





Healthy Choices for Breakfast and Snacking

Objectives

- Discuss the benefits of eating breakfast and Snacking.
- Read a nutrition label, and make healthy choices based on the information given.
- Identify smart breakfast strategies.
- Identify smart snacking strategies.
- Identify why fiber is important in a diet.
- Identify foods that contain fiber.

Sources: National Weight-control Information Network, Healthy Eating and Physical Activity Across a Lifespan. http://www.win.niddk.nih.gov

Lesson about Breakfast:

a) Let's begin by talking about the importance of breakfast.

Eating breakfast helps to 'break-the-fast'. Most people have been fasting overnight and are hungry in the morning. Think of our metabolism like a fire in the fireplace. When we go to bed, there may still be embers burning in the fireplace. If we don't stoke the fire in the morning, or feed ourselves, what's going to happen to that fire? Correct. It will completely go out! That's why breakfast is so important! If we don't give our bodies some type of fuel, they won't perform at the level we need them to. Healthy breakfast choices will increase your intake of vitamins, minerals, and fiber. Eating breakfast provides morning energy so that you feel less tired and hungry throughout the day.

According to the National Weight-Control Information Network, people who eat breakfast are less likely to overeat later in the day. In addition, research has shown that children who eat breakfast perform better in school than children who skip breakfast.

Breakfast should have **foods from at least two different food groups.** One group should be the dairy group – milk (especially for children) or a calcium-fortified beverage (for adults). Examples might be:

- cereal, a piece of fruit, and a glass of milk (3 groups) or
- apples and peanut butter (2 groups).

Examples of some low-cost nutritious breakfast:

- egg and bean taco on a whole wheat tortilla,
- oatmeal with raisins and a side of milk, or
- cereal with fruit on the side.

Breakfast Recipes



Handout 4-2

Breakfast Burritos

Ingredients

- Vegetable cooking spray
- 2 egg whites
- 2 whole wheat tortillas
- 1/4 cup fat-free cheese
- 1/4 cup rinsed canned beans (such as pinto beans or black beans)
- Salsa (to taste)

Directions

- 1. Spray vegetable cooking spray into a frying pan.
- 2. Scramble the egg whites in the pan and cook to the desired degree of doneness.
- 3. Place the cooked eggs on the tortillas.
- 4. Sprinkle the cheese over the eggs.
- 5. Place the beans over the cheese and eggs.
- 6. Roll each tortilla into a wrap.
- 7. Microwave for 30 seconds.
- 8. Spoon salsa on top.

Makes 2 servings.

Nutrition Facts Serving Size (142g) Servings Per Container

Amount Per Servin	g		
Calories 210	Cal	ories	from Fat 30
			% Daily Value*
Total Fat 3g			5%
Saturated Fat 1g			5%
Trans Fat 0g			
Cholesterol 5mg			2%
Sodium 670mg			28%
Total Carbohydrate 32g		32g	11%
Dietary Fiber 4g			16%
Sugars 4g			
Protein 13g			
Vitamin A 2%	nin A 2% • Vitamin C 2%		nin C 2%
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	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2.400mg	2.400mc
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Iron 4%

Calcium 8%

Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4

Nutrition Facts

Calories 220 Calories from Fat 30

Vitamin A 10% • Vitamin C 45%

Iron 8%

5%

0%

3%

15%

20%

Total Fat 3.5g

Saturated Fat 1g

Total Carbohydrate 45g

Dietary Fiber 5g

Trans Fat 0g

Cholesterol 0mg

Sodium 75mg

Sugars 29g

Protein 7g

Calcium 15%

Makes 2 servings.

Strawberry Parfaits

Ingredients

- 1 lb strawberries
- 2 cups low fat vanilla yogurt
- 6 tbsp granola cereal

Directions

- 1. Cut 1 lb strawberries into quarters and divide half among 4 glasses.
- 2. Divide 1 cup low fat vanilla yogurt and 3 tbsp granola cereal evenly among glasses.
- 3. Repeat with remaining berries and additional 1 cup yogurt and 3 tbsp granola. Top with sliced berries.

Nutrition Facts Calories 360 Calories from Fat 50 Total Fat 6g Saturated Fat 2.5q 13% Trans Fat 0g Cholesterol 15mg 5% Sodium 170ma 7% Total Carbohydrate 650 22% Dietary Fiber 6q 24% Sugars 49g Protein 16g Vitamin A 2% Vitamin C 230% Calcium 50% Iron 10% *Percent Daily Values are based on a 2,000 caloridiet. Your daily values may be higher or lower depending on your calorie needs:

Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4

Berry Breakfast Smoothie

Ingredients

- 1 banana, cut into chunks
- 1/2 cup fat-free milk (cold in the summer, warm in the winter)
- 1/4 cup frozen unsweetened blueberries
- 1/4 cup frozen unsweetened strawberries
- 1 teaspoon peanut butter
- 1/2 teaspoon honey

Directions

1. In a blender, combine the banana, milk, blueberries, strawberries, peanut butter, and honey. Process about 1 minute, or until the consistency of a thick milkshake.

Makes 2 servings.

Vanilla Spice French **Toast with Apple**

Ingredients

- 1 egg plus 2 egg whites
- 1 teaspoon vanilla extract
- · Dash each of cinnamon and
- 2 pieces whole-grain bread
- 1/2 medium apple, sliced

Directions

1. Whisk eggs, vanilla, and spices together. Dip bread into egg mixture. Spray skillet with cooking spray,

> and sauté bread on each side until brown (about 3 minutes). Top with apple slices.

Makes 1 serving.

Amount Per Se	rving		
Calories 30	0 Calo	ories fron	n Fat 70
		% Da	aily Value
Total Fat 7g			11%
Saturated	Fat 2g		10%
Trans Fat	0g		
Cholesterol 185mg			62%
Sodium 380mg			16%
Total Carbo	hydrate 3	36g	12%
Dietary Fi			24%
Sugars 14			
Protein 21g			
Vitamin A 6%	6 • '	Vitamin (2 8%
Calcium 109	6 •	Iron 15%	
*Percent Daily V diet. Your daily v depending on yo	alues may be	e higher or l	
Total Fat	Less than Less than	65g 20g	80g 25g 300mg

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Healthy Snacking

- b) This lesson reveals why snacking can be beneficial to weight loss, and why and how to include fiber in your diet every day.
 - Snacks are an important part of a healthy diet. Eating a small, healthy snack between meals can help with weight loss by keeping cravings under control and preventing excessive hunger that can lead to overeating. Also, snacks can help fill your nutrition gaps. Sometimes, we don't eat foods from all the food groups during our main meal times. Snacks can fill in the gaps and provide nutrients that a person might miss out on otherwise. Snacks should be thought of as minimeals. Around 200 calories or less is an appropriate amount of calories for a snack.
 - It's a good idea to have a snack that has a good source of **fiber**. It's important to get fiber in during every meal and snack time. Dietary fiber is the part of plant material that is **resistant to digestion by the intestines**. There are two types of fiber—soluble and insoluble. Examples of foods rich in soluble fiber are oat bran, fruits, vegetables, brown rice, barley, and nuts. Examples of foods rich in insoluble fiber are wheat bran and whole-grain breads, beans and cereals. Fiber helps to keep hunger at bay, and soluble fiber can help reduce cholesterol. The average American should aim for about 25-35 grams of fiber each day.

If a person is going to increase fiber in their diet, they will also want to increase water consumption. If water is not consumed in adequate amounts, it may cause constipation to occur.

Whatever snack you choose, be sure that you choose foods low in solid fat, salt, and added sugar, but high in nutrients and fiber. When planning your snacks, you'll need to consider whether you need access to a refrigerator to safely store your snack foods. Here are a few ideas for healthy snacks:

- Whole wheat crackers and low fat cheese;
- Fresh vegetables, such as cucumbers and cherry tomatoes, with low-fat salad dressing;
- Fruits canned in their own juice, such as pineapple or pears;
- "Grab and Go" fresh fruits, such as bananas, apples, and peaches;
- Nuts, such as almonds or walnuts;
- Granola bars;
- Low-fat popcorn;
- Peanut butter and celery sticks; and
- Bell peppers and hummus.

Whichever snack you choose, remember to keep it healthy and low in calories!

Sources:

McKinley Health Center- University of Illinois at Urbana-Champaign, American Dietetic Association

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Handout 8-1



Smart Snacking

Work snacks into your daily meal plan. Rather than considering them as "extras," choose snacks that contribute to your calorie and nutrient needs. Snack on foods that compliment your meals and add variety to your diet. For instance, if you mainly eat meats and starch at meals, snack on fruits, vegetables, and milk, cheese, or yogurt.

Match snacks to your calorie needs and weight goals. If your goal is weight maintenance or weight loss, you may want to consume nutrient-dense snacks that are between 100-200 calories. If you are a physically active person, however, or a person looking to gain weight, you may need to consume nutrient-dense snacks that contain between 200-400 calories.

Watch your snack portions. Snack portions are smaller than meal portions. Snacks shouldn't "fill you up" but rather help you to be "not hungry." Although the calorie level depends on your activity level and weight goals, snacks should generally not contain more than 200 calories.

Snack when you're hungry. Skip the urge to nibble in response to non-hunger eating impulses such as boredom, frustration, or stress. "Nourish" stress or boredom with a walk instead of a donut.

Snack consciously. Eat when you snack; relax when you watch TV; and study when you are studying. Don't mix snacking with other activities. Snacking absent-mindedly, while doing other things, leads to overeating.

Plan ahead for smart snacking. Keep a variety of tasty, nutritious, ready-to-eat snacks on hand at home, work, or wherever you need a light bite to take the edge off hunger. That way you won't be limited to snacks from vending machines, fast-food restaurants, or convenience stores. You may even consider purchasing a small refrigerator for your dorm room or office.

Practice good timing. Smart snacking works with good timing. Eat snacks two to three hours before mealtime.

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Potential Benefits of Dietary Fiber in Type 2 Diabetes

Dietary fiber is the structural part of the plant that human body cannot digest, so it does not contribute any energy. Dietary fiber sources include vegetables, fruits, grains, nuts, beans and legumes.

Dietary fiber contains soluble fiber and insoluble fiber. Soluble fiber dissolves in water. Food sources of soluble fiber include oats, fruits, barley, flaxseeds, legumes, and vegetables. Insoluble fiber does not dissolve in water. Food sources of insoluble fiber include wheat, corn, and oat bran; whole grain breads and Handout 8-1

cereals; fruit skins; root vegetables, such as carrots, beets, and turnips; green beans; the cabbage family, such as broccoli, Brussels sprouts, or cauliflower; and white or sweet potatoes.

Dietary fiber is beneficial for health. It can bind other food to prevent their absorption. Some dietary fibers ferment and generate various materials, such as short-chain fatty acids, which contribute to change the composition of the intestinal bacteria. Soluble and insoluble dietary fiber lowers blood glucose by slowing glucose absorption in the bowel. Evidences have shown that **dietary fiber increases insulin release which increases capacity of body to use glucose and resulting in a slow and steady release of glucose** from absorption in the body after eating. Dietary **fiber** is **also found to lower the level of hemoglobin A1c which is used to identify the average plasma glucose level** over prolonged periods of time, compared to blood glucose meter which just tells you what your blood sugar level is at any one time. Fiber also increases a feeling of fullness and satisfies after eating which is very helpful for losing weight. Excess weight is believed to play a role in the risk and development of type 2 diabetes. Therefore, people who eat more fiber are less at risk of developing type 2 diabetes in the first place.

For people with diabetes who are using insulin for treatment, carbohydrate counting, which is a meal planning technique for managing your blood glucose levels, helps to control blood glucose better. **Fiber, which does not contribute calories and can slow glucose absorption** in the bowel, can be subtracted from total carbohydrate, which is the major energy source and raise blood sugar after eating, when you are reading the food labels. Fiber saves quota for carbohydrates when people with diabetes count the carbohydrates for their meals. Increasing intake of fiber is a smart way to control glucose for people with diabetes.

Resources:

CL Bodinham, L Smith, J Wright, GS Frost, MD Robertson. Dietary fiber improves first-phase insulin secretion in overweight individuals. PLOS ONE, 2012; 7(7):1-5.

RE Post, AG Mainous, DE King, KN Simpson. Dietary fiber for the treatment of type 2 diabetes mellitus: a meta-analysis. Journal of the American Board of Family Medicine, 2012; 25(1): 16-23.

Carb counting. Diabetes self-management. 2006.

http://www.diabetesselfmanagement.com/Blog/Amy-Campbell/carb_counting/

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