

Fruits and Vegetables: A Nutritionally Rich Base

Summary

Nutrition contributions as well as proper selection, preparation and storage techniques for a variety of fruits and vegetables.

Main Core Tie

Food And Nutrition

[Strand 5 Standard 4](#)

Background for Teachers

Fruits and vegetables contain vitamins and minerals as well as carbohydrates and cellulose (fiber) and are an important part of the American diet.

Teachers should use any good foods textbook for supplemental material in this lesson. Concepts to cover include selection and storage of various types of fruits and vegetables and preparation of fruits and vegetables by various methods.

Salads, depending on ingredients used and how they are prepared and presented, constitute an important part of the daily diet. They are used as appetizers, side dishes, main dishes, and desserts. They can be a complete meal within themselves. Often they are served as a luncheon or light supper. Salads are a good way to insure your recommended number of servings of vegetables and fruits in the daily diet as designated by MyPyramid.

Stress the recommendations of MyPyramid that we eat a variety of vegetables throughout the week, making sure we eat more dark-green vegetables and orange vegetables. From the fruits group, we need to eat a variety of fruits each week and take it easy on fruit juices. Best sources of fruit are those with minimal added sugar, whether fresh, frozen, canned, or dried.

A good cookbook like Betty Crocker's Cookbook will have information on selecting, storing, and preparing many kinds of ordinary and unusual fruits and vegetables.

PREPARATION OF FRUITS AND VEGETABLES

How to Cook Vegetables on Range in Sauce pan:

Start vegetable cooking in salted, boiling water.

Return water to boil as quickly as possible.

Cook in small amount of water just enough to prevent scorching.

Cook vegetable to barely done.

Serve immediately.

Conservation Methods of Cooking:

Baking

Steaming

Panning

Cooking with skins on

How Vitamin and Mineral Losses Occur:

Through the dissolving action of the water.

Chemical decomposition, which may be influenced by the alkalinity or acidity of the cooking medium.

Oxidation of specific molecules such as vitamins.

Mechanical losses of nutrients; result of paring, rapid boiling, and overcooking.

Volatilization (quick evaporation)

Instructional Procedures

LEARNING ACTIVITIES AND TEACHING STRATEGIES

OPTION #1

As an introduction or bell ringer, have the students do a graffiti using the following statements.

My favorite fruit is

My favorite vegetable is

A dish I have prepared with fruit is

A dish I have prepared with vegetables is

A fruit I don't like is

A vegetable I don't like is

A fruit or vegetable I have never tasted is

OPTION #2

Demonstrate the selection and the storage of salad ingredients before the students prepare their salads.

Have students work as a unit to make salads, either vegetable, fruit or a combination salad. Assign each unit a different salad, and have each unit complete [ANALYSIS OF A NUTRITIOUS SALAD](#) to identify what vitamins and minerals the salad was high or low in. Discuss the salad analysis as a class.

VARIATION: Have students make a list of the kinds of foods they like to put in salads. Assign each student one food from the list and have he/she research the nutrients. Combine the information onto a bulletin board or chalk board bar graph. Have students choose ingredients they want for their salads. Make, eat, and analyze.

OPTION #3

After preparing a salad from a fruit bar with yogurt topping or a [FRUIT PIZZA](#) (see [FRUIT PIZZA CRUST](#) recipe), have each student do a nutrient analysis and cost of the content of the salad. This may be done on index cards or use [NUTRIENT IDENTIFICATION](#). Emphasize the nutrient content for vitamins and minerals and fiber values of the salads. (The best source for information is the Nutritive Value of Foods, U.S. Department of Agriculture publication. This may be obtained from your Extension Agent.) NOTE: This volume does not list fiber. Use other references in the FIBER section. Discuss the following questions:

Which food item contributed the greatest amount of vitamins?

Which food item contributed the greatest amount of minerals?

Which food item contributed the greatest amount of fiber?

VARIATION: Rather than have students make the salad or fruit pizza, have them create by writing down on paper what they would include on their plate if they visited a good salad bar. Then have them analyze it for nutrient content and cost.

VARIATION: Have students choose a recipe for a salad, make it in the lab and analyze it for nutritional value and cost. Have them do a comparison analysis by substituting low-calorie dressing or lemon juice for regular high-fat dressing.

OPTION #4

Have the students brainstorm facts about IRON. Record the facts on the chalkboard. Divide the class into groups and have each group use their text books to discover key facts to add to the list on the chalkboard.

Demonstrate the preparation of [SPINACH SALAD](#). Ask:

Why spinach added to a salad is better nutritionally than the traditional dinner salad.

Why does your mother say "eat your spinach, it is good for you"?

Why was spinach used by Popeye in the cartoon shows?

Have students prepare a spinach salad within their kitchen group. Answer the questions on the recipe sheet while they are eating their salad.

OPTION #5

Vegetables and fruits can be used as relishes. Using [RECIPES FOR MAKING GARNISHES](#) have students prepare relish dishes and dips. Discuss reasons how and why they can contribute to the total daily nutrition.

Demonstrate different relish trays that glamorize the vegetable or fruit to make it attractive.

VARIATION: Have some units make vegetable trays and some units do fruit plates. Every unit makes a different dip. Use low sodium dips to cut down on sodium intake. Have students research or supply students with picture of ways to cut and arrange fruits and vegetables in a variety of ways to stimulate their creativity. This could be a contest with prizes to the group producing the nicest looking tray.

Students will need to submit their grocery lists for their product.

OPTION #6

As a review for salads, have the students research cookbooks for salads that can be used for: an appetizer, a main dish, a side dish, and a dessert.

Have students complete [SALAD QUIZ](#).

NOTE TO TEACHER: This could also be a pre-assessment.

OPTION #7

Demonstrate various cooking methods for vegetables.

Demonstrate stir-fry (wok) cooking. (See [GARDEN VEGETABLE STIR FRY](#)) This is a good place to introduce unfamiliar vegetables such as spaghetti squash, artichokes, jicama, etc. Explain that stir-frys are economical, cook quickly and preserve nutrients.

Use community resources if possible. People from different cultures, particularly from the Far East, could do these demonstrations.

VARIATION: Find all the unusual fruits and vegetables possible. Put them on a tray and play 20 Questions or Inquiry to have students try to identify the name and the most common preparation of each one.

Demonstrate the preparation of and have students taste such unusual vegetables as artichokes, eggplant, turnips, zucchini, etc. (See [UNUSUAL VEGETABLE RECIPES](#)) and unusual fruits such as pomegranates, kumquat, jicama, papaya, fresh coconut, kiwi, winter pears, etc.

OPTION #8

Have students recognize that potatoes are an important vegetable in their diet. Discuss and demonstrate various ways to cook potatoes. Complete [POTATO WORKSHEET](#). Relate to the students that selection, storage and preparation methods for potatoes are often similar to those for many other vegetables.

Have students prepare a [BAKED POTATO BAR](#) using a variety of toppings. (See TOPPING VARIATIONS)

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