



No Time To Train

Short Lessons for School Nutrition Assistants

Let's Talk Oils and Fats!

Lesson Overview

Lesson Participants: School Nutrition Assistants/Technicians, School Nutrition Managers, Child and Adult Care Food Program Staff, Teachers

Type of Lesson: Short, face-to-face training session

Time Needed to Conduct the Lesson: 15 minutes

Lesson Description: This lesson explains the recommendations for oils and fats found on the MyPlate website. Participants will learn why oils and fats are an important part of the daily diet. Nutrition professionals will be able to apply the information presented in this lesson to school menu planning. MyPlate and related resources developed by USDA are helpful tools for child nutrition program staff to use when providing nutrition education to children of all ages.

Lesson Objectives:

At the end of this lesson, the participant will be able to:

1. Discuss why oils and fats in limited amounts are important to the diet.
2. Identify oil and fat food sources.

Get Ready to Train

Note: This lesson should be taught following the No Time to Train lessons on the *Dietary Guidelines for Americans 2010* and *MyPlate – The “New Generation” Food Icon*.

The format for the **No Time to Train** lessons includes an overview, preparation checklist, lesson at a glance with a timeline for conducting the lesson, references, handouts, and an instructor's script. The manager/instructor will use the script to present the lesson to the participants. The script gives directions to the manager/instructor—**DO, SAY, ASK, LISTEN, AND ACTIVITY**—for delivering the lesson.

No special audiovisual or electronic equipment is needed to conduct the lesson. The lesson can be presented in the cafeteria, media center, or classroom.

Teachers and others in the school or child care setting may wish to participate. This lesson also could be used to integrate nutrition education into the classroom. With some modifications, the lesson could be used with middle and secondary students.

Preparation Checklist

Directions: Use the Preparation Checklist to prepare for the training session. Track your progress by checking off tasks as they are completed.

Done <input checked="" type="checkbox"/>	Lesson Tasks
	<p>Gather Materials</p> <p>Materials Needed:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Instructor’s Script
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 1: How Do I Count the Oils I Eat? (one for each participant; accessible at http://www.choosemyplate.gov/foodgroups/oils_count.html#)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 2: Oils and Fats (one for each participant)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Pencils (one for each participant)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Session Evaluation form (one for each participant)
	<p>Prepare for Lesson</p> <p>Before the Training:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Make copies of Handouts 1 and 2 (one for each participant).
<input type="checkbox"/>	<ul style="list-style-type: none"> • Make copies of Session Evaluation form (one for each participant).
	<p>On Training Day:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Place pencils on tables (one for each participant).
<input type="checkbox"/>	<ul style="list-style-type: none"> • Distribute Handouts 1 and 2 to each participant.
	<p>On the Instructor’s Table:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Instructor’s Script
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 1: How Do I Count the Oils I Eat?
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 2: Oils and Fats
<input type="checkbox"/>	<ul style="list-style-type: none"> • Session Evaluation forms

Lesson at a Glance
(15 minutes)

Time	Topic	Task	Materials
2 minutes	Introduction and Overview	Introduce topic and relate to the <i>Dietary Guidelines for Americans 2010</i> and <i>MyPlate–The “New Generation” Food Icon</i> No Time to Train Lessons.	Instructor’s Script
4 minutes	Objective 1: Discuss why oils and fats in limited amounts are important to the diet.	Use Handout 1 to relate the importance of limiting oils and fats in a healthy diet.	Handout 1: How Do I Count the Oils I Eat?
5 minutes	Objective 2: Identify oil and fat food sources.	Use Handouts 1 and 2 to identify foods containing oils and fats. Participants complete activity and brainstorm ways to encourage students to know the limits on oils and fats in foods.	Handout 1: How Do I Count the Oils I Eat? Handout 2: Oils and Fats
2 minutes	Wrap Up and Review	Instructor encourages participants to ask questions and to make comments.	Handout 1: How Do I Count the Oils I Eat? Handout 2: Oils and Fats
2 minutes	Session Evaluation	Conduct a short evaluation of the lesson.	Session Evaluation form

Note to Instructor:

Answer questions to the best of your ability. If there are questions you can’t answer, tell the participants you will find out the answer and let them know later. If you need assistance in finding answers, please call the National Food Service Management Institute at 800-321-3054.

References:

National Food Service Management Institute. (2005, Rev. 2011). *Nutrition 101: A taste of food and fitness*. University, MS: Author.

U.S. Department of Agriculture. (2011). ChooseMyPlate.gov Website. Washington, DC. News and Media. http://www.choosemyplate.gov/global_nav/media_resources.html Accessed July 14, 2011.

U.S. Department of Agriculture, Food and Nutrition Service. (2011). Nutrition Assistance Programs Website. <http://www.fns.usda.gov/fns/> Accessed July 14, 2011.

U.S. Department of Agriculture, Food and Nutrition Service. (2011). Team Nutrition: Resources A-Z Website. <http://www.fns.usda.gov/tn/library.html> Accessed July 14, 2011.



U.S. Department of Agriculture and U.S. Department of Health and Human Services (2011). *Dietary Guidelines for Americans 2010* 7th Edition, Washington, D.C., U.S. Government Printing Office, December 2010.

<http://www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/PolicyDoc/PolicyDoc.pdf>

Accessed July 14, 2011.

U.S. Department of Health and Human Services. (2011). Healthfinder.gov Website.

<http://healthfinder.gov/> Accessed July 14, 2011.

Instructor's Script



SAY:

In previous lessons, we learned about the *Dietary Guidelines for Americans, 2010* and *MyPlate – The “New Generation” Food Icon*. Medical research shows that we all need to learn more about basic nutrition so that we all can make healthier food choices and live longer lives. Today, we will continue our discussion about basic nutrition.

This lesson will focus on limiting fats and oils. We are going to discuss why fats and oils are important in our diet and what foods are high in fats and oils.



DO:

Distribute copies of **Handout 1: How Do I Count the Oils I Eat?**



SAY:

The MyPlate.gov website includes information on oils, and the website provides links to other information on oils.



DO:

Refer participants to the **Handout 1** and discuss the recommendations in the *Dietary Guidelines for Americans, 2010* regarding fats and oils.

- Consume less than 10 percent of calories from saturated fatty acids by replacing them with monounsaturated and polyunsaturated fatty acids.
- Keep *trans* fatty acid consumption as low as possible, especially by limiting foods that contain synthetic sources of *trans* fats, such as partially hydrogenated oils, and by limiting other solid fats.
- Replace protein foods that are higher in solid fats with choices that are lower in solid fats and calories and/or are sources of oils.
- Use oils to replace solid fats where possible.



ASK:

Why do you think fats and oils should be consumed in limited amounts but are an important part of our diet?



LISTEN:

Listen to individual responses.



SAY:

Oils and fats are essential in the overall functioning of the body by helping in digestion, energy metabolism, and absorption of fat soluble vitamins (A, D, E, and K). Oils and fats are a part of a healthful diet, but the type, amounts, and mixture of fatty acids makes a difference in good health.

The major kinds of fats in the foods we eat are saturated, polyunsaturated, monounsaturated, and *trans* fatty acids.

Saturated fats typically are solid at room temperature because they contain higher amounts of hydrogen. The main sources of saturated fat in the typical American diet are foods from animals (whole milk, cream, ice cream, whole milk cheeses, butter, lard, visible fat on meats) and some plant oils (palm, palm kernel and coconut oils, cocoa butter).

Oils are a liquid form of fat and contain larger amounts of unsaturated fatty acids, which are liquid at room temperature. Some examples are cooking oils such as canola, corn, and soybean oil.

Polyunsaturated fats are found in plant foods such as corn, safflower, sunflower, sesame oils, nuts, and seeds, as well as fish and seafood.

Monounsaturated fats are found in plant foods such as canola, peanut, and olive oils, nuts, and avocados. The fat in meats (beef, pork, and poultry) is made of monounsaturated and saturated fatty acids.

Trans fats are common in a wide range of foods made with partially hydrogenated oils, such as baked goods, fried foods, and some margarine products. Through the process of hydrogenation, unsaturated fatty acids can be made more saturated. This process converts a liquid fat into a stable liquid or semisolid form. *Trans* fats can be found naturally in low amounts in meats and dairy products.



ASK:

Why do we need to know the limits on fats and oils?



LISTEN:

Listen to individual responses.



SAY:

In order to maintain a healthful diet, it is important to know that limiting saturated and *trans* fats are essential.

Saturated fats and *trans* fats raise blood cholesterol. A high level of cholesterol increases unhealthy blood lipids (low-density lipoproteins, or LDL cholesterol). A high level of LDL and total cholesterol in the blood is a major risk factor for coronary heart disease (heart attacks, stroke). It is important to check nutrition facts labels and ingredient lists on similar foods. Schools should serve meals with little or no *trans* fats and saturated fats to reduce risks of heart disease.

The *Dietary Guidelines for Americans 2010* recommendation is to limit fats not to exceed 30% of the total daily caloric intake. Only 10% of those calories should be from saturated fat and the other 20% should be divided between monounsaturated and polyunsaturated fat.

Child nutrition programs follow the dietary guidelines in menu planning. When averaged over a week, school meals must provide not more than 10% of calories from saturated fats (no more than 6-8 grams at lunch). The grams of fat will vary depending on the calorie level of the appropriate age group.

Aim for less than 100 mg of cholesterol at lunch and less than 75 mg at breakfast averaged over a week. Schools can meet these recommendations by serving lean meats (skinless chicken, low-fat hamburgers); encouraging more fruits, vegetables, dry beans, and whole grains; and serving only fat-free or low-fat (1%) milk.



DO:

Distribute **Handout 2: Oils and Fats**.



ASK AND SAY:

What are the oils and fats we serve at mealtime? Acknowledge responses. Take a few minutes to complete the activity on **Handout 2** and think about what oils and fats we add to our school menus. How will you encourage the students to maintain a healthy diet by limiting oils and fats?



ACTIVITY:

Participants will complete **Handout 2** and brainstorm what oils and fats are added at mealtime and how they can encourage students to limit or choose more healthy oils or fats. Some suggestions could be to:

- Use an olive oil dressing on salads.
- Snack on nuts (Note: some nuts may be a choking hazard for younger children.).
- Limit use of solid fats (butter, mayonnaise, shortening).
- Prepare more fish.
- Use steam, broil or bake cooking methods



SAY:

Thank you for all of these great ideas! I'll schedule some time for us to make a plan to implement some of these ideas. Today we've talked about the importance of limiting oils and fats. Know the limits to make the most of oils and fats that provide essential fatty acids and vitamins. It is important that we serve our customers oils and fats in limited amounts for maintaining a healthy diet.



ASK:

Do you have any questions about oils and fats?



LISTEN:

Listen to responses. Answer questions to the best of your ability. If there are questions you can't answer, tell the participants you will find out the answer and let them know later. If you need assistance in finding answers, please call the National Food Service Management Institute at 800-321-3054.



DO:

Distribute the Session Evaluation form.



SAY:

Thank you for participating in the lesson today. Please take a couple of minutes to complete the Session Evaluation form. Thank you for your input.

Handout 1: How Do I Count the Oils I Eat?

This chart gives a quick guide to the amount of oils in some common foods:

	Amount of Food	Amount of Oil (teaspoons/grams)	Calories from Oil (approximate)	Total Calories (approximate)
Oils:				
Vegetable oils (such as canola, corn, cottonseed, olive, peanut, safflower, soybean, and sunflower)	1 Tablespoon	3 teaspoons/14 grams	120	120
Foods rich in oils:				
Margarine, soft	1 Tablespoon	2 ½ teaspoons/11 grams	100	100
Mayonnaise	1 Tablespoon	2 ½ teaspoons/11 grams	100	100
Mayonnaise-type salad dressing	1 Tablespoon	1 teaspoon/5 grams	45	55
Italian dressing	2 Tablespoons	2 teaspoons/8 grams	75	85
Thousand Island dressing	2 Tablespoons	2 ½ teaspoons/11 grams	100	120
Olives*, ripe, canned	4 large	½ teaspoon/2 grams	15	20
Avocado*	½ medium	3 teaspoons/15 grams	130	160
Peanut butter*	2 Tablespoons	4 teaspoons/16 grams	140	190
Peanuts, dry roasted*	1 ounce	3 teaspoons/14 grams	120	165
Mixed nuts, dry roasted*	1 ounce	3 teaspoons/15 grams	130	170
Cashews, dry roasted*	1 ounce	3 teaspoons/13 grams	115	165
Almonds, dry roasted*	1 ounce	3 teaspoons/15 grams	130	170
Hazelnuts*	1 ounce	4 teaspoons/18 grams	160	185
Sunflower seeds*	1 ounce	3 teaspoons/14 grams	120	165

*Avocados and olives are part of the Vegetable Group; nuts and seeds are part of the Protein Goods Group. These foods are also high in oils. Soft margarine, mayonnaise, and salad dressings are mainly oil and are not considered to be part of any food group.

Source: U.S. Department of Agriculture (2011). ChooseMyPlate.gov.Website. Washington, DC. *How do I count the oils I eat?* Retrieved from http://www.choosemyplate.gov/foodgroups/oils_count.html# Last modified: June 04, 2011. Accessed July 25, 2011.



Handout 2: Oils and Fats

Oils and fats are essential in the overall functioning of the body by helping in digestion, energy metabolism, and absorption of fat soluble vitamins (A, D, E, and K). Oils and fats are a part of a healthful diet, but the type, amounts, and mixture of fatty acids makes a difference in good health. How can you encourage customers to recognize ingredient sources of oils and fats to limit?

Vegetable Oils

Canola oil
Corn oil
Cottonseed oil
Olive oil
Peanut oil
Safflower oil
Soybean oil
Sunflower oil

Foods Naturally High in Oils (Fats)

Nuts
Peanuts
Mixed nuts
Cashews
Almonds
Hazelnuts
Sunflower seeds
Olives
Some fish (salmon, tuna)
Avocados

Solid Fats

Butter
Beef fat (tallow, suet)
Chicken fat
Mayonnaise
Pork fat (lard)
Stick margarine
Shortening

Source: U.S. Department of Agriculture (2011). ChooseMyPlate.gov.Website. Washington, DC. *What are “oils”?* Retrieved from <http://www.choosemyplate.gov/foodgroups/oils.html> Last modified: June 04, 2011. Accessed July 25, 2011.

Ingredient Sources of Oils and Fats to Limit Activity

Match the food items on the column to the major kinds of oils and fats in the foods we eat. There may be more than one correct match:

a. saturated (sat) fat

b. polyunsaturated (poly) fat

c. monounsaturated (mono) fat

d. *trans* fat

- _____ 1. Shortening or partially hydrogenated vegetable oil
- _____ 2. Cheese (regular)
- _____ 3. Nuts
- _____ 4. Olive oil
- _____ 5. Butter
- _____ 6. Avocados
- _____ 7. Tuna, salmon
- _____ 8. Pork fat (lard)
- _____ 9. Corn, safflower, sunflower, or sesame oils
- _____ 10. Margarine, soft or stick
- _____ 11. Palm and coconut oils, or cocoa butter
- _____ 12. Whole or reduced-fat (2%) milk
- _____ 13. Sunflower seeds
- _____ 14. Seafood
- _____ 15. Canola oil

Ingredient Sources of Oils and Fats to Limit Activity (Answers)

Match the food items on the column to the major kinds of oils and fats in the foods we eat. There may be more than one correct match:

a. saturated (sat) fat

b. polyunsaturated (poly) fat

c. monounsaturated (mono) fat

d. *trans* fat

<u>saturated & <i>trans</i> fat</u>	1. Shortening or partially hydrogenated vegetable oil
<u>saturated fat</u>	2. Cheese (regular)
<u>polyunsaturated fat</u>	3. Nuts
<u>monounsaturated fat</u>	4. Olive oil
<u>saturated fat</u>	5. Butter
<u>monounsaturated fat</u>	6. Avocados
<u>polyunsaturated fat</u>	7. Tuna, salmon
<u>saturated fat</u>	8. Pork fat (lard)
<u>polyunsaturated fat</u>	9. Corn, safflower, sunflower, or sesame oils
<u><i>trans</i> fat</u>	10. Margarine, soft or stick
<u>saturated fat</u>	11. Palm and coconut oils, or cocoa butter
<u>saturated fat</u>	12. Whole or reduced-fat (2%) milk
<u>polyunsaturated fat</u>	13. Sunflower seeds
<u>polyunsaturated fat</u>	14. Seafood
<u>monounsaturated fat</u>	15. Canola oil



National Food Service Management Institute
The University of Mississippi

Session Evaluation

Instructions:

Completely fill in the circle of your answer. Use a #2 pencil.
Please select only one response for each statement. Do not fold or crease this sheet.

Title of Meeting: _____	
Session Topic: _____	Trainer's Code: _____
Date: _____	Time Slot: _____ Location: _____ Length of Event (hrs/min): _____

Attendee Status:

- | | | |
|--|---|--|
| <input type="radio"/> District director | <input type="radio"/> Major city director | <input type="radio"/> Private consultant/trainer |
| <input type="radio"/> State agency staff | <input type="radio"/> Site-level manager | <input type="radio"/> Foodservice assistant |
| <input type="radio"/> Educator | <input type="radio"/> Other (please list) _____ | |

Reaction to this Session					
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Please read the following statements related to the session. Rate your level of agreement by using the scale 5 (Strongly Agree) to 1 (Strongly Disagree).					
1. The session objectives were clearly presented.	5	4	3	2	1
2. The session objectives were achieved.	5	4	3	2	1
3. I can apply what I learned in this session to my job.	5	4	3	2	1
4. Attending the session increased my skill on the topic.	5	4	3	2	1
5. Attending the session increased my knowledge on the topic.	5	4	3	2	1
6. I would recommend this session to others.	5	4	3	2	1
7. Overall, the session met or exceeded my expectations.	5	4	3	2	1

Comments about this Session
<p>The information I found MOST useful was:</p> <hr/> <hr/> <hr/>
<p>Please share any additional comments:</p> <hr/> <hr/> <hr/>

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