



# Educator guide: Nutrition lesson

## **Recommended for grades:**

8<sup>th</sup> grade

## **Time:**

12 minutes

## **National Health Education Standards:**

This activity aligns with the following National Health Education Standards:

- Standard 1: Use functional health information to support health and well-being of self and others.
- Standard 3: Access valid and reliable resources to support health and well-being of self and others.

For more information about the National Health Education Standards, visit the SHAPE America website: [shapeamerica.org](http://shapeamerica.org).

## **Learning objectives:**

After completing this lesson students will be able to:

1. Describe at least three healthy behaviors (including one that specifically helps keep the mind healthy) they can do each day.
2. Locate three sources of valid health information.
3. Choose the less processed food when given two foods from the same food group.
4. Determine the possible outcomes of eating too many processed foods and not getting regular physical activity.

## **Lesson description:**

In this lesson students will learn about food processing and how to make healthy choices from each food group. They will also learn how to determine what makes something a valid source of nutrition information.



## Pre and post-test questions:

Use the following questions with your students in any way that you see fit (on paper, using a survey tool, etc.) You may choose to combine questions from various lessons and activities that your students participate in. Correct answer choices are bolded.

1. Which of the following is a valid source of health information? Choose all that apply.
  - a. **choosemyplate.gov**
  - b. TV commercials
  - c. Friends
  - d. **Nutrition facts labels**
2. Which of these is the least processed food?
  - a. **Whole wheat bread**
  - b. White bread
3. Which of these is the least processed food?
  - a. Apple juice
  - b. **Apple**
4. Which of these are potential outcomes of eating too many processed foods and not getting regular physical activity? Choose all that apply
  - a. **Weight gain**
  - b. Weight loss
  - c. **Heart problems**
  - d. Better sleep
  - e. **Low energy**

## Vocabulary:

Use the following list of vocabulary as a reference for yourself or your students as you complete the Nutrition lesson. You may choose to use this list in any way that fits your needs.

- Calorie – a unit of energy
- Cholesterol – a type of fat found in your blood
- Enriched grains – grains that have some vitamins and minerals added back in, but the body can't use them as well as the vitamins and minerals from whole grains
- Fat – a type of nutrient that the body uses as a source of fuel
- Fiber – a nutrient that helps food move through the digestive system and helps you feel full
- Food processing – changing the way a food looks or tastes
- Heart – muscle that pumps blood throughout the body
- High blood pressure – when your blood pressure (the force of your blood pushing against the walls of your blood vessels) is consistently too high
- High cholesterol – occurs when there is too much cholesterol in the blood and the excess may be deposited along the walls of arteries, including the coronary arteries of the heart, the carotid arteries to the brain and the arteries that supply blood to the legs and the intestines
- Minerals – substances found in foods, such as calcium, iron, magnesium or sodium that are essential to the functioning of the human body
- MyPlate – a tool created by the USDA that provides information about physical activity, the food groups and how much should be eaten from each food group each day
- Nutrition facts label – a label required on most packaged foods that provides detailed information about a food's nutrient content, such as the amount of fat, sugar, sodium and fiber it has
- Refined grains – grains that have been significantly modified so they contain less fiber and fewer vitamins and minerals
- Sodium – an essential nutrient, often called salt, that the body needs in small amounts to help maintain a balance of body fluids
- Sugar – a simple carbohydrate that can be found naturally in foods such as fruits, vegetables, milk and milk products or added to foods and drinks during processing
- Sweetened drinks– drinks that contain added sugar, such as lemonade, flavored milks, sports drinks, soda, etc.
- Type 2 Diabetes – a condition where the body's cells cannot use blood sugar efficiently for energy



- USDA (United States Department of Agriculture) – U.S. government agency that provides leadership on food, agriculture, natural resources, rural development, nutrition, and related issues based on public policy, the best available science and effective management
- Vitamins – substances in food that are essential for the human body to work properly
- Whole grains – grains that contain 100% of the original kernel (all of the bran, germ and endosperm)

# Nutrition worksheet

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Instructions:** Complete this worksheet as you move through the Nutrition lesson.

1. What are three questions you can ask to help determine if a source of information is valid?

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

2. What is the United States Department of Agriculture's website that contains information on food groups?

\_\_\_\_\_

3. What is the definition of food processing?

4. List the two types of grains and two examples of each.

a. \_\_\_\_\_

b. \_\_\_\_\_



5. Why are fresh vegetables healthier than vegetable juice?

6. Dried fruit and fruit juice contain more of what than fresh fruit does?

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7. Which two nutrients do you need to check the nutrition facts labels for on dairy products?

a. \_\_\_\_\_

b. \_\_\_\_\_

8. What type of protein foods should we cut back on?

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9. List two tips for eating healthier when eating at restaurants.

a. \_\_\_\_\_

b. \_\_\_\_\_



# Nutrition worksheet answer key

1. What are three questions you can ask to help determine if a source of information is valid?

- a. Who wrote it?
- b. Is the information up to date?
- c. What is the intent?

2. What is the United States Department of Agriculture's website that contains information on food groups?

[choosemyplate.gov](https://www.choosemyplate.gov)

3. What is the definition of food processing?

Changing the way a food looks or tastes

4. List two types of grains and two examples of each.

- a. Whole grains: whole grain breads or rolls, brown rice, oatmeal, popcorn, etc.
- b. Refined grains: white bread, white rice, anything made with white flour, etc.

5. Why are fresh vegetables healthier than vegetable juice?

Most of the fiber is removed during processing, so vegetable juice won't fill you up as much as fresh vegetables would.

6. Dried fruit and fruit juice contain more of what than fresh fruit does?

Sugar

7. Which two nutrients do you need to check the nutrition facts labels for on dairy products?

- a. Fat
- b. Sugar

8. What type of protein foods should we cut back on?

Deli meats and other processed meats, like bacon

9. List two tips for eating healthier when eating at restaurants.

Look for nutrition facts either posted or online, look for foods that are low in fat, calories, sugar, and sodium, choose baked, grilled, or broiled items over fried foods, order a side salad or fruit instead of fries, avoid extras like bacon, cheese and mayo.

# Handouts

Included on the following pages are additional resources that you and your students' families may find useful.





# Nutrition and physical activity resources for parents, caregivers and educators

- American Heart Association, [heart.org](https://www.heart.org)
- Centers for Disease Control and Prevention (CDC), [cdc.gov](https://www.cdc.gov)
- Children's Wisconsin, [childrenswi.org](https://www.childrenswi.org)
- KidsHealth, [kidshealth.org](https://kidshealth.org)
- Mental Health America, [mhanational.org](https://mhanational.org)
- National Institute of Mental Health (NIMH), [nimh.nih.gov](https://www.nimh.nih.gov)
- Society of Clinical Child & Adolescent Psychology, [effectivechildtherapy.org](https://www.effectivechildtherapy.org)
- U.S. Department of Agriculture (USDA), [myplate.gov](https://www.myplate.gov)
- Wisconsin Department of Public Instruction Student Services/Prevention and Wellness, [dpi.wi.gov/sspw](https://dpi.wi.gov/sspw)



# Transcript

## Slide 1 (video)

Tayler: There are so many choices out there when it comes to food, and it can be overwhelming!

Camara: Yeah, I hear you! There's choices to be made at home, at school, at restaurants...pretty much everywhere! And everyone seems to have an opinion about which foods are best. We're going to try to sort out the facts for you, and show you where you can get valid information when it comes to the foods you eat.

Tayler: We're also going to take a look at what can happen when we're not balancing our food choices out with our activity level. Before we do that, open the worksheet and either save it to your computer or print it. Complete this worksheet as you move through this lesson.

## Slide 2

Food is the fuel your body needs to get through the day. Think of all the different things you do each day! School, sports, music, hanging out with friends. The list goes on and on. Your body needs energy to do all those things, and that energy comes from the foods you eat. But, it's not always easy to figure out if a food is healthy or not.

## Slide 3

It's important to know how to find valid, or accurate, sources of information when it comes to the foods we eat. Information on the nutritional value of food can be found on the internet, on TV, in the grocery store, in the doctor's office, from friends and many other places. Not all of these are valid sources of information though. We need to think about who is giving us the information, whether or not the information is up to date, and what the intent of the information is. Are they just trying to sell us a product, or do they really care about our health?

#### Slide 4

One valid source of nutrition information is [choosemyplate.gov](http://choosemyplate.gov). This is the United States Department of Agriculture's website, and you can find lots of great information there. You can learn all about MyPlate and the different food groups. You can even learn how much food from each food group someone your age needs!

#### Slide 5

Let's see if you can figure out which foods belong in each food group. If you need a quick review of the food groups check out [choosemyplate.gov](http://choosemyplate.gov). Click and drag each food to the correct food group on MyPlate.

Great job! Next we'll take a look at which foods are healthier within each food group.

#### Slide 6

Aside from fresh, raw fruits and vegetables, most foods have had some changes to them before we eat or drink them. Changing the way a food looks or tastes is called food processing. Examples of food processing include: when wheat is ground into flour and made into bread, when fresh vegetables are cut, cooked and canned to make canned vegetables, and when fresh fruits are squeezed to make fruit juices. Sometimes food processing can also change how nutritious or healthy a food is. Generally, if the food or drink is close to its original form, it is going to be healthier.

#### Slide 7

If you look at the nutrition facts labels on foods that are processed versus foods that are less processed, you will see a big difference in fat, salt and sugar. The more processed the food is, the more fat, salt and sugar they probably have.

Take a look at the difference between a potato and potato chips. Notice that there is more fat, sodium and sugar, and less fiber in the potato chips. And, the serving of chips is only one fifth the weight of the potato.

Processed foods are not good to eat regularly. That doesn't mean that you can never eat them, but it is a good idea to try and eat less of them. Eating a diet high in fat, salt and sugar can cause weight gain and problems for your heart.



## Slide 8

Let's take a look at each food group and figure out which choices within each group are the healthiest for us. First, we'll look at grains. There are two types of grains, whole grains and refined grains. Whole grains are best because they include all parts of the grain. From the whole grain you get more fiber, the most vitamins and minerals, and energy that lasts longer. Examples of whole grains include: whole grain breads or rolls, brown rice, oatmeal and popcorn. Refined grains consist of grains that have been significantly modified, and they will contain less fiber and fewer vitamins and minerals. Examples of refined grains include white bread, white rice, or anything made with white flour.

## Slide 9

The ingredient lists on foods are another great source of valid nutrition information. For grains, look for the words "whole grain" at the beginning of the ingredient list. Refined grains are listed as "enriched" flour or "enriched" grains. Enriched means some vitamins and minerals have been added to the food item, but our bodies cannot use the enriched vitamins and minerals as well as those from whole grains. It is recommended that at least one half of your grain servings each day come from whole grains. So, try to substitute whole wheat bread for white bread, or whole grain cereal for sugary cereal.

## Slide 10

You can also look at the Nutrition Facts label to tell if a grain is a whole grain or not. Look at the amount of dietary fiber in a serving. The more dietary fiber, the better. Look for grain products that have at least 3 grams of fiber. Fiber helps fill you up so you're not hungry an hour after you eat. It also helps keep the food moving through your body on a regular basis.

### Slide 11

Now let's take a look at vegetables. Vegetables can be fresh, frozen, canned, or juiced. Fresh vegetables are the best option. They include the most vitamins and minerals, the most fiber, and they don't have any added fat or salt. Vegetables that are frozen can be a good choice too, but watch out for the ones that have a sauce because they can have added fat and salt. Vegetables that come in a can may have salt added to them too. Look for "no salt added" on the label for the healthier choice. Vegetable juice gives you vitamins and minerals also, but most of the fiber from the vegetables is removed during processing so it won't fill you up as much as fresh vegetables would. It is recommended that you vary your veggies as much as possible. Try to eat lots of different colored vegetables throughout your day.

### Slide 12

Fruits can be fresh, frozen, canned, dried, or juiced. Just like with vegetables, fresh is the best option. Fresh fruits contain the most vitamins, minerals, and fiber. Plus, they don't have any added sugar. Frozen fruit can be just as healthy as fresh fruit, but be on the lookout for any added sugar. Fruit in a can or other container has the same benefits as fresh fruit, but may have added sugar, especially if the package says "packed in syrup". Dried fruit also contains the vitamins, minerals and fiber that fresh fruit does...it's just missing the water. And, fruit juice is missing the fiber. Dried fruit and fruit juice also contain more sugar than fresh fruit. It's recommended to focus on whole fruits each day. And, it's important to choose from a variety of colors.

### Slide 13

Dairy products include milk, yogurt and cheese. These are all excellent sources of calcium and other nutrients that help our bones grow strong and keep our teeth strong. Be careful about flavored milks and yogurts because they often have lots of added sugar in them. Some dairy products also contain higher amounts of fat. The amount of fat and sugar will always be listed on the nutrition facts label so make sure to check it.

Click on each type of milk to see the nutrition facts label.

Remember to choose low fat or fat free dairy products each day. And don't forget to watch out for added sugar.



## Slide 14

Protein foods include: beef, fish, nuts, beans, eggs, chicken, and soy products like tofu. Choosing less processed options are best because processing often adds fat and salt. It is recommended to choose lean, or low-fat options as much as possible. And it's best to cut back on eating deli meats and other processed meats, like bacon, that are high in sodium.

## Slide 15 (video)

Camara: All of this can be really confusing. Especially when we're eating out. Fast food places can make it even more difficult to eat healthy. I mean, you'd think chicken would be a better choice than beef, but sometimes the chicken sandwich has more fat and calories than a regular hamburger!

Tayler: Luckily, most food places post nutrition facts either in their restaurant or on their website. So, look for foods that are low in fat, calories, sugar and sodium.

Camara: And if you don't have the nutrition facts to look at, here's what to do: Choose baked, grilled, or broiled items over fried foods. Order a side salad or fruit instead of fries, but go easy on the dressing. And, watch out for extras like bacon, cheese and mayo.

Tayler: It can also be hard to make good choices when you're grabbing a snack from the corner store or gas station. As much as possible, be prepared to keep healthy snacks with you. If you find yourself needing a snack on the go and don't have anything with you, try to choose foods that are less processed. These foods will contain less sugar, fat, and sodium. Look for fresh fruit, nuts, and low fat dairy products like milk or yogurt. It's best to avoid soft drinks, fruit juices and sport drinks because they are loaded with sugar!

Camara: Eating too much fast food and processed foods can really drag a person's body down. The most obvious problem is weight gain, but because the foods we eat affect how our bodies function, eating the wrong foods can affect many things like our mood, energy, strength...even our ability to think and concentrate. And, of course it can definitely affect our future health.

Tayler: Yeah, if we don't watch what we eat, we could end up dealing with things like high blood pressure, high cholesterol and type 2 diabetes...even diseases like arthritis, sleep apnea and fatty liver.

Camara: I've even heard that your family history can affect what diseases you can develop as you get older.

Tayler: That's right. Everyone's family history of disease is different, and you should be aware of any disease that your family has dealt with. Talk with parents, grandparents, aunts, uncles, and anyone else in your family to determine what your risks may be. If you have a family history of a certain disease, like diabetes, ask your doctor what you can do to keep your risk low. And remember, no matter what your family history is, you can still reduce your risk by eating a healthy diet and getting regular exercise.



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