Introduction to Nutrition
4th Grade
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References:

- 2003-04 Columbus Public Schools Science SLC Guide

Benchmarks:

SLC 19: Analyze and/or evaluate various nutritional plans for humans.

Objectives:

Students will plan nutritional meals by using the USDA’s Food Guide Pyramid and will analyze food labels to aid in this planning.

Materials:

- Wonderbread

Initial Demonstration:

Ask the students, “Why do we eat?” [to get energy/nutrition]. Eat a food item and a non-food item [e.g. a tangerine/piece of bread and a piece of paper/leaf/a bit of sponge, etc.].

Ask “Is all food the same? Why do we eat what we eat? Is everything that we can put in our mouths and chew and swallow food?”

Target Observations:

- Not all foods are the same.
- We eat food to get energy.

Target Model:

- We can eat lots of different things.
- Some things that we can eat we think of as food and some of the things that we can eat are not food.

Procedure:

Make a list of the different kinds of food. Ask the students why we would want to eat the different kinds and how much of the different kinds of food would we want to eat?
Make a list of different types of food. Make a list of characteristics that make food different from non-food, “how do I know that something is food?”

**Target Observations:**

- Foods can be grouped together.
- There are several different groups, like fruits and vegetables, grains, etc.

**Target Revised Model:**

- Different foods provide different types of nutrition that our bodies need.
- Different types of activities/life styles/health require different types of foods.

**Procedure:**

Have the students put a piece of Wonderbread in their mouths. Tell them not to chew it, but to just hold it and wait while it dissolves.

Have one table of students get up and run in a circle around the room. Have another group walk slowly around the room. Have another group just sit at their desks.

Ask them to describe what they taste. [At first the flavor is bitter and “bready” then it will get more sweet]. Explain that this is the complicated sugars [carbohydrates] digesting into simple sugars [like those in a candy bar]. Simple sugars get into your body faster and more easily than do complex sugars. [Get in fast and all at once, your body cannot make efficient use of all of it at the same time, better to have more complex sugars, take body more time to process them, can use more effectively, less likely to turn directly into body fats.]

The other types of foods are different too. There are dairies and sweets and fats/oils and meat/legumes/protein and fruits and vegetables and complex sugars/carbohydrates. Tell the students what each of these is used for in the body.

Ask the students to tell you which group of students required/used up the most energy. Explain that people who are active burn a lot more calories/energy than people that are sedentary [i.e. sit around and play Nintendo or play station all day long].

**Target Observations:**

- The bread gets sweeter the longer it stays in our mouths.
- The students that ran around spent the most energy, and those that sat at their desks used the least.

**Target Revised Model:**

- Our bodies change our food to turn it into energy.
• Different foods give us different nutrients.
• People who are active and use up more energy are burning more calories.

Summary:

Students have been introduced to the idea of food groups, and what some of the food groups provide us with as far as nutrients. They should know what a calorie means, and are familiar with being active means burning up more energy.