FOOD EXPLORERS

INVESTIGATING WHAT WE EAT AND WHY

SESSION 1: WHAT'S IN MY SNACK?

Investigating highly-processed foods marketed as "healthy."

Making fun, flavorful snacks.

KEY MESSAGES:

- Real food is found in nature, not processed too much, and filled with nutrients to make you healthy.
- Highly-processed food is made in a factory, stripped of most of its nutrients, contains too much sugar, salt, and/or fat, and has many artificial ingredients.
- The more a food is processed, the less healthy it is.
- Food companies try to trick kids (and their families) into thinking highly-processed foods are healthy.
- Don't be fooled by packaging with super-heroes, exaggerated claims, and asterisks *(the little star that leads to information companies don't want you to see).
- Read labels closely, and try not to eat foods that have lots of ingredients you can't pronounce.
- Do your best to snack on real foods that you make yourself.

PREPARATION:

- Print copies of the pre-test survey for each student.
- Print copies of the recipe for each student.
- Buy ingredients for Powerhouse Pumpkin Muffins
- Read Exposed: Fruit by the Foot www.teacheatlove.com/2013/09/exposed-fruit-by-foot.html

EQUIPMENT NEEDED:

- ☐ Session #1 bin
- ☐ Magnifying glasses from Admin Bin
- ☐ Processed Food Cards
- ☐ Mixing bowls
- ☐ Spoons for mixing
- ☐ Measuring cups and measuring spoons
- ☐ Can opener
- ☐ Oven mitts
- ☐ Muffin tins (large if using regular oven, small if using convection oven)
- ☐ Convection oven (if no regular oven on site)

SET UP:

- Display highly-processed foods on a large table. Set out magnifying glasses on table too.
- Set up 3 different cooking stations, one for each group with all of the equipment and ingredients necessary.

WELCOME

- Introductions: Tell us your name, age, and if you could be any vegetable, what would it be and why?
- Administer the Pre-program Questionnaire.

DISCUSSION

When you're hungry and need a snack, what do you eat?

Chips, soda, granola bar, candy bar, fruit snacks, etc.

Why do you choose those foods?

Quick, easy, convenient, taste good, they are in my cupboard at home, they are cheap at 7-11 or corner shop, etc.

How are these snacks made?

Explain: A lot of snack foods are highly-processed. That means they are made by machines in factories. These snacks may have started as a real food found in nature, but they have been changed so much that you can hardly recognize the food anymore.

Look at examples from the Processed Food Cards:

- An ear of corn turns into a bowl of colorful Froot Loops cereal.
- Brown rice turns into a marshmellowy Rice Krispies treat.
- An orange turns into a can of Fanta soda.

When food is made with a lot of machines, it starts to taste strange. So scientists add a lot of sugar, salt, and/or fat to make it taste good to you. They also add many other ingredients so that highly-processed food can last a long time at the store and even longer on your cupboard shelves.

Do you think highly-processed snacks are the best food to keep you healthy?

Explain: The closer the food is to its natural state, the more nutrients it has. Processing food takes away its nutrients.

Highly-processed foods aren't very healthy, but they have PACKAGING. And food companies put all sorts of funny things on packaging to convince you that their product is good for you.

INVESTIGATION

Have students look at the table filled with highly-processed foods. Let them pick up the items and explore the packaging. Pass out magnifying glasses for them to look at the information up close.

Explain: Some food companies think that kids aren't very smart; they think that they can trick kids into believing that junk food is actually healthy food.

How do food companies trick kids?

Pictures of athletes, super heroes, or famous characters on the package—sometimes there isn't even a picture of the actual food on the package.

Exaggerated claims: The Cheetos package says, "Made with real cheese." It might have a very small amount of dried cheese powder, but Cheetos are mostly made with artificial dyes and fake flavorings. Fritos are "corn chips." Fresh corn on the cob can be good for you, but highly processed corn turned into chips are a different story!

A Healthy ingredient smothered in not-so-healthy ingredients: Granolas bars are made with oatmeal, which is a healthy whole-grain, but they are covered in chocolate and marshmallows—which make it a dessert, not a healthy snack.

Rewards and contests: Free movies, toys, video games, and other rewards are advertised on the food packaging. For example, the Doritos package announces a contest to win games for your Xbox.

Asterisks: That little tiny star. Food companies make big claims on the front of products but then you have to look on the back to see the small print. Small print is important information that food companies don't want you to see. Real fruit doesn't need an asterisk!

For example:

On the front package of Strawberry Fruit by the Foot, it says:

STRAWBERRY—NATURALLY FLAVORED
MADE WITH REAL FRUIT*

So you think there would be strawberries in it, right? NOPE!

Go looking for the ASTERISK. You'll find it at the bottom of the nutrition label and it says (in the tiniest print):

"These fruit flavored snacks are made with pear concentrate…not intended to replace fruit in the diet."

Isn't that sneaky! There are no strawberries in Strawberry Fruit by the Foot! Instead, there are strange sugars, highly-processed oils, and weird additives.

Get your magnifying glasses out and take a look at the ingredients.

Can you pronounce them? Do you know what they are?

If there is time, explain to the students what some of these ingredients are.

Ingredients of Strawberry Fruit by the Foot:
Pears from Concentrate; Sugar*; Maltodextrin*; Corn Syrup*; Partially Hydrogenated Cottonseed Oil*; Carrageenan; Citric Acid*; Acetylated Monoglycerides; Sodium Citrate*; Malic Acid*; Xanthan Gum*; Locust Bean Gum; Vitamin C (ascorbic acid)*; Potassium Citrate*; Natural Flavor; Color (Yellow 5, Red 40, Blue 1)

- Maltodextrin: sugar like substance that makes things soft/fatty and stay on shelf for a long, long time
- Corn syrup: made by scientists, not farmers
- Partially Hydrogenated Cottonseed Oil: bad for your heart
- Malic Acid: a common additive in "fruit" snacks, which adds the tart fruity flavor that corn syrup lacks.
- Acetylated Monoglycerides: plasticizer and coating agent
- Natural Flavor: this isn't "natural" at all. Castoreum, a flavoring derived from beaver anal glands, is considered "natural" and can be used in strawberry flavored foods. Since flavorings are considered a trade secret, we can only guess at the bizarre combination of dozens of chemicals that make up the strawberry flavor in these snacks.
- Color: Real strawberries don't need added color, but strawberry-flavored pear mash does. These kinds of petroleum-derived dyes have been linked to hyperactivity in children.

Do you think Fruit by the Foot is real food? Do you think it's a healthy snack?

What are some better ideas for healthy snacks?

- whole fruits: apple, banana, grapes, pears, etc.
- veggies with dip: carrots, celery, cucumbers, peppers
- whole grain pretzels, home-made popcorn, whole grain bagel or toast with peanut butter
- something made by yourself—instead of made by a machine!

COOKING

We're going cook up a very healthy snack: Powerhouse Pumpkin Muffins—packed with Vitamin K, Vitamin C, and fiber.

Since this is the first time the students will be cooking, take time to go over the Basic Rules of Cooking.

BASIC RULES OF COOKING

- Wash your hands right before you start.
- Make sure your work space is clean.
- Read through the entire recipe first.
- Make sure you have all the ingredients.
- Make sure you have all the correct equipment.
- Follow directions carefully.
- Ask an adult if you don't understand something.
- Don't rush.
- No running.
- Be careful—equipment can be dangerous.
- Only use white plastic knives (metal knives are for teachers only).
- Put dirty items in bins for washing.
- Clean up messes right away.
- Have fun!

COOKING SKILLS THIS SESSION

Go over the different measuring cups and different measuring spoons (make sure to point out the difference between a teaspoon and a tablespoon).

MEASURING DRY INGREDIENTS:

- Fill cup or spoon with ingredient.
- Don't pack the ingredient too tightly into the cup or spoon.
- Use the back of a knife to level off the extra.
- Make sure the ingredient is even with the top of the cup or spoon.

MIXING:

- Always use one hand to hold the mixing bowl in place.
- With the other hand, grab the mixing spoon and thoroughly mix ingredients. Scrape through to the bottom of the bowl to make sure unmixed ingredients aren't left there.

EXPLORATION AT HOME

Have students investigate what types of snacks are found in their kitchen at home. Which ones are healthy and which ones would they change?