins & minerals
- High in fiber
- Contain anti-inflammatory agents
- Some of our favorites:
  - Avocado
  - Garlic
  - Olive Oil
  - Nuts & Seeds
  - Green Tea
Tips for success

- Make 1 change at a time (e.g. eliminate juice)
- Involve the whole family
- Plan your menu for the week and write your list before shopping
- Keep meals very simple
- Double recipes and freeze leftovers
- Do not keep “trigger” foods in the house
- Don’t forget portions matter
Diet Therapies for Managing Epilepsy

- Ketogenic Diet (KD)
- Modified Atkins Diet (MAD)
- Low Glycemic Index Treatment (LGIT)
- MCT oil diet
- Custom/ Blended Diets
  - All diets incorporate the same foods and emphasis is on fat
What do these diets have in common?

- Medically supervised by a trained diet team
  - High in fat (60-90% calories from fat)
  - Low in carbohydrate (4-15% calories from carbohydrates)
  - Moderate in protein (6-25% calories from protein)
- The standard American diet consists of roughly
  - 30-35% fat
  - 50-60% carbohydrate
  - 15-20% protein
Comparing the KD, MAD and LGIT Diets

<table>
<thead>
<tr>
<th>Ketogenic Diet</th>
<th>MAD &amp; LGIT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pros:</strong></td>
<td><strong>Pros:</strong></td>
</tr>
<tr>
<td>▶ Increased diet precision- all food weighed on a scale</td>
<td>▶ Uses household measurements which can be simpler</td>
</tr>
<tr>
<td>▶ Don’t have to worry about “counting”</td>
<td>▶ Increased ability to eat in restaurants or in social situations</td>
</tr>
<tr>
<td>▶ No room for interpretation</td>
<td>▶ More liberal in carbohydrates and more room for some “processed foods”</td>
</tr>
<tr>
<td>▶ Increased transparency between dietitian and patient</td>
<td>▶ Cooking foods can be easier</td>
</tr>
<tr>
<td>▶ Less decision making on patient part</td>
<td><strong>Cons:</strong></td>
</tr>
<tr>
<td><strong>Cons:</strong></td>
<td>▶ Can be more difficult to achieve ketosis</td>
</tr>
<tr>
<td>▶ Can be more difficult to eat out in restaurants</td>
<td>▶ Easy to overeat protein rich foods</td>
</tr>
<tr>
<td>▶ Weighing all foods can be tedious, time consuming and a challenge</td>
<td>▶ Counting throughout the day can be challenging</td>
</tr>
<tr>
<td>▶ People can feel like it “medicalizes” eating</td>
<td>▶ No exact meal plan- more room for error</td>
</tr>
<tr>
<td>▶ Challenging for caregivers who enjoy cooking</td>
<td>▶ Can be more difficult to fine tune</td>
</tr>
</tbody>
</table>
A balanced, real-food based diet is beneficial for everyone’s health and well-being

Small changes can make big differences today and in the future

People with epilepsy may see increased benefits from adopting a real-food diet with emphasis on healthy fats
Enjoy Lunch!

Thanks to the Epilepsy Foundation of Greater Los Angeles for providing a “real” food lunch!