Sources of Energy – Carbohydrates, Fats and Protein

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Learning objectives

Sources of Energy: Carbohydrates, Fats and Protein

• Review the sources of energy
• Learn the importance of these sources for one’s health
• Explain importance of monitoring the sources of energy
• Understand how to read nutrition labels
Food Basics

Food = Energy (or Calories)

Body needs energy for growth, metabolism, and other body functions

Major nutrients in food: *All food is not equal in calories. Fat, for example, has more than twice the calories, gram for gram, as equal amounts of carbohydrates or protein.

Carbohydrates | Proteins | Fats
Carbohydrates

Carbohydrates are found in many different foods, some of these foods include:

- Breads, cereals, and other grains
- Fruits
- Starchy vegetables, like potatoes and corn
- Milk and milk products (e.g. yogurt)
- Dried Beans
- Foods containing added sugars (e.g., desserts and sodas)
Carbohydrates

Choose low fat or non fat milk products
- Low fat or no fat cheese, yogurt, and milk

Choose healthy carbohydrates
- Whole Grains (e.g. whole wheat breads and pastas, bulgur, brown rice)
- Fruits and vegetables
- Beans

Try to limit or avoid unhealthy carbohydrates
- Desserts
- Soda
- Breaded or fried foods
- Candy
Proteins

• Proteins are part of every cell, tissue, and organ in our bodies

• **Protein** is found in the following foods
  – Meats, poultry, and fish
  – Legumes (dry beans and peas)
  – Tofu
  – Eggs
  – Nuts and seeds
  – Milk and milk products

• Choose **lean cuts** of meat and poultry

• **Plant sources** of protein include
  – Peanut butter, beans, and tofu

• If you have **kidney problems**, you may need to limit how much protein you eat
Fats

- Major **source of energy** and helps our bodies absorb vitamins
- Important for **proper growth** and for keeping us healthy – focus on healthy fats
- Has **most calories** compared to any other nutrient

<table>
<thead>
<tr>
<th>Healthy</th>
<th>Unhealthy</th>
</tr>
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<tbody>
<tr>
<td>Monounsaturated fat</td>
<td>Saturated fat</td>
</tr>
<tr>
<td>Polyunsaturated fat</td>
<td>Trans fat</td>
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</tbody>
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**Healthy**
- Ex. Avocado, Nuts and seeds, olive oil and olives, vegetable oils (such as sunflower, safflower, corn, soybean, and cottonseed, peanut butter

**Unhealthy**
- Ex High-Fat Cheeses or cuts of meat, full fat milk and cream, butter, palm and coconut oil, “partially hydrogenated” oils, shortening
Common higher fat foods to limit

• **Meats**
  – Contain fat we can see and fat we cannot see

• **Dairy foods**
  – Whole milk, regular cheese, ice cream

• **Snacks foods**
  – Potato chips, granola bars

• **Butter or margarine**

• **Gravy, mayonnaise, salad dressing**

• **Baked goods**
  – Cookies, cakes, muffins

• **Fat added through cooking**
  – Oil, lard, shortening

*Did you know: 70% of fat we eat is hidden in foods!*
Eat a Healthy, Balanced Diet

• **Different foods** are usually a mix of all three macronutrients (carbohydrate, protein, and fat)

• Eat foods from different food groups

• **Controlling fat** intake is one of the most important steps in losing or maintaining weight
Food Labels

- **Reading food labels** is a great way to know how many calories you are eating.
- Keeping **general serving sizes** in mind.
Measure Your Foods

• A small difference in portion size = big difference in calories
• Weighing and measuring foods is an important step in knowing what we eat,
  – Use measuring cups, spoons and scale to measure food

1 cup of pasta = 221 calories
2 cups of pasta = 442 calories
Make a Plan that Works for You

• No specific “diet”

• You and your **family** can eat the same healthy foods at mealtime

• Focus on making **healthy choices** that are good for you and your family
Setting a S.M.A.R.T. goal

**Specific** — Ask who, what, where, when, why

**Measurable**

**Attainable/Achievable/Action-Based**

**Realistic**

**Timely**

Set a timeframe to meet the goal

Ask who, what, where, when, why

How much, how many, how long, how often
Summary

• Carbohydrates, protein and fats are **important nutrients** in our diet
  – Limit intake of fat

• Weight management is about **balance**

• You can **weigh and measure food** to make it easier to figure out the calories and portions you are eating

• Let’s practice!
  – **Which foods do you want to increase in your diet?**
  – **Which foods do you want to decrease in your diet?**
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Join Me In August!

On-Site Lunch 'n' Learns

- Hurray for Fruits and Veggies!
  - August 9 @ Revenue Strawberry Square
  - August 16 @ Game Commission
  - August 17 @ Rachel Carson Building
  - 12:00 – 12:30pm
  - www.pebtf.org/wellness
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Webinars

- Healthy Eating
  - September 8 or September 22
  - 12:00 – 12:30pm
  - www.pebtf.org/wellness
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