

Fun Nutrition

How Much Fat in that Snack?

Purpose:

- Predict, test, and compare which snack foods contain the most fat
- Test the fat contents of several types of nuts
- Understand that different types of fats exist
- Learn to make healthier food choices

Dietary Fat:

Fat in your diet is important for healthy body maintenance. Your body utilizes fats in many important ways. Fats are components of cell membranes and make up body compounds that regulate blood pressure, blood lipids, blood clotting, and immune response. In addition to providing your body with energy, fat insulates and cushions internal organs. Fats are needed for your body to absorb fat-soluble vitamins and provide fatty acids that your body cannot produce. Fatty acids allow your body to grow and maintain healthy skin.

Although dietary fat is essential for your body to function properly, too much fat in your diet can be bad for your health. An unhealthy high-fat diet increases your risk for heart disease, cancer, diabetes, obesity, and high blood pressure. Recommendations state that no more than 30 percent of total calories consumed should come from fat. Because of this reason, it is important to pay attention to the fat content of snack foods.

Activity 1: Comparing Snack Food Fat Contents

Supplies (for each group):

- Brown paper grocery bag
- Marker
- Peanut butter and fat-free yogurt
- Cheese stick and carrot stick
- Graham cracker and cookie
- Pretzel and potato chip
- Candy bar and banana

Work in groups of 2 to 4. Ask each group to predict which snacks out of each food pairing contain the most fat:

- peanut butter or fat-free yogurt?
- cheese stick or carrot stick?
- graham cracker or cookie?
- pretzel or regular potato chip?
- candy bar or banana?

Have groups test their predictions by rubbing each type of food on different a section of the brown paper grocery bag. Label the spots left by the different foods with a marker so it is easy to see which was which.

Discussion:

1. If the snack food has a high fat content, it will leave a greasy spot. Based on the spots left on the brown paper bag, which foods contain a lot of fat?
2. How do these results compare to the group predictions?

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Adapted from: 4-H/Army Youth Development Health, Fitness and Nutrition Curriculum, Wonderwise Rainforest Ecologist <http://wonderwise.unl.edu/>, & Oklahoma Cooperative Extension Service <http://osuextra.okstate.edu/pdfs/T-3153web.pdf>



2 activities for grades 3-6. Allow 60 minutes. Science Standard - Investigation
Colorado State University Extension 4-H Youth Development

Optional Activity Extension:

Read the nutritional labels of the various foods tested for fat content. How do the fat contents on the labels compare to Activity 1's results?

Activity 2: A Nutty Study

Supplies (for each group):

- One of each type of unprocessed nut in shell: walnut, almond, pecan, Brazil nut
- Nut cracker
- Piece of white copy paper, divided with a marker into 4 quadrants
- Marker

Work in groups of 2 to 4. Have each group identify the different types of nuts. Crack each nut, remove nut meat from shell, and peel away the outside thin skin until the cream-colored nut meat is exposed. Rub one type of nut meat on each quadrant of the piece of paper. Try to keep the rubbing pressure equal for each area. With a marker, label each quadrant with the appropriate nut name. Hold the paper up to light and observe which stains are the most translucent (see through). The more translucent a stain, the more fat a nut contains.

Discussion:

1. Based on your observations, which nuts contain the most fat?
2. Scientists have found that the fat content for each nut is as follows (from lowest to highest): walnut, almond, pecan, Brazil nut. How do your fat results compare to the information provided?

3. Although nuts have high-fat content, in moderation, unprocessed nuts are considered a healthy snack unlike high-fat “junk” food (such as potato chips). Scientists have found that different types of fats exist and some are very good for your body. Nuts contain mostly a healthy type of fat which does not raise body cholesterol levels. What additional reason do you think makes nuts a healthy snack opposed to other foods higher in fat?
Answer: Nuts are rich in essential fatty acids and vitamins for body maintenance. Nuts also provide good sources of protein and fiber.

