

Sources of Energy— Carbohydrates, Fats and Protein

PEBTF

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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

Try to limit or avoid unhealthy carbohydrates

- Desserts
- Soda
- Breaded or fried foods
- Candy

Choose healthy carbohydrates

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

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

Healthy

Monounsaturated fat

Polyunsaturated fat

Ex. Avocado, Nuts and seeds, olive oil and olives, vegetable oils (such as sunflower, safflower, corn, soybean, and cottonseed, peanut butter

Unhealthy

Saturated fat

Trans fat

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

Nutrition Facts

Serving Size 1 cup (228g)

Servings Per Container 2

Amount Per Serving

Calories 250 **Calories from Fat** 110

% Daily Value*

Total Fat 12g **18%**

Saturated Fat 3g **15%**

Trans Fat 3g

Cholesterol 30mg **10%**

Sodium 470mg **20%**

Total Carbohydrate 31g **10%**

Dietary Fiber 0g **0%**

Sugars 5g

Protein 5g

Vitamin A **4%**

Vitamin C **2%**

Calcium **20%**

Iron **4%**

* Percent Daily Values are based on a  Your Daily Values may be higher or lower depending on your calorie needs.

		Calories:	2,000	2,500
Total Fat	Less than	65g	80g	
Sat Fat	Less than	20g	25g	
Cholesterol	Less than	300mg	300mg	
Sodium	Less than	2,400mg	2,400mg	
Total Carbohydrate		300g	375g	
Dietary Fiber		25g	30g	

Enriched Macaroni Product (Durum Wheat Flour, Wheat Flour, Niacin, Ferrous Sulfate [Iron], Thiamin Mononitrate [Vitamin B1], Riboflavin [Vitamin B2], Folic Acid), Cheese Sauce Mix (Yehoy, Milkfat, Milk Protein Concentrate, Salt, Sodium Tripolyphosphate, Contains Less than 2% Of Citric Acid, Lactic Acid, Sodium Phosphate, Calcium Phosphate, Milk, Yellow 5, Yellow 6, Enzymes, Cheese Culture).

Contains wheat and milk.

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/**A**chievable/**A**ction-Based

Realistic

Timely

Ask who,
what, where,
when, why

Set a
timeframe
to meet
the goal

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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ActiveHealth
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Wellness Webinar Series:
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Sundance Wilander
Director of Consumer
Engagement
January 26, 2016
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Your Digital Coach has *New* Insights to Help You

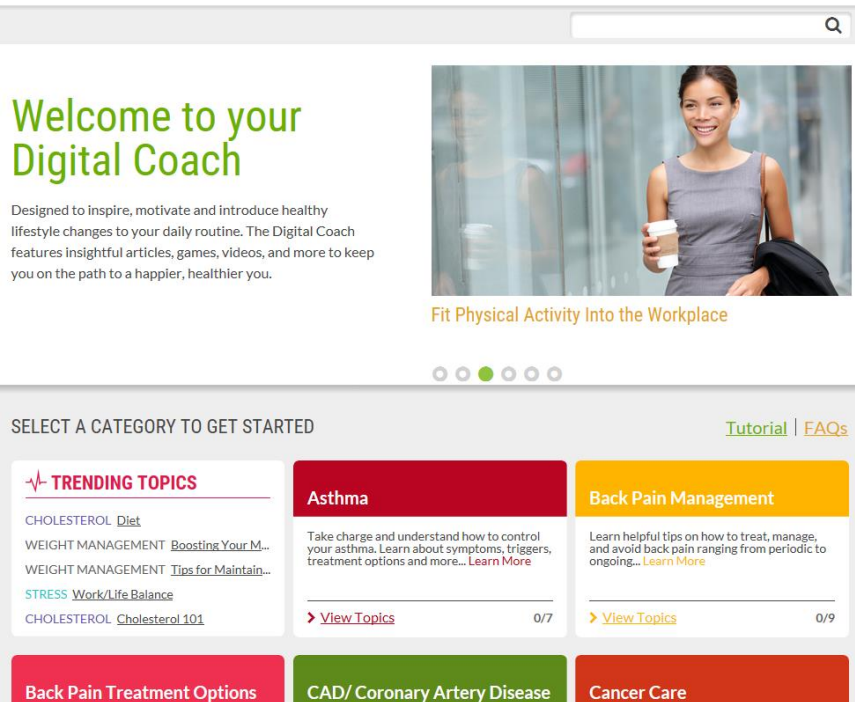
- Do you want to learn more about your health? We have answers!
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MENU ≡
♥ 15/100 Heart Beats

Some of the *New* Tools Include

- Articles, games, videos, and other engaging content on:
 - **Coronary artery disease**
 - **Living a heart healthy lifestyle**
 - **Mindfulness**



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n'
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- **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

Join Me In September!

Webinars

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



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