Grady County OHCE Lesson
Leader's Guide
January, 2016

WARM UP WITH WINTER SOUP

Cool temperatures and warm soup go hand-in-hand. Enjoy winter soup recipes as we prepare for blustery weather!

Objectives:

Create tasty soups for family and friends using Oklahoma Gardening recipes.
Learn about age-related immune system changes.
Learn about the role of diet, food safety and physical activity in immune system health.
Learn how the Dietary Guidelines promote immune system health.

Materials needed:

1. Leader’s Guide
2. Member Handout—"Winter Soup Recipes"
3. Copies of the Food Safety Quiz for each member
4. One copy of the Food Safety Quiz Key for the Leader
5. Pencils

Background information:
(Leaders—this information will help you prepare for the lesson.)

Soup and stews are great ways to create a “one-plate” meal on cold winter days. Evidence of soups can be found as far back as about 20,000 BC. Boiling was not a common cooking technique until the invention of waterproof containers which were probably clay vessels.

Soups and stews can be purchased in canned or dried form. They are great “ready-to-eat” meals and have become very popular as a main course over the past 40 years.

Colder weather introduces many viruses and bacteria which can be challenging to immune systems. Building a healthy plate and being physically active (your way) can help promote immune system health.

Immune function tends to decrease with age. The immune system protects the body against infections, inflammatory conditions such as arthritis, and chronic diseases such as cardiovascular disease, high blood pressure, diabetes, and cancer.

Many nutrient deficiencies can compromise immune function. A healthful diet helps to maintain immune function. Regular physical activity also helps to maintain immune function.

Decreased immune function also increases the risk of foodborne illness. Safe food handling practices can lower this risk.
**Presentation:**

Soups have been a part of American cuisine since the founding of the country. Evidence of soup making can be traced to 20,000 BC. The word “soup” is a French-based word from “soupe” which means “soup” or broth. The word has a German root which is associated with “sop” which means to soak up soup or thick stew. In American history, one of the first cookbooks published by William Parks in Williamsburg, Virginia, in 1742, included several recipes for soup and bisques. The first American cooking pamphlet dedicated to soup recipes was written in 1882 by Emma Ewing and was entitled *Soups and Soup Making.*

Soups have traditionally been used as a “starter or first entrée before the main meal. Soup types include dessert, fruit, cold, Asian, and traditional. The varieties are endless. The recipes given with this presentation were developed and presented by Dr. Barbara Brown, Oklahoma Cooperative Extension Service (OCES) Food Specialist, for Oklahoma Gardening, a weekly television program presented by OCES on Oklahoma’s Public Television.

Immune systems are constantly battling bacteria and viruses to help us stay healthy and well. Winter sometimes can be particularly hard for many to remain healthy because our immune systems are working very hard in its battles.

Building a Healthy Plate including fruits, vegetables, low-fat dairy, whole grains, and a variety of lean protein foods can provide the many nutrients involved in maintaining immune function. In addition, keeping your food safe to eat can help lower the risk of foodborne illness. Regular aerobic physical activity can also help to maintain immune functions.

**Age-related immune system changes**

The immune system involves a network of tissues and organs scattered throughout the body. What tissues and organs are involved in the immune system? *(Leaders—this is the answer to the question: Tissues and organs involved in the immune system include the thymus gland, bone marrow, spleen, tonsils, adenoids, lymph nodes, lymphoid tissue, and lymphatic vessels.)*

The immune system defends the body against infections from bacteria and viruses. The immune system also helps protect against inflammatory conditions such as arthritis. In addition, the immune system protects against other health problems such as chronic diseases and cancer.

Immune function tends to decline with age. What affect would a compromised immune system have? *(Answer: As a result, risk of infections, inflammatory conditions, and cancer tends to increase with age. In addition, antibiotics used to treat infections are not as effective if the immune system is compromised. Furthermore, a compromised immune system can reduce the body’s ability to respond to influenza and pneumonia vaccinations.)*

**Diet, Physical Activity, Food Safety and Immune System Health**

A healthful diet and regular physical activity are essential for maintaining a healthy immune system. How would the decline in immune function with aging be related to food handling practices? *(Answer: Because immune function tends to decline with age it is also important to follow safe food handling practices.)*

**Diet.** A healthful diet has an important role in maintaining the immune system. Many nutrient deficiencies can compromise immune function. What nutrient deficiencies can compromise the immune system?
The role of many nutrients in immune function highlights the importance of a healthful diet including fruits, vegetables, low-fat dairy, whole grains, and lean protein foods. Consuming a variety of nutrient-rich foods can provide the body with the nutrition it needs every day.

**Physical Activity.** Physical activity is also beneficial for immune function. Regular physical activity can help to maintain immune function. What are the USDA physical activity recommendations? (Answer: Physical activity recommendations are at least 150 minutes a week (30 minutes for 5 days) of moderate-intensity or 75 minutes a week (15 minutes for 5 days) of vigorous-intensity aerobic physical activity.) If you cannot meet this guideline, be as physical active as your abilities and conditions will allow.

**Food Safety.** The immune system helps the body defend itself against foodborne pathogens. However, the immune system tends to decline with age. This is one reason why the risk of foodborne illness increases with age.

Following safe food handling practices can lower the risk of foodborne illness. Many foodborne illnesses are caused by unsafe food handling practices in the home. What are some safe food handling practices in the home? (Answer: Some food handling practices which can lower the risk of food safety problems in the home are washing hands, thoroughly rinsing vegetables and fruits, preventing cross-contamination, cooking foods to safe internal temperatures, and storing foods safely for the recommended time.)

These safe food handling practices are highlighted by the four basic food safety principles which work together to reduce the risk of foodborne illness. What are the four basic food safety principles? (These principles are—Leaders: A poster of “Fight Bac” is enclosed in your Leaders material to share with members as you describe the following.)

- **Clean.** Clean hands, food contact surfaces, and vegetables and fruits.
- **Separate.** Separate raw, cooked, and ready-to-eat foods while shopping, storing, and preparing foods.
- **Cook.** Cook foods to a safe temperature.
- **Chill.** Refrigerate perishable foods promptly.

Some foods pose high risks for foodborne illness and should be avoided. What are some foods that pose high risks for foodborne illness and should be avoided? (Answer: These include raw (unpasteurized) milk, cheeses, and juices; raw or undercooked seafood, meat, poultry, and eggs; and raw sprouts.)

**Activities**

*Leaders—you may choose to do one activity or both activities:*

**Food Safety**

Supplies: Pencils, Copies of “Food Safety Quiz” for each member and a copy of the “Food Safety Quiz Key” for the Leader.

Background: The immune system helps the body defend itself against foodborne pathogens. However, the immune system tends to decline with age. This is one reason why the risk of foodborne illness increases with age. Following safe food handling practices can lower the risk of foodborne illness. Many foodborne
illnesses are caused by unsafe food handling practices in the home. Give each participant a copy of the handout “Food Safety Quiz.”

Tell participants the immune system helps the body defend itself against foodborne pathogens. However, the immune system tends to decline with age. This is one reason why the risk of foodborne illness increases with age. Following safe food handling practices can lower the risk of foodborne illness. Many foodborne illnesses are caused by unsafe food handling practices in the home.

Tell participants cooking or reheating foods to safe internal temperatures can lower the risk of foodborne illnesses. Ask participants to draw a line from each food on the left to its endpoint temperature. Share the answers to the quiz once participants have completed the quiz. You may want to reward members who have the most answers correct. Rewards may include a food/meat thermometer or a freezer/refrigerator thermometer.

Soup’s On!

Enclosed are recipe books for each member. Choose one, two, or more recipes to prepare for your group to taste. Nutritional analysis for each recipe is provided. When you present your soup, you may want to talk about the nutrients, sodium and fat content along with number of calories per serving and how many servings are prepared with the recipe.

Lesson adapted from Journey Through Health: The Immune System written by Dr. Janice Herrmann, Oklahoma Cooperative Extension Service Adult and Older Adult Nutrition State Extension Specialist.

Recipes from Oklahoma Gardening website: http://www.oklahomagardening.okstate.edu/recipes

References:


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