

FEEDING YOUR HUNGER

This lesson aims to bring the STEM skills of inquiry, critical thinking, problem solving, and resiliency to life through hads-on learning and connecting STEM concepts with career opportunities.

LEARNING OBJECTIVES

By the end of the lesson, students should be able to:

- · Understand the feeling of hunger and fullness
- · Discuss the impact of unequal access to food

EDUCATIONAL STANDARDS SUPPORTED

SC.5.13.4.C Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

National Health Education Standard 1:

Students will comprehend concepts related to health promotion and disease prevention to enhance health

- 1.5.1 Describe the relationship between healthy behaviors and personal health.
- 1.5.2 Identify examples of emotional, intellectual, physical, and social health.

National Health Education Standard 8:

Students will demonstrate the ability to advocate for personal, family and community health.

8.8.3 Work cooperatively to advocate for healthy individuals, families, and schools.

PREPARATION FOR TEACHERS

The Food Research and Action Center (FRAC) released its national analysis of food hardship in the U.S. in a report titled "Food Hardship in America: Households with Children Especially Hard Hit."

According to the survey, **15.9 percent** of Nebraska households with children and **10 percent** of households without children reported difficulty in affording food. Nebraska ranked **7th best** among all states and the District of Columbia for families who reported struggling to buy food in 2015.

GRADE LEVEL **4-6**

LESSON LENGTH **45 minutes**

RELATED ACTIVITIES
See Supplemental
Piece

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Furthermore, the survey also ranks the nation's 100 largest Metropolitan Statistical Areas (MSAs). In the Omaha/Council Bluffs MSA, **16.1 percent** of households with children faced food insecurity, the 84th highest rate in the nation.

Nebraska's hunger struggles mirror the national picture. Across the U.S. **19.2 percent** of families with children and **14.2 percent** of families without children struggled to afford meals in 2015.

Living at the poverty line means having to prioritize where income is spent. If you are not receiving employee benefits, then healthcare, insurance and other living expenses need to be covered. Food is usually the last item on the checklist of things to pay for.

Children and elderly are the demographics most affected by food insecurity. Overall in Nebraska, one in six children are food insecure, while one in four seniors are food insecure. However, these numbers change when moving the scope to rural communities. One in two seniors are food insecure and one in three or four children are food insecure, depending on where you live.

To check out your individual county score, download:

NE_AllCounties_CDs_MMG_2016.pdf

INTRODUCTION



When children are very young, they stop eating when they are full.

As they get older, they stop listening to the hunger signals their body sends them.

Children can overeat, where they feel so full they don't feel good. If they keep overeating, they may start to gain weight.

Conversely, sometimes children don't have enough to eat. Children who are hungry often experience headaches, fatigue, frequent colds, and other illnesses that may cause them to be less physically active. Or they have feelings of irritability, and anxiety, feel cold all the time, and not sleep well. Children who are hungry may be less attentive. Many hungry children have difficulty concentrating; therefore their reading ability, and verbal and motor skills suffer.

The best way to know how much to eat is to listen to your body. Eat until you feel almost full. You should feel satisfied, but not overly stuffed.

OPENING QUESTIONS

- Do you ever eat too much?
- Do you ever feel you need to eat more?
- Do you know how long it takes for our heads (brain) to pick up the signal that we are full and have had enough to eat? (answer: about 20 minutes)

ACTIVITY 1: CHARTING YOUR HUNGER

Use a balloon to demonstrate fullness as you are talking about the Hunger Scale.

For example:

- #1 on the scale use a flat balloon,
- #2 will have a small amount of air,
- #3 will be a moderate size balloon,
- #4 will be stretching the balloon, and
- #5 will be nearly bursting.

Practice blowing up the balloon before the lesson to stretch it out and to figure out how much air it needs for each number. Have a few extra balloons in case one breaks.

MATERIALS LIST:

MAKE ONE PER STUDENT OR A LARGE ONE ON THE BOARD

HUNGER SCALE

I am very hungry	I am ju	st right	I ate too much.
1	2	34	5

DIRECTIONS:

Ask students to think about what their hunger number usually is before lunch. Then ask then to place and x over a number that matches what they felt.

What is your body telling you about how it feels?

Now, have the children think about what their hunger number usually is after lunch. Ask them to place an X below the number that corresponds.

Discuss the importance of thinking about eating enough food by how you feel.

Also cover the following points:

- How do you feel when you come to school without eating?
 How does this affect you when you are trying to study?
- How do you feel when you eat too much at lunch time?
- What happens if you always eat too much at one time?
- · What happens when you don't eat enough?

ACTIVITY 2: SOME KIDS ARE HUNGRY

MATERIALS LIST:

- Boxes of raisins or candy (using a snack or treat that participants like will raise the stakes in this activity)
- Lunch-size paper bags (number of bags depends on the number of participants)
- Distribution (example for a group of 25)
- 1/3 of the bags -no treat
- 1/3 of the bags 5 small boxes of raisins or pieces of candy
- 1/3 of the bags –10 small boxes of raisins or pieces of candy
- 1 bag -Full of raisins or candy
- · Smart board, white board, or flipchart with markers

DIRECTIONS:

- Divide the treats so that roughly an equal number of participants receive none and small or moderate amounts, and only one student receives a large amount of the snack.
- While participants sit at their desks, tables, or in a circle on the floor, explain that you are giving them a snack or treat.
- Pass out a closed brown (so you can't see contents) paper sack to each person.
- (Students should not open bags until instructed by facilitator. It's a good idea to fill the empty sacks with crumpled paper so that they all look the same.)
- When everyone has received a bag, instruct them to go ahead and open them and give them a minute to absorb what is happening.

DISCUSSION QUESTIONS

- How did it feel to be the one in the group that received the most snacks?
- What were your initial thoughts?
- How did it feel to be among the few who received nothing in your snack bags?
 What were your first thoughts?
- Do you think there are people who are hungry in your community

How can we come up with a solution for distributing todays snacks so that everyone has enough, and what are some action steps that we can take in our own communities so that everyone has enough to eat?



We want to hear from you!

Let us know what you thought of the lesson or send us a picture of youth participating in the lesson.

#NE4HSTEM





Supplemental: Additional Food Activity

Sometimes we eat food to show emotions.

Ask the children the following questions to help them understand their relationship with food. You might bring in a favorite recipe from your family to share. Or share different cultural foods.

DISCUSSION QUESTIONS

- · Do we eat food for reasons beyond hunger? What are they?
- Do you think that we express love and comfort with food? How? (when people are sad, funerals, celebrations, family gatherings)
- Do you have any special memories of preparing food with someone you love, or of a meal that was particularly delicious? If so, share what made the experience stand out.
- · Can you share an example of how food helps us share family history?
- Does your family have any special recipes that have been passed down for generations? Who created them?
- How did our grandparents or great grandparents access and prepare food differently from the way we do now?
- How do you think that hunger can impact a person's sense of connection to their family? To their community?

References: Food Research and Action Center (FRAC)

Nutrition in Me - http://extension.wsu.edu/curriculum-fidelity/wp-content/uploads/sites/48/2017/09/Nutrition-in-Me-Grade-4-PDF.pdf

Child Hunger Fact Sheet

The Meaning of Food: PBS.org