

Healthy Foods

Subject Area: Science

Unit Title: Nutrition

Grade Level: 4th & 5th grade

Objectives: Students will know the types of nutrients, how they benefit our body, and why some foods are more healthy than others.

Colorado Content Standards to be covered:

SCIENCE

Standard II - Physical Science: Students know and understand common properties, forms, and changes in matter and energy.

Materials: 2- 8 1/2 x 11" papers for each student

Anticipatory Set: Photocopy the "KWL" handout on the last page and brainstorm with your students, having them fill in what they already know about Healthy Foods (first column "K") and what they want to learn (middle column "W"). After the lesson they can fill in the last column with what they learned ("L").

Input:

A light bulb needs electricity to light up. Cars and trucks need fuel to run. Similarly, people need food in order to grow and stay healthy. Food is fuel for our bodies. It gives you energy, makes you strong and helps prepare you to do well in school, sports, and play. There are six different nutrients found in food. They are protein, carbohydrates, vitamins, minerals, water and fat. No single food provides everything our bodies need. That's why it's important to eat a variety of foods.

Proteins are what the body uses to grow. Your body needs protein to repair itself and build muscles. Protein also increases resistance to infection and disease. Carbohydrates (sometimes called carbs) are starches and sugars. They are found in grains, milk, fruits and vegetables. Carbs are used as fuel by the body.

Vitamins and minerals are needed by the body in very small amounts. Vitamins help your body grow and function. Examples of vitamins are vitamin A, B complex, C, D, E and K. Minerals build strong bones, healthy muscles and help our bodies use other nutrients. Some of the minerals you need everyday include: calcium, iron, iodine, zinc and phosphorus.

Not only is fat an energy source, it is the body's major energy storage system. It is a necessary nutrient that also helps your organs, such as your heart and lungs, function.

Not all food is created equal. What is healthy eating? It means eating a variety of foods, more vegetables, fruits and whole grains and choosing sensible portion sizes. Whole grains are healthier than processed grains because they contain more nutrients.

What is unhealthy eating? Eating too many foods that are high in fat and sugar and contain few nutrients is unhealthy. "Junk-foods" such as candy, cookies and soda pop are in this category. A little bit is okay, but if most of the food you eat is in this category, you're not giving your body the best fuel it needs to run well.

Checking for Understanding: At the end of this section choose one of the following for a quick check: ask the students to partner share and think, pair and share, do a quick 3 word write up as an exit slip, do a quick sketch or give each other a quick thumbs up or down to check for understanding. Determine the level of mastery for each student and provide individual remediation as needed.

Procedures/Activities: R.A.F.T. Writing Assignment

Introduction/Directions:

Explain to students the concept of a R.A.F.T.S. writing assignment. A R.A.F.T.S. challenges a writer to assume a “Role” before writing, to write for an imaginary “Audience,” to write using a given “Format,” and to write about a certain “Topic.” Write the following chart on the board to help students.

R Role	A Audience	F Format	T Topic
An educator such as a teacher or professor	Elementary school students	Storybook with pictures	Importance of good nutrition and choosing healthy foods

Explain to students that it will be their job to pretend they are a teacher or professor and write and illustrate a storybook for elementary students about the importance of good nutrition. Brainstorm ideas with them and have them fold 2- 8 1/2 x 11 papers in half down the 11 inch side. Then staple the center. Each student will end up with an 8 page “book” to write and illustrate pictures in. Prompt them to come up with a title or name for their book and some main characters that the author or educator can use to communicate his/her message. Students can work individually or in pairs and give/share with other students.

Optional: Use the following list of possible snack choices to generate ideas for the story.

Snacks from the grain, vegetable and fruit groups provide lots of carbohydrates, vitamins and minerals. High-fat and sugar snacks are okay to eat once or twice a week. But, it is better to pick snacks such as carrot sticks, bagels, pretzels, apples, kiwis and oranges.

Which are the healthiest choices for snacks?
Put a check mark in the box.

<input type="checkbox"/> apple	<input type="checkbox"/> carrot
<input type="checkbox"/> candy bar	<input type="checkbox"/> orange
<input type="checkbox"/> cheese	<input type="checkbox"/> soda pop
<input type="checkbox"/> banana	<input type="checkbox"/> celery
<input type="checkbox"/> peach	<input type="checkbox"/> green peppers
<input type="checkbox"/> potato chips	<input type="checkbox"/> cauliflower
<input type="checkbox"/> corn curls	<input type="checkbox"/> broccoli
<input type="checkbox"/> grapes	<input type="checkbox"/> doughnut

Additional Activity:

Make a matching card game that matches nutrient, function and food. Includes are: 6 nutrient cards (each card has a name of a nutrient), 6 function cards (each card has a function of one of the nutrients), and 12-24 food cards (a name of a food item on each card). Some of the food cards need more than one card because for example, milk can be matched with carbohydrates and protein, etc.

Closure:

Review and clarify the key points of the lesson by reviewing some actual food labels and filling in the “L” column on the “KWL” handout.

K (Know)	W (Want to Learn)	L (Learned)