Dietary Fiber Introduction

Summary

The student will identify fiber from foods, its sources and function in the body.

Main Core Tie

Food And Nutrition

Strand 3 Standard 2

Time Frame

1 class periods of 90 minutes each

Group Size

Individual

Materials

Video on Cancer:

Eating Smart, Cancer Society, 8 minutes. Demonstrations:

Dried out sponge with a piece of PVC 1-inch tubing

1 cup dried beans

two-quart jars

elastic band around one jar indicating the bean line

water

1/2 cup bran

1/2 cup white flour

1/2 cup whole wheat flour

three rubber bands indicating the level of bran

three jars

water.

Tape:

Jammin' 5 A Day Songs Cassette Tape from Dole 5 A Day - Song on Fiber from Dole.

Handouts:

Roughage or Fiber Worksheet

How Much Fiber?

Test Your Fiber Knowledge

Fiber Facts

A Partial List

Field Guide to Fiber

extra credit cooking assignment for power bars.

Twenty to twenty-five nutritional labels from cans or packages of food attached to several 9 X 11 sheets of colored paper for the students to go around and identify the amount of fiber from each and tell if the food is a good source of fiber or not.

Prepare ahead of class - Party Mix for the students to eat during lecture on fiber.

14 cups corn, wheat or rice bran cereals

2 cups pretzel sticks

1 1/2 cup nuts

12 tbs. melted butter

8 tsp. Worcestershire sauce

2 tsp. seasoned salt 5 oz. paper cups to serve in large metal bowl measuring cups and spoons large spoon

Background for Teachers

Knowledge of Fiber.

Prepare demonstrations ahead of class time.

Prepare Party Mix for class to eat during lecture. You can use other recipes or add your own favorite cereals, crackers, etc.

Obtain a copy of the song called Fiber from Dole's cassette tape - Jammin'5 A Day Songs Cassette Tape.

Prepare handouts and labels for fiber activity if there is time at the end of the hour for review.

Student Prior Knowledge

Understanding the importance of fiber in the diet and good food sources that one can eat to get at least 20 to 35 grams a day.

Intended Learning Outcomes

The students will be able to identify what fiber is, its sources and its function in the body.

Instructional Procedures

Prepare ahead of class - Party Mix to be passed out to the students during the lecture in 5 oz. paper cups.

Prepare demonstrations for the beans and water in the jars, bran, white flour and whole wheat flour in jars, dried out sponge and PVC tube.

Prepare labels from food on colored paper for students to identify amount of fiber and if it is a good, fair or poor sources of fiber.

Locate a video on Cancer.

Prepare handouts to be used during class lecture and notes.

Play for the students the song called "fiber" from the Dole 5 A Day cassette tape while you pass around the Party Mix for the students to eat and enjoy. You will find that they will want something to drink as they eat the Party Mix.

Lecture. Ask: Do you know anyone who has cancer or who has died of cancer? Open up for discussion leading into Fiber.

Show Video on Fiber.

Pass out handouts.

Have the students complete the handout: How Much Fiber? Ask: How many have marks on the right side?, left side?

Refer to Lecture notes on fiber.

Show and explain Fiber Demonstration with beans.

Have the students complete the handout: Test Your Fiber Knowledge and fiber facts.

Discuss water and its importance with eating fiber. Demonstrate why the body needs water when eating fiber using the dried out sponge and the PVC pipe.

Orally for review, go over the Roughage or Fiber Worksheet for the students to complete.

If time is available, have the students identify the grams of fiber from the labels and tell if it is a poor, fair or good source of fiber.

Assign extra credit home cooking assignment to prepare Power Bars or Granola Bars if interested.

Bibliography

Handouts on fiber from PennState, Penn State Nutrition Center, Benedict House, The Pennsylvania State University, University Park, PA 16802.

Partial List of Food Sources for Fiber Content - Courtesy of Utah Cooperative Extension Service.

A Field Guide to Fiber - Anderson, J. Plant Fiber in Foods, (HCF Diabetes Research Foundation, Inc. P.O. Box 22124, Lexington, KY 40522) 1986.

Recipe for Power Bars - Sue Schumacher, Pleasant Grove High.

Recipe for Granola Bars - Tamara Marcroft, Lehi High.

Authors

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