







Extending the Knowledge and Resources of the University System to the People of Waupaca County and Wisconsin

Waupaca County Courthouse, 811 Harding Street, Waupaca, WI 54981 715 258-6230 715 258-6232 (FAX)

# The Wonder of Sprouts

Grades: 1-5

Total Lesson Time: 15-20 minutes

### **Lesson Overview**

Students involved in the Fit Kids Green and Gold Program or classrooms will learn about locally grown sprouts. Students will also learn about different types of sprouts, how they are grown and the nutritional benefits of sprouts. Students will also have the chance to sample one or more kinds of sprouts.

## **Objectives**

Students will fulfill educational expectations by meeting school standards and benchmarks in:

- 1. Reading and Language Arts: Using general skills and strategies of the reading process.
- 2. Mathematics: Understand and apply basic measurement skills.
- 3. Science: Appreciate the process of growing and eating healthy food.
- 4. Social Studies: Learn about relationships between themselves, farming and local environment.

## **Preparation**

- 1. Wash and dry sprouts for taste testing.
- 2. Students should wash and sanitize hands before tasting.
- 3. Assemble activity props, pictures and samples for session.

### **Procedures**

## **Introduction**

Hand out "Sprouts for Dinner!" worksheet.

- -Have students draw their idea of what sprouts look like.
- -Share the drawings with the class.

What are Sprouts?

Sprouts are the tender, edible seedlings of certain plants. Sprouts come in many shapes, sizes and colors and offer a diverse range of flavors and textures.

- -Show the students pictures of different kinds of sprouts and discuss how they can be eaten.
- Sandwiches, stir fries, soups, breads, salads or just for snacking raw!
- Compare sprouts to baby corn- most kids know about baby corn.

## **Nutrition of Sprouts**



Hand out "How Do Sprouts Affect You?" worksheet.

- Sprouts are high in magnesium, chromium, iron, zinc, phosphorus, potassium, Vitamins C, A, and E.
- Allow students to guess how the nutrients affect the body before you tell them.

**Vitamin A:** Needed for night vision, growth and repair of tissues, and immune system function.

-Sprouts provide vitamin A, which helps us to see at night and helps our body grow and fight off sickness.

**Vitamin E**: Acts as a free radical scavenger and aids in immune system function.

- Sprouts help to keep us from getting cancer and helps to keep us from getting other sicknesses too! Vitamin E plays a big part in keeping our skin healthy, too!

**Vitamin C**: Aids in wound healing, collagen maintenance, infection resistance, and is essential for healthy gums and blood vessels.

- Sprouts provide vitamin C, which helps us to heal when we hurt ourselves. It also helps to keep our gums and blood vessels healthy.

Magnesium: Aids in nerve and muscle function and bone growth.

- Sprouts provide magnesium which helps to keep our bones, nerves and muscles healthy.

**Chromium:** Aids in glucose metabolism and increases effectiveness of insulin, essential for muscle function.

- Chromium helps our muscles to use the sugar we eat for energy!

**Zinc:** Aids in regulation of metabolism and healing, keeps hair glossy and smooth.

-Zinc helps our wounds to heal and keeps our hair healthy and shiny!

**Iron:** A constituents of hemoglobin which carries oxygen to the tissues by blood circulation.

- Iron helps to carry oxygen to all the parts of our body.

**Phosphorus:** Aids in bone development and carbohydrate, fat and protein utilization.

- Phosphorus keeps our bones strong and helps us to turn the food we eat into energy!

**Potassium:** Controls fluid balance, activity of the heart, and helps nervous system function.

-Potassium makes sure we don't have too much water in our body, keeps our heartbeat normal, and keeps our nervous system healthy.

# **Tasting Activity**

Try to encourage all students to taste the different kinds of sprouts. Explain that a "taste" could be as small as a nibble, a lick or the entire sprout! Talk to the students about the many words we can use to describe foods and flavors. Ask the students to us all their senses to describe the sprouts. Discuss how they look, smell, taste, sound, taste and feel!

- Have the students compare the sprouts to other foods they have tasted before.
- Ask students to "act" out their best description of how sprouts taste.
- Tell students to pretend they are a chef and were given sprouts to use in a recipe. How would they use them?

# **Grade Level Adaptations and Enrichment Suggestions**

Kids Spout Kit http://www.sproutpeople.com/seed/kit/kids.html



- -Older students could be involved in the cultivating of their own sprouts!
- -Students could prepare a simple sprouts recipe, like grilled cheese 'n' sprouts.

## **Materials**

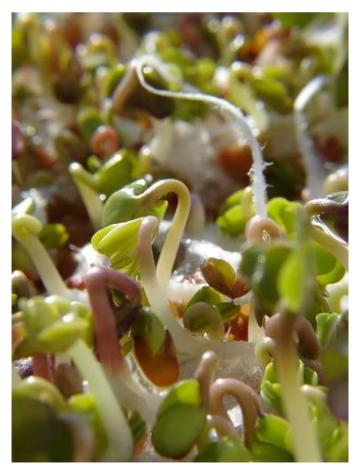
- Printouts of "Sprouts for Dinner" and "How Sprouts Affect You" Worksheets.
- Pencils, markers, or colored pencils for both worksheet activities.
- Pictures of different types of sprouts
- Sprouts for sampling, tongs to pick up sprouts
- Napkins
- Paper and a marker to record reactions to sprout tasting.



Alfalfa Sprouts



Mung Bean Sprouts



Radish Sprouts



Sunflower Sprouts



Broccoli Sprouts



Lentil Sprouts









# Extending the Knowledge and Resources of the University System to the People of Waupaca County and Wisconsin

Waupaca County Courthouse, 811 Harding Street, Waupaca, WI 54981 715 258-6230 715 258-6232 (FAX)

Parent Recipe Page to Take Home

## Californian Bean Sprout Salad

Serves: 6 Preparation Time: 20 minutes

### Ingredients:

1 head Romaine lettuce

1 head leaf lettuce

2 cups bean sprouts, blanched

1/4 cup cider vinegar

1 teaspoon sugar

1/4 tablespoon salt

1/2 cup cucumber, diced

1 red pepper, julienned

1 avocado, cubed

1 hard-boiled egg

1 teaspoon sesame oil

### Instructions:

- 1. In saucepan, bring 1 quart water to a boil. Add the bean sprouts and blanch for two minutes; remove from heat, drain in a colander and run under very cold water; set aside
- 2. Mash boiled egg; set aside
- 3. In a small bowl, blend vinegar, sugar and salt.
- 4. In a large bowl, combine bean sprouts, cucumbers, red pepper and avocado.
- 5. Add 1 teaspoon of sesame oil and toss well.
- 6. Add the vinegar mixture to the bean sprout mixture and toss to combine; cover bowl tightly and refrigerate 1 hour.
- 7. Tear lettuce into bite sized pieces and divide equally among 4-6 salad plates. Top with the sprout mixture, sprinkle with the chopped egg.

## Kong Namul Kuk (Bean Sprout Soup)

Serves: 6 Preparation Time: 45 minutes

### Ingredients:

6 cups water or vegetable broth

4 cups bean sprouts, washed.

2 Tbsp soy sauce

1 clove garlic, minced

1 tsp sesame oil

1/2 tsp cayenne

2 tsp salt

6 green onions chopped

red pepper flakes

### Instructions:

- 1. In a large saucepan, bring 2 cups of the water or broth to a boil. Add the bean sprouts, reduce the heat to low and cook for 10 minutes.
- 2. Mix in the soy sauce, garlic, oil, red pepper and salt. Add the remaining 4 cups or water and simmer 10 minutes.
- 3. Add the onions and simmer 3 minutes more. (The sprouts should still have a crunchy texture.)
- 4. Ladle into soup bowls. Decorate the top of the soup with red pepper flakes and serve.

## **Lively Grilled Cheese**

Serves 4 Preparation Time: 10 minutes

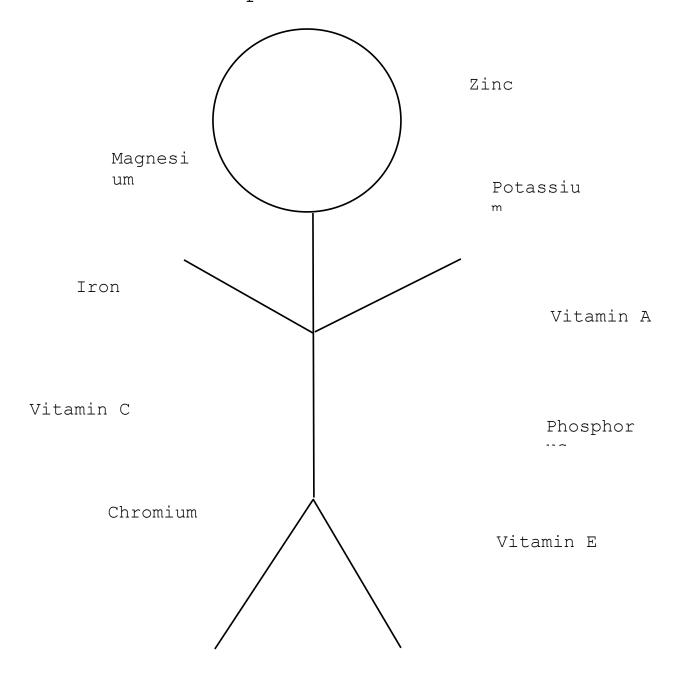
### Ingredients:

8 pieces whole wheat bread 4 slices American cheese 8 slices of tomato Sprinkle of bean sprouts or radish sprouts Butter

### Instructions:

- 1. Butter one side of each slice of bread.
- 2. Place bread butter side down onto a heated skillet.
- 3. Layer one slice of American cheese, two slices of tomatoes, and sprouts onto bread.
- 4. Place top piece of bread, butter side out.
- 5. Cook until bottom slice of bread is golden brown, then flip and cook until top slice is also golden brown. (About three minutes per side.) Enjoy!

How Do Sprouts Affect



First, make the stick person look by you by adding a face, hair, clothes, shoes, or anything else fun!

Then, listen to your teacher and test your Knowledge!

Your Mom made Sprouts for Dinner! Draw them!

