

LESSON OUTLINE

Lesson #5: Heed Your Warning Lights

Lesson Objective: Students will identify signs of feeling satisfied rather than full and will understand the importance of listening to their bodies; students will understand what a food allergy or sensitivity is and some alternative food choices.

Classroom Lesson Outline:

1. Review from Lesson #4 4 minutes
2. When to start eating and when to stop 20 minutes
 - a. Hunger scale from 1 to 4
 - b. Use volunteers to illustrate the best time to start eating.
 - i. At 2 on the scale – when you start to feel hungry
 - ii. You can control what and how much you eat
 - c. Use volunteers to illustrate the best time to stop eating.
 - i. When you feel satisfied
 - ii. Paying attention to your meal helps you hear signals when it is time to stop eating
3. Mindless eating
 - a. While watching TV is most common
4. Food Allergies
 - a. Dairy/lactose intolerant – cannot eat dairy products from cow, sheep, goat milk
 - b. Gluten intolerance/Celiac disease – Cannot eat certain grains – wheat, oats, rye, spelt
 - c. Corn, soy, eggs, peanuts/tree nuts – Cannot eat foods containing these products
5. Review 5 minutes
6. Optional Food Sample 8 minutes



Recommended Reading

Stop when full? You must be French *By Brian Wansink, Ph.D.*

California State Standards met by grade

3rd grade:

Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations.

Students will:

- Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.

4th grade:

All organisms need energy and matter to live and grow. As a basis for understanding this concept:

- Students know plants are the primary source of matter and energy entering most food chains

5th grade

Listening and Speaking Strategies

Organization and Delivery of Oral Communication

- Engage the audience with appropriate verbal cues, facial expressions, and gestures.

Comprehension

- Interpret a speaker's verbal and nonverbal messages, purposes, and perspectives.

SCRIPT

Lesson #5: Heed Your Warning Lights

Let's review from our last lesson on eating high-quality breakfasts.

Question: Who can remember what makes up a higher-quality breakfast?

Answer: High-quality proteins, fats and carbohydrates

Question: Why does a bowl of cold cereal, high in sugars, often leave you feeling hungry before lunch?

Answer: Because it is made with processed grains, high in added sugars. and it is digested fast, leaving you feeling hungry soon after. It is like a fuel tank with a hole in it – you fill up the tank but it empties very quickly.

Question: Why is it important to have a higher-quality breakfast?

Answer:

1. Breakfast feeds your brain – it actually helps you perform better in school. Studies show that kids who eat a high-quality breakfast perform better in school than kids who skipped breakfast.
2. Breakfast gives you energy. A high-quality breakfast gives you lasting energy the whole day – so you perform your best in both school and sports.
3. Breakfast can affect your mood. You may feel happier throughout the day when you eat a high-quality breakfast.

All of you have learned so much about the importance of food this year! You've learned that food is what helps our bodies grow, helps our brains think, and gives us energy. Food is our life force. And you've learned that you have a choice between different quality foods; eating higher-quality foods helps you think and perform at your best.

Today we are going to talk about how to eat. By that I mean when to start eating, when to stop eating and recognizing the signals your body gives you when a particular food is hard for your body to digest.

Question: Who can describe the way you feel when you are hungry?

Answers: Rumbling/growling stomach, headache, shaky, can't concentrate, cranky

Question: Who can describe the way you feel after a huge meal, when you are really full?

Answer: Uncomfortable, stomachache, tired, nauseated.

Depending on whether you are hungry, satisfied or really full, these are all signs your body is giving you and it is important to pay attention to them.

Let's take a look at the hunger scale in front of you. It is a scale from one to four. This chart shows


some of the signals our body uses when it comes to eating. It also shows the stages a body goes through when we eat.

Number one is famished. Another word you might use is starving. This means you feel so hungry you will eat just about anything. Imagine a very active summer day, you may be playing all day with friends and forget to eat lunch. Suddenly it is 4 o'clock in the afternoon. Your stomach may actually hurt because you are so hungry, and you would gladly gobble up anything in sight.


Number four is how you feel after you've just eaten everything in sight because you were so hungry. Perhaps you had 4 slices of pizza, 2 glasses of juice, a bag of potato chips and handful of cookies. Now you've overeaten and your stomach feels like it is about to explode.

There is a point on this scale that is the best time to start eating, so you have control over what and how much you eat. And, there is a point to stop, so you do not feel like you might explode.


I need four volunteers who can act out the points on our hunger scale. The class is going to guess which signal on the hunger chart you are acting out.

 *Docent note: Line volunteers up in front of classroom. In random order, hand them their clues to act out, as in charades. Have the volunteers take turns acting out their clues for about 10 seconds each so the class can observe. After all volunteers have had a turn acting, ask the class who each person was on the scale and line the volunteers up in order from famished to ill/exploding.*

Question: Ok, class, who was “famished”?


 *Docent note: Identify volunteer who was “famished.” Discuss the symptoms they were acting out, which are listed on the card. Ask students if anyone has any other signals they feel when they are very famished.*

Question: Who was “hungry”?

 *Docent note: Identify volunteer who was “hungry.” Discuss the symptoms they were acting out, which are listed on the card. Ask students if anyone has any other signals they feel when they are hungry.*


“Hungry,” go stand next to “famished.”

Question: Ok, class, who was “satisfied”?

 *Docent note: Identify volunteer who was “satisfied.” Discuss the symptoms they were acting out, which are listed on the card. Ask students if anyone has any other signals they feel when they are satisfied after eating the right amount of food at a meal.*

“Satisfied” go stand next to “hungry.”

Question: Finally, who was “ill/exploding”?

 *Docent note: Identify volunteer who was “ill/exploding.” Discuss the symptoms they were acting out, which are listed on the card. Ask students if anyone has any other signals they feel when they are extremely full after eating too much food at a meal.*

OK, “ill/exploding” go stand next to “satisfied.”

Question: So, looking at our fine actors up here, who acted out the best time to start eating? (Point to the appropriate volunteers) Should we start when we are famished? When our stomach feels hungry? When we feel satisfied? Or, when we are very full and feel like we are going to explode?


Answer: The best time to sit down to a meal or a snack is when you feel hungry. You want to allow your body to FEEL hungry before you begin eating, but don’t wait until you are starving and feeling jittery! If you wait until you are at a number one, you’ve waited too long to eat.

One big problem with waiting too long to eat is we get overly hungry and eat way too fast. Sometimes you are eating so fast, you don’t even chew up your food very well!


If you are really crazed with gulping down your food, you may not pay attention to what your body is telling you, like “Hey, I am getting full!”

Question: Using the hunger scale, who can tell me when the best time to stop eating is?

Answer: At number 3, when you feel satisfied.

 *Docent note: Indicate volunteer who is ill/exploding.*

You don’t want to eat until you are at number four and are so full you are uncomfortable and feel like you are going to explode. Our stomachs have a limit to how much they can expand before they get over-stretched. At that point, it is hard for your body to digest all that food.

 *Docent note: Hand ill/exploding volunteer a balloon and instruct them to start blowing it up, make sure to stop them before the balloon gets too full so it doesn’t pop in their face.*

Think of your stomach as a balloon – as you eat, it gradually fills up. Like a balloon filled with too much air, your stomach can get too full of food. It won’t pop like a balloon, but you may feel like it could pop!

 *Docent note: Thank volunteers and have them sit down.*

Question: Can anyone think of a time when you ate a lot without even realizing how much you were eating?

Answer: Usually when you are watching TV. This is called mindless eating because you are paying attention to the TV, not to your food. When you eat a meal or snack, it is important to pay attention! When you are distracted watching TV you will continue to reach into that bag of potato chips until you eat the whole bag.

By understanding when to start eating, paying attention to your meal or snack, and eating slowly, you will be able to listen to the signals your body is giving as your stomach fills up. Paying attention to how your body is feeling helps you to recognize your body’s signals so you know when you’ve had enough.

Now you know when to START eating, and when to STOP. Take a minute to fill in the blank lines on your activity sheet. Think back to a time when you felt each of the four signals on the hunger chart.

3

Write three different words that best describe the signals your body was giving you. You may use the word bank below.



Docent note: Give students 4-5 minutes to work on this. They may work with a seat partner.



Docent note: While students work on activity, write food sensitivities/allergies on the white board:

Dairy / lactose intolerant Gluten intolerance / Celiac disease Corn, soy, eggs, peanuts / tree nuts

Finish up writing your last word. If you did not finish, take the activity home to finish with your family.

We've spent our time so far talking about the hunger/fullness signals our bodies give us when we are eating. Now we are going to talk about some signals you may feel when your body has a hard time digesting a particular food.

On the board I wrote some common food allergies.



Docent note: Read the food allergies aloud

Question: Does anyone have any others they want to add?

Food allergies occur when your immune system gets confused. Normally, your immune system protects you from germs and disease. It does this by making antibodies that help you fight off bacteria and viruses that can make you sick. When a person has a food allergy, their immune system mistakenly treats certain foods as if it's really dangerous to them. Some reactions a person with a food allergy may feel are:

- Trouble breathing
- Rashes
- Stuffy nose
- Headache
- Nausea or stomachache
- Diarrhea/vomiting
- Bloated stomach
- Burning sensation in mouth, lips

These are some of the common signals that are important to pay attention to if they happen a lot. It's the body's way of saying "warning – you may want to avoid this particular food."

Let's review the food allergy examples I listed on the board.

Question: If I am dairy or lactose intolerant, what are the foods I need to avoid?

Answer: Dairy products like milk, yogurt, cheese, butter. These products may come from cow, sheep or goat milk.

Question: What are some other choices I can make if I cannot eat dairy products?

Answer: Soy, rice or almond milk, yogurt or cheese. There are non-dairy spreads made from olive oil you can use instead of butter. Sometimes these spreads are made with hydrogenat-

4

ed oils, but if you read the ingredient lists you can always find a choice with no hydrogenated oils.

Question: What foods would I need to avoid if I have gluten intolerance or Celiac's disease?

Answer: Wheat, oats, spelt and rye. People who have this intolerance cannot digest a certain type of protein found in many grains which is called "gluten." Gluten containing grains are usually found in crackers, pretzels, breads, cookies, cakes and cereals.

Question: What are some other grain choices?

Answer: Corn, rice, buckwheat, quinoa. It may seem like it is hard to avoid gluten when it is found in so many of the foods we eat every day but there are many, many gluten free foods available in grocery stores.

Other common food allergens are corn, soy, eggs, peanuts/tree nuts. Avoiding these foods is easily done by reading ingredient lists before you eat packaged foods.

There are different ways to find out if you have a food allergy or intolerance. With the help of your parents, you can try not eating that food for two to three weeks to see if the symptoms go away. There are also special allergy doctors who can help diagnose allergies.

So, let's review:

1. Allow your body to feel HUNGRY for meals and snacks before you start eating
2. Eat until you are satisfied, not full
3. Pay attention when you eat so you don't miss important clues about how full or hungry you are feeling
4. Pay attention to signals that let you know if a food doesn't agree with you

That's our GrowingGreat lesson for today.

Remember to share the Grill Me flyer with your parents.

This is our last lesson for the year! You have all done a wonderful job of listening and learning in our five lessons this year. We are so appreciative for your enthusiasm and participation.