

What's to Eat

A Close Look at Food Around Our School

K-1 Classroom

Phase 3

Sharing Results, Findings, and Understandings



Students give a puppet show entitled "The Hungry Thing" for their parents.



Children share their work with parents.

During Phase 3, students reviewed and reflected upon their work. Teachers evaluated children's developing basic skills and knowledge in content areas. Students thought the topic of food was important. It allowed depth in investigations, and they had personal experiences to tell about food.

Food is an important topic. The *Illinois Learning Standards for Physical Development and Health* state, "a tremendous opportunity exists to enhance our health and well being. Much of that opportunity lies in our ability to address the growing health challenges that are facing children and youth. Although progress is being made, poor physical fitness; violence; **lack of proper nutrition** [*bold added for emphasis*]; communicable diseases; and alcohol, tobacco, and other drug use continue to plague out society and most notably our youth." Student's reflections in their Food PowerPoint presentations demonstrated that they recognized the relationship between good nutrition and a healthy body. Students had a chance to interview and become familiar with people from various fields of study related to food. They brainstormed the many occupations that facilitate our consumption of food.

- botanist
- cashiers
- chef/cook
- dishwashers
- farmers
- garden shop
- grocers
- managers

- nutritionist
- processing plant
- restaurant
- servers in a cafeteria
- shelf stockers
- truck drivers
- waiters and waitresses

They also listed the people who work with corn in particular:

- animal scientists
- artist representing corn
- bread maker
- chemical companies making medicines
- children using corn for dramatic play
- factory workers that make corn products, eg. corn chips
- farmer - planting, picking, feeding to animals
- miller
- people eating corn
- scientist that study corn
- storekeepers that sell corn products
- zookeeper feeds corn to animals

Food was a topic with depth. Students gained an awareness of the relationship between food and plants. They made posters and books for the culminating potluck, which showed evidence of their new understandings of plants. Students demonstrated their increased understanding about digestion. A comparison of the web created at the end of the project ([Student Food Topic Web 2](#)) with the web ([Student Food Topic Web 1](#)) that they brainstormed at the beginning of the project showed increased digestion vocabulary. Parent volunteers probed students' ideas from their webs and students further explained what they brainstormed. Their explanations are detailed in the [Expanded Food Topic Web 2](#). Even though they increased their understanding, some students continued to wonder about plants and digestion. They incorporated new questions about plants and digestion in the second semester project topic of movement.

K/1 students had personal experiences and opinions about food. Students gained an appreciation for the variety of food that people eat. They became aware of peanut allergies and other children's likes and dislikes. When bringing birthday treats, they made comments to reassure the child with peanut allergies that their treat was peanut free. This was also demonstrated by an increased number of students (all of them) saying that they would be willing to try new foods. They reflected on their willingness to try new foods in a food survey given by the teachers at the beginning and the end of the project. ([Teacher Food Questionnaire 1](#) and [Student Food Questionnaire 2](#)) Students learned ways to maintain their healthy bodies. They showed interest in cookbooks and recipes and became more knowledgeable about portions and the food pyramid. The [students'](#) and [parents' reflections](#) revealed that the students had a growing awareness of different food groups and the amount of food that is suggested to maintain a healthy body.

To finish the project, students planned how they would share what they learned from their investigation entitled, *What's to Eat: A Close Look at Food Around Our School*. Students worked individually, in small and large groups commenting, listening, and discussing the products that they were producing for the open house. They chose a number of ways to relate how they pursued the answers to their questions. Some groups presented representations about what they discovered on their field studies. Other students revealed concepts they had learned on murals and scenery for food skits, puppet shows, stories, poems, books food labels, and PowerPoint presentations.

Products

Representations of Information Gained from Site Visits and Experts

After students returned from a site visit, they met in a small group to plan how they wanted to represent what they had learned. They looked at sketches and digital photographs and made choices about who they wanted to work with and what materials they wanted to use. After the trip to the bean and cornfields, students decided to make a representation out of boxes and junk of a tractor that they had seen. The tractor was displayed at the open house.



Students tape together large boxes to represent a tractor.



The tractor is finished and ready for the open house.



Students explain their representations at the open house.

Students also displayed 3-dimensional representations from the grocery store; a mixing bowl, oven, and flattening machine from the pizza shop; a model of the body showing the digestive system and a model of the tongue. The students felt that the representations informed others about the researchable questions from Phase 1:

Where does food come from?
How does the body process food?
What is in food?

Digestive Game

A small group of students interested in digestion made a game for the other members of the class and their parents to play. They placed Velcro on the 3-dimensional body and on cardboard cutout body parts. They wrote rules to the game.

Object of the Game: To learn more about the digestive system.

Rules:

Pick a blue card and read it aloud.
Find the matching body part.
Place the body part in the correct place on the body.
The game is over when the digestion system is complete.

Definitions: Defined by a student and placed on a blue card.

Rectum - It's the end of the digestive system.
Liver - It squirts out juice to help the villa get the food into the blood stream.
Mouth - It helps chew up the food before you swallow.
Salivary Gland - It is something that makes your mouth wet. It makes the food softer so that you don't choke. It also makes spit.
Large Intestines - The food goes into it and gets dried up before it comes out of you.
Small Intestine - It's a tube that's almost as long as a football field and the food takes a long time to get through it. The food goes through villa that makes it into fuel.
Appendix - It helps digest raw meat. We don't need it because we cook meat. People who lived back in the old days ate raw meat.
Epiglottis - A part in your body that opens and shuts to help foods go down at the right time.
Stomach - It's a big round ball in you tummy. It has gases in it and the gases smoosh up the food.
Esophagus - It's a tube that leads from your mouth to your stomach.

Many of the same children continued to study digestion in the second semester. At the last culminating open house in May, they added more features to their 3-dimensional model and used it in their poster session to explain how movement occurs in digestion.

Murals and Food Representations

After students brainstormed what they had learned about food, they noticed some themes. Students worked individually and in small groups to communicate their ideas for the open house. The themes were similar to the “Big Ideas” that teachers generated prior to beginning the investigation:

We get food from a variety of places
Plants are so important for food.
Healthy animals and people need food.
Favorite food is delicious and beautiful.
Eating the right amount of food is important.

Some students collaborated to make murals to show that "Healthy animals and people need food", "Plants are important for food", and that "We get food from a variety of places."

Students learned to perceive and respond to works of art by their classmates and by adult artists. They compared and contrasted exemplars. Then they used many different art mediums to show the theme that "Favorite food is delicious and beautiful."



Student arranges food to be artistically interesting.



Student uses chalk as a medium to represent the food arrangement.



A student is putting Mod Podge gloss-Lustre on a 3 dimensional apple to make it as shiny as his real apple.



Student adds texture to her 3 dimensional pear.

A small group of students worked on a skit to demonstrate to their parents the theme of "Eating the right amount of food is important." They dictated the lines that they wanted to say to the

teacher. The teacher facilitated by asking probing questions and typing the script. They practiced their lines, painted the scenery, and gathered the costumes and props for their skit entitled, *Eating the Right Amount of Food*.

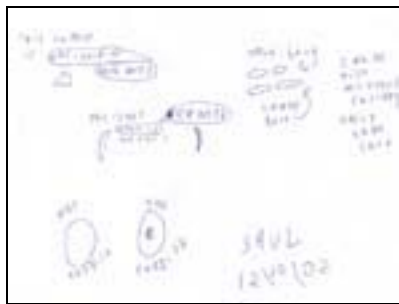
PowerPoint Food Presentations

Some students had created a PowerPoint presentations last year. They were very excited about the opportunity to again work on a presentation. Most of the class worked with the assistant teacher on creating a PowerPoint presentation to share what they had learned about food. He worked individually with each student using a format, which included samples of work from each phase. Students selected a work sample from their Phase 1 project portfolio to explain their prior experiences with food. Then they chose evidence of how they researched their questions from the Phase 2 project portfolio. For Phase 3, they reflected on what they knew and thought was important about food. Students chose the type of presentation they wanted and the slide template. The assistant teacher facilitated their reflections by typing and by helping insert their digital pictures into their presentation. At the open house, some students presented their PowerPoint reflections in front of the audience of parents. (See [PowerPoint Gallery](#)).

Literacy

Reports, Poems, Booklets, Stories, Recipes, and Riddles

There were many opportunities for the students to read and write throughout the project. They wrote thank you letters to the experts and field site guides on behalf of the class. The teacher gathered fiction and non-fiction book about food and made them available. They wrote reports and rules to games. They wrote charts to explain what they now knew about food.



Student summarizes an experiment. This lemon is antioxidant (new word). Orange juice or lemon juice. I wonder which will oxidize faster? Answer: lemon juice.

Every week the teachers read a number of poems to the students during whole group language and literacy time. Teachers identified poetry elements such as repetition, meter, rhyme,

metaphors and similes. Students incorporated vocabulary and food ideas into their poetry. Teachers displayed their poems for the culminating open house.

Pizza

By DM

Pizza, Pizza
Oh that big pizza
You taste so pepperoni good.

Pumpkins

By AC

Pumpkins, Pumpkins
I love pumpkins
They can make pumpkin pies
I love pumpkins because they can be used for Halloween.
Pumpkins, Pumpkins
The juice is slurpy and glurpy, sloppy and poppy and ploppy, popular and slopular.
Yummy pumpkins
Mum! Mum! Mum!

Apples

By AC

Apples, Apples, Apples
I love apples
They are juicy and sweet
The juice is watery and sticky
Apples are good

Fruits

By NB

Fruits, Fruits
I love fruits
Squishy, Gloppy fruits

Apples

By LS

I like apples
They taste good
They are juicy
They are red as roses
They are too red

But I still like them

Bread

By LS

I like bread to eat with soup
And crackers too.

The teachers read a variety of versions of *Jack and the Beanstalk* and *The Old Lady Who Swallowed a Fly*. The teacher chose *Jack and the Beanstalk* because it referred to beans that children were growing in the window garden. The teachers chose *The Old Lady Who Swallowed a Fly* because it presented a playful idea about eating. Children compared and contrasted the versions. They listed the similarities and displayed comparison charts for both stories, *There Was an Old Lady*, and *Jack and the Beanstalk*.

There Was An Old Lady

Title	Author	What she ate		Did she die?
<i>I know an old lady</i>	Rose Bonne	Fly Spider Bird	Dog Goat Horse	Yes
<i>I know an old lady who swallowed a bat</i>	Lucille Colandro	Bat Owl Cat Ghost	Goblin Bones Wizard	No
<i>I know an old lady who swallowed a fly</i>	Nadine Bernard Westcott	Fly Spider Bird Cat	Dog Goat Cow	Yes
<i>There was an old lady who swallowed a fly</i>		Fly Spider Bird	Cat Dog	
<i>There was an old lady who once saw a ghost and other funny rhymes</i>	Sirley Pettigrew	What she saw and did: Monkeys Birds Horse Duck 2 old Ladies Baseball	Ghost Hats Cats Skis Airplane Skate	No
<i>I know an old lady who swallowed a pie</i>	Alison Jackson	Pie Cider Roll Squash	Turkey Pot Cake Bread	No

		Salad		
<i>I know an old lady who swallowed a trout!</i>	Teri Sloat	Trout Salmon Otter Seal	Porpoise Walrus Whale Ocean	No

After reading and comparing stories, students wrote their own version of *Jack and the Beanstalk* and *The Old Lady Who Swallowed a Fly*. Students shared their versions with the preschoolers next door. They also displayed their books at the open house.

Alice and the Beanstalk

By NB

Once there lived an old poor woman with a little girl, Alice. They had 3 horses and a cabin and that's all they had. One day early in the morning Alice looked out of her bedroom window. She saw a giant beanstalk. She wondered what was up there. So she climbed and climbed and climbed the beanstalk until she came to the top where there was a big castle. Suddenly she shivered. She felt something. She turned around and she saw a giant and it said, "Fee Fi Fo Fum. I see an English woman."

"Hello," she said, "My name is Alice."

The giant looked confused. "I thought that your name was Jack."

"No, it isn't," said Alice.

"Oh," said the giant. "Then you can go."

"OK."

So she ran into the castle. She found a big ladle. She jumped in. When the giant came in the castle, he said, "Fee Fi Fo Fum. I smell the blood of an English woman. Be she alive or be she dead, I'll grind her bones to make my bread."

Suddenly Alice heard a snoring sound from the castle. The giant had fallen asleep from a wind sound. She wanted to know what made the wind sound, so she went to the window and saw a magic harp. She jumped out the window, grabbed the harp, and ran down the beanstalk and lived happily. The end.

The Old Lady Who Swallowed a Bee

By CP

I know an old lady who swallowed a bee.

I don't know why she swallowed a bee, cause it was free.

I know an old lady who swallowed a bear. She swallowed a bear to catch the bee.

I don't know why she swallowed a bee, cause it was free.

I know an old lady who swallowed a lion. She swallowed a lion to catch the bear. She swallowed the bear to catch the bee.

I don't know why she swallowed the bee, cause it was free.

I know an old lady who swallowed a tiger. She swallowed the tiger to catch the lion. She swallowed the lion to catch the bear. She swallowed the bear to catch the bee.

I don't know why she swallowed the bee, cause it was free.

Students wrote food stories incorporating ideas that they had learned from their study. They also wrote booklets summarizing and listing the source of foods that they eat. Some children chose to read their writings in front of the parents, others displayed their writings at the open house.

The Tomato Garden

By LS

Once, there was a little seed. It was a tomato seed. There was a farmer who planted it. One day, it got so big. He tried to pull it, but it was stuck in the ground. So, he called his dog and his cat. His animals couldn't get it out, either.

He called his neighbors, but they weren't home. Now his tomato had grown as big as the house. He grabbed a doll's silverware and he tried to cut the tomato. But it didn't work. He tried to push the tomato to the ground, but he couldn't. He sat down on his bed and thought, "How can I cut that tomato down?"

Then he got an idea. He went to get a beaver to cut it with his teeth. He went in the forest to find the beaver. But the beaver was cutting trees. The farmer asked the beaver, "Could you come help cut down my tomato?"

The beaver said, "No, I am busy."

So, the farmer had to do it by himself. He found a big knife and that was the perfect thing because it was as huge as the tomato.

Then, all the people came and said they wanted some tomato. The farmer said, "If you will help me cut the tomato down, you will each get a big piece of the tomato."

While they were cutting, the beaver came to help, so he could get some tomato, too.

They were able to cut it down and they all lived happily ever after with the farmer having a stomachache.

What Comes From Wheat?

By SD

What comes from wheat?

Apple pie crust comes from wheat.

Croutons come from wheat.

Sugar cookies come from wheat.

Cake, bread and crackers come from wheat.

Lots of things come from wheat.

What Comes From Corn?

By JC

What comes from corn? Corn tortillas!

What comes from corn? Cookies!

What comes from corn? Pancakes!

What comes from corn? Breeding for fried perch!

What comes from corn? Corn bread!
What comes from corn? Cornflakes!

Students were curious about what was in the foods that they enjoyed eating. They also were interested in the ingredients and the sequence in preparation of foods. Students wrote food sequence charts, which were displayed at the open house.



Student wrote an applesauce sequence chart.



A student writes the sequence of pizza.



A kindergarten student draws a very detailed sequence of making pasta. These are the first six steps.



AH continues giving directions for making pasta.

Many students were very interested in sharing what their families were bringing to the open house potluck. They announced several days ahead what food they were bringing, some of the ingredients and the steps in making it. They made food name cards, and displayed them in front of their dish at the potluck. This interest led to a compilation of recipes of the foods made during the food project. Students created one cookbook with their original recipes and illustrations. A volunteer parent created a collective cookbook of all of the recipes that were brought to the potluck. After the potluck, the students wrote riddles to quiz their classmates.

Riddles

PJ: I ate this at the potluck.
It is crusty.
It is cheesy.
It is saucy.

You can eat it in a triangle.
What is it? Pizza

AC: I ate this at the potluck.
You cook it in boiling water.
It has cheese you eat it for lunch.
It is good.
What is it? Macaroni and cheese

BSH: I ate this at the potluck.
It's sticky.
It's healthy.
It's yummy.
It's messy.
What is it? Fruit Picks

VM: I ate this at the potluck.
It's a dessert.
It can melt.
It is cold.
What is it? Ice cream.

BH: I ate this at the potluck.
It can be eaten in triangles.
It has a crust.
It has sauce.
It has to be in an oven.
What is it? Pizza.

SD: I ate this at the potluck.
It is slippery.
Lots of people like it.
You need a big spoon to serve it.
What is it? Pasta

JIC: I ate this at the potluck.
It was healthy.
It was mixed.
It was cold.
It was in a bowl.
What is it? Fruit salad.

AB: I ate this at the potluck.
It looked round.
And it has sauce.
And cheese.

What is it? Pizza.

AHO: I ate this at the potluck.
It is round.
It has circles.
And I brought it to the potluck.
A lot of people ate it.
What is it? Cookies.

NB: I was eaten at the potluck.
I have a cone.
I am a circle.
I am slippery.
I am different flavors.
What am I? Ice cream.

CS: I ate this at the potluck.
It is sweet.
It is cold.
It will melt.
What is it? Ice cream.

JEC: I was eaten at the potluck.
I have noodles.
Before I'm eaten I'm in a pot.
The pot is hot.
What am I? Macaroni

Display

Students wanted to display results of a parent questionnaire that they had designed. Their questionnaire included the following:

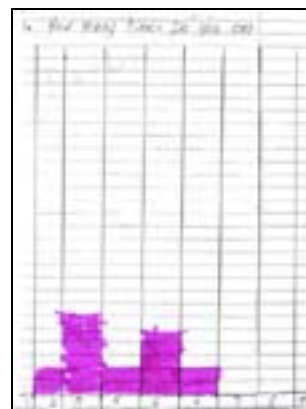
1. How many times do you eat (in a day)?
2. How many times do you eat breads and cereals (in a day)?
3. Do you eat bread dressing?
4. How many times do you eat vegetables (in a day)?
5. Do you eat potatoes?
6. Do you eat salad?
7. Do you eat corn?
8. Do you eat peas?
9. Do you eat green beans?
10. Do you eat carrots?
11. Do you eat broccoli?
12. How many times do you eat fruit (in a day)?

13. Do you eat blueberries?
14. Do you eat cranberries?
15. Do you eat cranberry juice?
16. Do you eat pie?
17. If yes, is the pie bought or homemade?
18. Do you celebrate Thanksgiving?

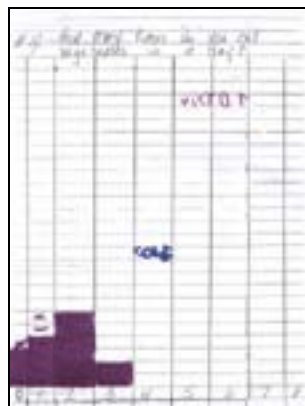
The students worked in pairs to analyze their data. They prepared bar graphs and/or pie graphs to display the results for each question. One child read the parent response and marked it off on the survey. The other child transferred that data to the graph. In this multi-age classroom, this allowed readers and non-readers to work together.



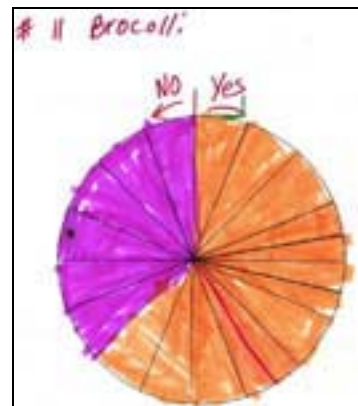
This is one family's response to the questionnaire.



This graph show that the six families reported that they ate three times that day.



This graph shows that six families ate two servings of vegetables that day.



This pie graph shows that more people eat broccoli than do not.

Students noted:

- NB: The most people ate 3 times a day. I was surprised that 2 families ate only 2 times a day and 2 other families are 6 times a day.
- CP: It tells me that most of the people that we surveyed ate 2 vegetables in a day. But some ate 0 vegetables. You are supposed to have 3 to 5 vegetables a day.
- AJH: This graph tells me that 13 people said they eat broccoli and 6 people said no they don't eat broccoli.

New Vocabulary Related to Food

Students were pleased when they learned a new word. They wanted to see just how many new vocabulary words that they collectively knew. They were surprised at the length of their list. They integrated new vocabulary words into their conversations. Sometimes individual students were still refining the correct meaning or offered a word to the list but didn't recall the definition.

New Vocabulary

New Vocabulary Word	Definitions
2 Compartment sink	There are two compartments of the sink. One in the back and one in the front.
Antioxidant	
Botanist	Someone who studies plants and works with them.
Buttermilk	
Carnivore	Means meat eater.
Casserole	Like a hot beef in it. In a roll. It can be rolled up. Casserole is a kind of food. And my Mom and Dad have it for dinner.
Catering	
Chlorophyll	Something in the leaf that makes it green.
Coddled	
Compare	It means try it against something else.

Conveyor belt	It's a belt that moves other things from one place to another.
Corn flour	It's corn and you ground it up.
Digestion	Digestion is something that helps you swallow.
Esophagus	A long food tube.
From scratch	It means that you don't follow a recipe and just know from scratch.
Ginger-stem	
Griddle	Is like a big thing that you cook with.
Herbivore	A plant eater.
Large intestine	
Large Surface	I think it is a large island. And a lot of people go on it.
Liver	Something I think that sends juice into your body. Only digestion juice.
Marshmallow crème	Marshmallow stuff that's sticky and gooey.
Microorganisms	I think it means something that gets in your body and helps you get your baby out if you are pregnant.
Mill	Is like something that crushes things and mill is also something that you need to plug in.
Mold	Yucky stuff.
Mycelium	When the spore divides and then it all goes into little bubbles, it divides itself. I think it means that mold is getting on our pieces of food.
Ocolist	A glasses maker.
Omnivores	Rodents. Like rats and those things.
Ogre	It's a mean giant.
Oxidizing	
Pancreas	Pancreas is I forgot what it means but I know what it means. It's the other thing in your body and it squirts juice into your stomach.

Pantry

Pass through A place where you can send the things they want to send from the wall to the other side of the wall.

Persimmons This is an orange fruit and you sometimes need to peel the skin off. And to me it really doesn't taste good.

Photosynthesis It means I think it means something with a plant how the plant grows. The sun would give it the energy to the leaf which makes it get food.

Poached It's an egg and its made with water and a stove and an egg.

Potato peeler machine

Processing Plant

Pomegranate It's a kind of a fruit

Proofer Something that pats something else down

Pumpkin pie filling It's a kind of pumpkin stuff that tastes like pumpkin and it's sticky and gooey

Rectum It's a body part. It's the end of the large intestine.

Rough metal

Sanitizing It's like when you get germs off of something.

Small intestine It is almost half as long as a football field. It's a part in your body. It froze juices to digest the food inside the small intestine. It digests the food in there and goes into the large intestines and it digests all of the food and finally goes at the end of you and then it goes out of you.

Skim Milk

Spore A spore is mold floats around in it, and then it lands on something when it finds the right air, and food.

Stack oven It's an oven that you cook pizza and cookies in and all kinds of stuff. Something that you stack stuff with.

Star fruit	It's a fruit that I tasted that tasted bad. I think star fruit comes from stars.
Steam Jacket Kettle	I don't know a jacket that is steamed. Doesn't look like a kettle but it is a kettle.
Steamer	It's hot. And you don't touch it. Something that you can't wear any jewelry around.
Taste buds	Something that tastes on your food. They are things to help you taste things. If you didn't have them you wouldn't taste anything.
Tentacles	Something that sticks out.
Tilting /Skillet	Something that you cook with. A skillet is a pan.
Tuber	
Udder	
Utensils	They are stuff that you use to bake stuff with and like mix. Something that you use to cook with.

Open House

The teachers and students decided that this culminating open house on the food project should have a potluck so there would be a lot of food. Everyone could contribute family favorites and customs. The open house was held on the last day of school before winter break. The morning of the open house, a small group of students made homemade pizza as the class contribution to the potluck. They made extra pizza to be able to open a pizza shop over the lunch hour. They advertised with flyers and taped them up and down the hall of the building where our school is located. They sold a slice of pizza for \$1.25. At 1:00 P.M., the open house program began. Students shared orally their PowerPoint presentations, read their stories and books, dramatized their skit, and sang their original group songs.



The students contributed their own verses to their song.

The display in the room included products, webs from the beginning and the end of the project, a model of the tractor, stories and booklets, and murals and posters. Students guided their parents to view the displays before or after they ate at the potluck. They took turns being servers.



At the potluck, there was pizza, ice cream and corn casserole. EE is serving.



The process of taking a "Closer Look at Food" is displayed on the wall of the classroom.

Teachers designed a questionnaire to give to parents, asking them what they thought their children had learned about food. In the Evaluation section, teachers share their reflections as well as those of the parents and students. The teachers also documented growth in individual students and share some examples from the Student Portfolios.