

Samples From the *Hip Hop Healthy Heart Program for Children™*

Module 3: SUPERFOODS! *... Eat Good Food, Dude!*

Module 3 includes 7 units:

Introduction

Unit 1: My Super Foods Plate!

Unit 2: Groovin' Grains

Unit 3: Veggies for Vigor!

Unit 4: Fabulous Fruits!

Unit 5: Healthy Fats

Unit 6: Magnificent Milk!

Unit 7: Mighty Meat & Beans

A Module 3 content overview and listing of standards begins on the following page.



Each Unit Includes:

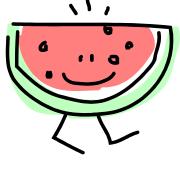
- **Comprehensive teacher background Information**
- **Two or more lesson plans, handouts and answer keys designed for**
 - **K-3rd grade students or**
 - **4th – 6th grade students**
- **Enrichment activities for group or independent study in Appendix with additional worksheets and resources**

Samples in this document:

1. Excerpts from Unit 5 Teacher Background (page 7)
2. Plan for Unit 5, Lesson 1: Healthy Fats 4th–6th Grade (page 11)
3. Sample Activity: K-6th Grade (page 24)
4. Sample Activities: K-3rd Grade (page 29)
5. Excerpts & Images from Unit 5 Appendix (page 32)

Module 5 Overview

Unit	Learning Objectives	Activities/ Worksheets
1. My Superfoods Plate 	<ul style="list-style-type: none"> • Name five food groups that support heart health • Understand what comprises a healthy meal • Explain the relationship between nutrition and health • Explain the value of a balanced diet • Name some nutrition-packed foods from each food group • Know what nutritious foods are stored in their homes • Explain what a calorie is and how calories fit with food choices • Explain how physical activity interacts with diet to sustain health 	<ul style="list-style-type: none"> • SuperFoods! Rhyme • Fix Yourself a Plate • Find Good Food! • Healthy Snacks Are Good to Eat Rhyme • Go for Nutrients Handout • Choose Your Healthy Snack • What's in Your Snack Worksheet(s) • Get Moving! • Food Groups for the Food Bank • Super Sleuth • Take the Quiz • Calories In/Calories Out Chart
Unit 2. Groovin' Grains! 	<ul style="list-style-type: none"> • Describe the common grains used to make food products. • Describe the three parts of a grain kernel. • Compare characteristics of whole and refined grain foods. • Describe how grains are grown and processed. • Compare characteristics and benefits of whole and refined grain foods. • Discuss how grain portions contribute to a healthy diet. • Explain the role of bread in nutrition • Differentiate among varieties of breads • Understand the benefits of incorporating whole grains • Know how bread is made • Describe the role of fermentation in baking breads • Practice making one or more types of bread 	<ul style="list-style-type: none"> • Groovin'Grains Rhyme • Grain kernel Image • Where Grains Grow in the U.S. Worksheet & Key • Measure the Wheat Grass Instructions & Worksheet • Super Sleuth Worksheet & Key • Complex Carbs... • Simple Carbs... • Serving Sizes Chart – pages 1 & 2 • How Many Servings? Worksheet & Key • Carbs in Detail Handout • Breads Around the World • Grains Growing Images for Posting • Amounts & Substitutes • Cool Facts about... • Groovin' Grains Vocabulary Take Home & Key • Unit 2 Assessment • Letter to Parents

Unit 3. Veggies for Vigor! 	<ul style="list-style-type: none"> • Discuss the size of the vegetable portion on the <i>My Plate Image</i> • Discuss the health benefits of vegetables • Investigate ideal vegetable portions in a healthy diet • Investigate how vegetables are grown and processed. • Compare different ways to enjoy vegetables • Practice preparing vegetables one or more ways 	<ul style="list-style-type: none"> • Veggies for Vigor Rhyme • Get Moving 2! • Veggies Rainbow • Taking Measure • Daily Dining • Daily Dining 2 • Eyeball It! Handout • A Veggie Valentine! • Veggie Mask Activity • Parts We Eat • Cruisin' the Salad Bar! • Fix Your Salad Plate! • Just Steamin' • Unit 3 Vocabulary • Unit 3 Quiz • Cool and Colorful! • Vegetable Information Handout
Unit 4. Fabulous Fruits! 	<ul style="list-style-type: none"> • Discuss the size of the fruit portion on the <i>My Plate Image</i> • Discuss the health benefits of eating fruits • Investigate ideal fruit portions in a healthy diet • Know how much fruit to integrate into a healthy diet • Describe and compare characteristics of various fruits 	<ul style="list-style-type: none"> • Fabulous Fruits Rhyme • Enjoy Fruit • Fruit in Color • Nutrients Handouts (3) • Fruit Search • Ripening Record • Go for Nutrients • Taking Measure • Fruitful Choosing • Eyeball It! – Fruits Handout • Fruitful Tracking • Unit 4 Vocabulary Work • Unit 4 Quick Quiz
Unit 5. Healthy Fats! 	<ul style="list-style-type: none"> • Understand the role of certain fats in a healthy diet. • Discuss the purpose and functions of fat • Identify the health benefits and risks of certain fats and oils • Name benefits of including certain fats in a healthy diet • Determine appropriate amounts of fat to include in a healthy diet • Practice using fats in cooking 	<ul style="list-style-type: none"> • Let's Hear It for Fats! Rhyme • Plaque Busters! • Fats to Know Handout • Searching • Oil/Water Mix • Eyeball It (fats) • Eat Good Fats • Cool Facts about Fats • Build a Better Peanut Butter Sandwich • Dancing to Measure • Unit 5 Vocabulary • Smoke Points Chart • Images • Take the Quiz!

<p>Unit 6. Magnificent Milk!</p> <p>!</p> 	<ul style="list-style-type: none"> • Discuss the size of the dairy portion on the <i>My Plate Image</i>. • Identify nutrients in milk • Compare characteristics of different foods in the milk group • Compare liquid and solid milk foods • Discuss the health benefits of dairy foods • Discuss recommended quantity, portion size and type of milk foods • Examine ways to make wise choices from the dairy group • Examine how milk foods are used in cooking and baking • 	<ul style="list-style-type: none"> • Magnificent Milk Rhyme • A Peek inside a Dairy Cow Handout • How Do Cows Make Milk • How Much Milk Can One Cow Make • Calcium Crossword • What Do Dairy Cows Eat? Handout • Farm Tour Images • Farm to Table Guide • Calcium Crossword • Milk Serving Sizes • Calcium Calculator Handout • Taking Measure • Bone Up on Calcium Relay • Create Your Own Blender Buzzer • Build a Better Grilled Cheese • International Cheese Activity Guide • Marvelous Milk? Vocabulary • Quick Questions Assessment • Average Milk Consumption Image • Relay Station Signs 1-4 • Dairy Foods Images • Milking a Cow Images • Farm Images
<p>Unit 7. Mighty Meat and Beans!</p> 	<ul style="list-style-type: none"> • Discuss the size of the protein portion on the <i>My Plate Image</i> • Identify foods in the meat and beans group • Discuss the health benefits of proteins • Identify complete and incomplete protein foods • Determine how much protein food to eat daily and weekly • Compare characteristics of protein foods. • Discuss the value of varying the type of protein food eaten. • Compare different ways to enjoy vegetables • Practice preparing protein foods one or more ways 	<ul style="list-style-type: none"> • Meats & Beans Are Protein Foods! Rhyme • Protein Puzzle • Name That Food! • Protein Group Handout • Portions Handout • Build a Menu • A Day's Menu • Eyeball It (Protein) • How Does Meat Cook? • Set the Table • Red Lentil, Wild Rice, Apricot Soup • Cheesy Eggs • Mighty Meat and Beans Vocabulary • Take the Quiz • Food Sources Chart • Cool Facts about Eggs • Dry Beans Basics • Using an Outdoor Digital Thermometer • Rosemary Scented Chicken • Grill the Perfect Steak

Alliance with Common Core Standards

GRADE	READING			WRITING			
	Literature	Informational Text	Foundational Skills	Text Type & Purposes	Production & Distribution	Research to Build Present Knowledge	Range of Writing
4		RI1, 2, 3, 4, 5, 7, 9,	RF3, 4, 5	W1, 2	W4	W7	W10
5		RI1, 2, 3, 4, 5, 6, 7, 9	RF3, 4, 5	W1, 2	W4	W7	W10
6		RI1, 2, 4, 7 RST1, 2, 3, 4, 7, 9		W2, 2	W4, 6 WRST4, 6	W7, 8	W10

	SPEAKING & LISTENING		LANGUAGE		
	Comprehension/ Collaboration	Presentation of Knowledge & Ideas	Conventions of Standard English	Knowledge of Language	Vocabulary Acquisition & Use
4	SL1, 2	SL4, 5	L1, L2	L3	L4, 6
5	SL1, 2	SL4, 5	L1, L2	L3	L4, 6
6	SL1, 2	SL4, 5	L1, L2	L3	L4, L6

GRADE	MATH										
	OA	NBT	NF	MD	G	RP	NS	EE	G	SP	
4	✓	✓	✓	✓							
5	✓	✓	✓	✓							
6						✓	✓	✓			

NATIONAL STANDARDS for PHYSICAL EDUCATION

GRADE	PHYSICAL EDUCATION				
	Standard 1: related to demonstrating competency in motor skills and movement	Standard 2: related to applying concepts, principles, etc. to movement & performance	Standard 3: related to demonstrating knowledge & skills for maintaining health	Standard 4: related to responsible personal & social behavior	Standard 5: related to recognizing the value of physical activity
4	S1.E1.4 S1.E5.4 S1.E11.4 S1.E13.4 S1.E15.4 S1.E27.4	S2.E2.4	S3.E1.4 S3.E3.4	S4.E1.4 S4.E2.4 S4.E3.4 S4.E4.4 S4.E6.4	S5.E1.4
5	S1.E5.5 S1.E11.5 S1.E13.5 S1.E27.5	S2.E1.5 S2.E2.5	S3.E2.5 S3.E4.5 S3.E6.5	S4.E1.5 S4.E4.5 S4.E6.5	S5.E1.5 S5.E2.5 S5.E3.5
6	S1.M1.6 S1.M18.6	S2.M1.6	S3.M1.6 S3.M2.6 S3.M3.6 S3.M17.6	S4.M1.6 S4.M4.6 S4.M5.6 S4.M7.6	S5.M1.6 S5.M4.6 S5.M5.6 S5.M6.6

NATIONAL STANDARDS for HEALTH

GRADE	HEALTH STANDARDS							
	Standards 1-4: understanding concepts, analyzing influences, accessing information, communicating/decision-making for health					Standard 5-8: decision-making, goal-setting, practicing healthy behaviors, advocating for health		
4	1.21 1.5.1 2.5.1 2.5.2 4.5.1					5.5.1 5.5.3 5.5.4 5.5.5 5.5.6 6.5.2 7.5.1 7.5.2 7.5.3 7.8.1 8.5.2		
5	1.21 1.5.1 2.5.1 2.5.2 4.5.1					5.5.1 5.5.3 5.5.4 5.5.5 5.5.6 6.5.2 7.5.1 7.5.2 7.5.3 7.8.1 8.5.2		
6	1.81 1.8.7 2.8.1 2.8.2 3.8.3 4.8.1					5.8.1 5.8.2 5.8.3 5.8.4 5.8.5 5.8.6 5.8.7 6.8.1 7.8.1 7.8.2 7.8.3 8.8.2 8.8.3		

Hip Hop Healthy Heart Curriculum for Children™

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Module 3: SUPERFOODS Sampler page 6

(Excerpts)
Introduction to Unit 5: *Healthy Fats!*
Grades 4-6

Teacher Background

Fats are essential for a healthy diet and add color and interesting tastes as well. ***Unit 5 –Healthy Fats!!*** provides useful information for you and your students that not only can help you learn more about oils and fats but can also help you make wise choices about how to use them effectively to provide nutrients for your body. These introductory pages use a question and answer format to link information in four categories: science, science/nutrition, nutrition and food science/culinary. .

Science Link

Fats

Fat is one of the basic 6 essential nutrients that we need to survive. These include:

1. Carbohydrate	4. Minerals
2. Protein	5. Vitamins
3. Fat	6. Water

Oils are also known as *lipids* or fats.

What are the functions of lipids in the body?

Lipids are an essential macro-nutrient that our body needs for basic function. They provide:

- Energy storage
- Cushion for our organs
- Insulation
- Vitamin transport
- Structure for the cells of our body
- Energy transport to spare protein

What is the difference between fat and oil?

Fat is a lipid that is solid at room temperature. Oils are lipids that are liquid at room temperature.

Can we live without fats?

A person will not die immediately if fat is cut from the diet, but there will be internal health complications and physical complications as well. Without fat, our bodies cannot metabolize the fat soluble vitamins A, D, E and K. Fat-free diets, when followed for long periods of time can create severe deficiencies of these essential vitamins. Since fat is responsible for so many processes in our bodies, cutting fat completely can cause many diseases (e.g. cardiovascular disease, improper breakdown of vitamins, diabetes from carbohydrate mismanagement, and a weak immune system).

How often do we need to eat fats?

We need to eat fats daily. Healthy Fat should make up 20-30% of our daily calories. Since fat is a crucial part of our daily bodily function; we need to ensure we are getting the proper amount to stay healthy and strong. Children under the age of two should consume higher amounts of fat than older children because these are the prime years for growth and development.

Can fat give us energy?

Fat will provide energy to our body when we are participating in any endurance type of exercise or if we are temporarily starved (e.g. in an emergency when no food is available). Fat gives us our long-term energy supply when carbohydrates have been used up by our body.

What can happen to our physical appearance if we don't eat enough fat?

Since fat contains good sources of vitamin E, the skin would lose elasticity, healthy glow, and be more prone to pollution and sun damage. We would bruise more easily because fat protects us by providing us with "padding."

Can eating excess fat be harmful?

Yes, especially in individuals who don't participate in regular cardiovascular exercise. Eating excess amounts of fat can cause a rise in the amount of lipid molecules flowing in the blood. This can cause damage to the blood vessels and progress to a buildup of plaque around the artery walls. This is usually caused by excess amounts of cholesterol in the diet.

What are the effects of plaque buildup?

The more plaque buildup around the artery wall, the less space there is for blood to flow freely. This causes blood pressure to rise. *Hypertension* is high blood pressure. Individuals with high blood pressure are at high risk for numerous types of cardiovascular disease since the heart is working overtime to pump blood.

Is a fat-free diet a healthy choice?

A fat –free diet is not a healthy diet, but a low- healthy fat can be very beneficial to our health. Since we already learned that we can't live without fat, we know that it is essential for our health, but can be harmful. This is why we should be eating various types of good, healthy fats in moderation.

When should we eat healthy fat? Daily

Why do our bodies need dietary fat?

There are certain vitamins that our body needs that cannot be properly metabolized without fat. These are the fat-soluble vitamins A, D, E, and K.

What are the most beneficial dietary fats?

Unsaturated fats that come from natural sources. There are different types of fat in this category that are discussed in detail later on in this lesson. Some fats are essential, meaning our body cannot produce them; therefore we must get them from the foods we eat. Beneficial fats help lower cholesterol, keep blood pressure down, and maintain healthy cell structure, and give quality, long lasting energy throughout the day.

What are essential fatty acids?

The body can make all but two fatty acids; therefore they must be supplied by means of diet. The two essential fatty acids (EFA) are Omega 6 and Omega 3 fatty acids (ALA Linoleic Acids).

What are triglycerides?

Triglycerides are fats that are formed from dietary fat that is broken down in our bodies. This is the main form of storage fat. By breaking down the word you can get a visual of what this looks like. Tri=three and glyceride=glycerol or the back bone of the structure. Imagine the trunk of a tree and three branches that come off of that. Those branches are called fatty acids.

What is cholesterol?

Cholesterol is a type of fat made in the body. Our liver produces cholesterol to reside in the cells of our body for structural support. Since our body makes about 300mg of cholesterol per day, it is important that we be aware of the amount of cholesterol that we are consuming for food sources. If cholesterol levels in the body get too high, it can cause build-up in the walls of our arteries making the natural blood flow to the heart more difficult. This build up is called *atherosclerosis*.

Nutrition/Science Link

What fats should be monitored and consumed in moderation?

Certain fats like *saturated fat* and *cholesterol* because they can increase the risk of cardiovascular disease and diabetes.

Why should we eat very little hydrogenated oils or trans-fats?

Because they can be detrimental because they can damage the structure of a cell causing improper build-up of unhealthy cells in the body. *Hydrogenation* is the addition of hydrogen molecules into a liquid fat causing it to be solid (i.e., acting like a saturated fat). This can cause fat build-up in the body leading to a rise in blood cholesterol. Altering the structure of the cell is a very risky process. Therefore hydrogenated foods should be avoided to avoid health risks.

What foods are included in the healthy fat group?

Oil, nuts, seeds, and fatty fish (e.g. tuna, salmon, and mackerel) are foods that classify as a lipid because of their high fat content. Certain fruits and vegetables fall into this category as well because they contain mostly oil.

Nutrition Link

Eating Healthy Fat Guidelines

With so many types of foods with fat to choose from, what kind should we eat each day?

Like foods in the other food groups we have studied, think *variety* because different types of fat offer different benefits. This means eating a varied mixture of foods from the healthy fats group every day in order to give your body the best chances for overall health. Try to eat a variety of unsaturated fats from natural sources.

Try snacking on nuts and seeds, try to include fish 2-3 times per week in your menu plan, and try avocados as a condiment instead of mayonnaise. Small amounts of saturated fat are fine, but mono-unsaturated and poly-unsaturated fats should make up the majority of one's daily fat intake.

Why is it important to include fish, nuts, and seeds in your diet?

Many people forget to make varied choices from this group of foods. Instead, they select meat or poultry every day as their main dishes. Varying choices and including fish, nuts, and seeds in meals can boost intake of monounsaturated fatty acids (MUFAs) and polyunsaturated fatty acids (PUFAs). Most fat in the diet should come from MUFAs and PUFAs. Some of the PUFAs are essential for health—meaning the body cannot produce them or create them from other fats. It is very important to try new dishes that include these foods to help increase energy and overall health and proper function and growth of the body.

Why is it important to include fish in your diet?

Some fish (such as salmon, trout, and herring) are high in a type of polyunsaturated fatty acids called “omega-3 fatty acids.” The omega-3 fatty acids in fish are commonly called EPA and DHA. There is some limited evidence that suggests eating fish rich in EPA and DHA may reduce the risk for mortality from cardiovascular disease. (EPA is *eicosapentaenoic acid* and DHA is *docosahexaenoic acid*). Some nuts and seeds (flax, walnuts) are excellent sources of essential fatty acids, and some (sunflower seeds, almonds, hazelnuts) are good sources of Vitamin E. Other countries in which the population eats fish more frequently show a trend of less heart related health problems. In some areas of the United States, fish is not as fresh and abundant, so a bigger effort must be made to get these health benefits.

How much food from the healthy fats should we eat each day?

The amount of fat a person needs to eat each day depends on various criteria including:

- ♥ Personal weight: underweight, overweight
- ♥ Amount of activity: (heavy, moderate, sedentary)
- ♥ Age: Teenage boys need more than younger kids because they have more muscle mass and are generally more active. Older people need less, particularly if they are sedentary.

The USDA gives these guidelines for kids and teens that count the amount of teaspoons per day.

Gender	Age	Amount of fats per day	% of daily calories
All Kids	4-8 years old	4 teaspoons	30-35
All Kids	9-13 years old	5 teaspoons	25-35
Boys	14-18 years old	6 teaspoons	25-30

These amounts are appropriate for kids who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

- ♥ Less than 10 percent of calories should come from saturated fatty acid
- ♥ Less than 300 mg/day of cholesterol should be consumed daily

Culinary/Food Science Link

What is the role of fat in cooking?

Fat gives food flavor, color, flakiness, richness, crispiness, aroma, and juiciness. Omitting fat from a recipe could eliminate these qualities. Many oils can add a strong distinct flavor (sesame oil), while some are very mild (canola oil). When selecting and cooking meat, a cut that is *marbled* with fat will produce a tender texture and a rich flavor. Steaks with more marbling are valuable to chefs and usually more expensive.

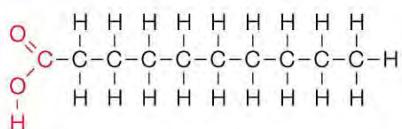
What is the role of fat in baking?

In baked goods, fat preserves moisture, provides “mouth feel” and gives baked goods their flaky, crispy texture. This is why baking recipes must be followed exactly. A baking recipe is like a math equation and the “signs” must be followed exactly to get the right “product.”

What are fatty acids composed of?

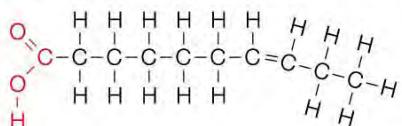
A fatty acid at the molecular level is a long chain of carbon atoms. These carbon atoms have hydrogen atoms attached on each side. At the end of these chains there is a compound forming an acid. Learning what the different classifications of fatty acids look like can help understand why fats have different textures and different effects on our bodies. See the figure below.¹

Saturated



Saturated Fat: There are no double bonds in the fatty acid to interrupt the long chain of carbons. This makes it easy for them to stack up and remain stable. This is why butter, lard, animal fat are solid at normal temperatures.

Unsaturated



Unsaturated Fat: There are double bonds in the long chain that interrupt the stable structure of the fatty acid. This makes it more flexible and fluid. This is what makes oil a liquid substance.

Mono-unsaturated: There is one double bond in the fatty acid chain.

Poly-unsaturated: More than one double bond in the fatty acid chain

Why don't oil and water mix?

The structure of a lipid makes it *hydrophobic*. This means that it does not “like” water and rejects the water molecules. This is why we “grease” the pan for baking so food doesn’t stick and why salad dressings separate after a period of no movement. The act of whisking in oil to a water/vinegar combination allows for the two compounds to mix. This could be vinegar or any other acid for that matter. It is a common method in the cooking to “drizzle in the oil slowly while whisking continuously.”

¹ <http://biology.clc.uc.edu/graphics/bio104/fatty%20acid.jpg>

Unit 5: Healthy Fats! gives you a variety of teaching options.

- 2 Core Lessons provide the basics for two 20-30 minute classes that provide foundational information about nutrition. The lessons are designed to help students gain experience with making healthy choices now and in the future.
- Activities can be integrated with related material throughout the year.
- Worksheets included with each lesson provide choices so you can select activities that best serve your students. Use some or all when completing the lesson or select some for now and use the rest throughout the year.
- Quick Assessment Questions to use when your students complete the unit.
- Appendix – offers supporting charts, wall photos, and extra questions to use during the lesson or throughout the year.



Unit 5: Features

Flexibility: You can do the entire unit, select stand-alone activities, or integrate portions of the lesson plans with your plans for other subjects. Your class may benefit from taking a project approach to the unit, compiling worksheets, research, essays, plans and trackers in a binder that they can continue building as they advance to the next grade.

Choices: Most information and many activities and handouts are available to serve students with varied levels of experience with money management. Choose lessons and activities based on your students' ages, levels and interest. Keep in mind, however, that many students benefit from reviewing the basics.

Transferability: Some activities or lessons can be repeated from year to year. As students progress through grade levels and start having more personal experiences with making nutritious choices, they will bring new questions and insights to the activities, and be able to apply their skills at a more complex level.

Presentation style: Lessons are designed to be positive, interactive, and fun as well as informative. A key goal is to boost your students' self-confidence and sense of well-being. Instead of getting right answers, kids benefit from analyzing situations, examining alternatives, making and learning from choices.

***A Sample Lesson Plan for Unit 5, grades 4-6
Begins on the next page.***

Lesson 1 Highlights

Objectives: Students will

- Understand the role of certain fats in a healthy diet.
- Discuss the purpose and functions of fat
- Identify the health benefits and risks of certain fats and oils

Anticipatory Set:

- Photos from magazines or printed from Appendix of foods that contain fats.
- Copy for each student:
Healthy Fats! Hip Hop Rhyme.
- Introduce fats and oils as part of a healthy diet. Find information in A-G at right.

Lesson Materials:

- Continue posting the *My Plate Image*
- Samples of “fats” (e.g. butter, olive oil)
- Samples of or photos of lean and marbled meat (Appendix)
- Copy for each student:
 - *Plaque Busters! Worksheet*
 - *Worksheet*
- Drawing utensils

Enrichment Activities:

- Describe lipids and why they support health. Find information in 1A-G beginning at right.
- Explain why people need to eat fats daily. Find information in 1H-I on page 240.
- Discuss saturated fat, comparing lean and marbled meat. Find information in 1J-M on page 240.
- Compare the effects of eating not enough or too many fats. Find information in 2A-G on page beginning on page 240.
- Using the *Plaque Busters! Worksheet*, explain the benefit of incorporating regular cardio-vascular exercise into one’s day. Find information in 2H-J on page 241.

Unit 5 Healthy Fats!

Lesson 1 – Fats Can Be Fine! 4th–6th Grades

Lesson 1: Fats Can Be Fine!

Anticipatory Set Activity

- A. Explain that the class will be looking at fats – a food that doesn’t hold its own place on the *My Plate Image*.
- B. Invite students to say what they think of when they hear the word “fats.”
- C. Explain that, even though we often talk about fat as if it is a bad thing, we actually need fats in our diet to stay healthy.
- D. Show students photos of foods that contain fats.
- E. Explain that fats can be ingredients in many different foods.
- F. Invite student to name their favorite food that contains fats.
- G. Read the *Healthy Fats! Hip Hop Rhyme* together.

Lesson 1: Fats Can Be Fine!

1. Let’s talk about fats and oils

- A. Explain that fats are found in many foods.
- B. Point out that fats are rarely eaten alone but are usually combined with other foods as when you put butter on bread or dip the bread in olive oil.
- C. Explain that we often include fats in foods we want to enjoy during fun gatherings. These can include dips or snacks or desserts.
- D. Explain that fat and oil are both known as lipids.
- E. Explain that lipids are essential to healthy bodies because they provide:
 - Energy storage
 - Cushion for our organs
 - Insulation

- Using the **Fats to Know! Worksheet**, discuss various types of fat and their roles in a healthy diet. Find information in 3A-E on page 241.

Curriculum Links

- Art
- Health
- Language Arts
- Science

Educational Skills:

- Design
- Compare
- Compare
- Discuss
- Examine
- Investigate
- Present
- Write

Closure Activity:

Using the **Searching ! Worksheet**, identify key words related to healthy fats. Find information on page 246

Enrichment Activity:

Using the **Oil/Water Mix Worksheet**, investigate why oil and water do not mix. Find information on page 246.

- Vitamin transport
- Structure for the cells of our body
- Energy transport to spare protein

F. Explain that the difference between fats and oils is that fats are solid at room temperatures and oils are liquid at room temperature.

G. Explain that fats are essential to our health for several reasons:

- Our bodies need fat to metabolize fat-soluble vitamins like A, D, E, and K. Fat-free diets can create severe deficiencies of these vitamins.
- Cutting fat completely can cause cardiovascular disease, diabetes, and a weak immune system.

H. Point out that our bodies need to eat foods with healthy fats because the human body can't produce fat.

I. Explain that we need to eat fats every day.
Healthy fats should make up 20-30 percent of our daily calories

J. Explain that foods with fat should be eaten less often which is why the food group doesn't hold a spot on the *My Plate Image*. Instead, foods with fats like dips and desserts should be eaten once in a while or in small side servings instead of the main parts of a meal.

K. Explain that one way we take in fat is through the meat we eat.

L. Explain that the fat found in animals is called saturated fat. Add that saturated fat is usually visible. We can see it when we look at a cut of meat.

M. Show students the photos of lean and marbled meat. Compare how the lean meat looks next to the marbled meat.

2. Let's talk about how we digest fats

A. Explain that our bodies begin digesting fats in our mouths.

B. Explain that saliva starts to melt the fat.

The fluid combines with the lipid and separates it into smaller droplets. The droplets combine with bile which emulsifies the fat for proper absorption.

C. Explain that the emulsified fat combines

with enzymes in our pancreas to produce fatty acids. After that, one of two things can happen.

- Dietary fat is stored in the body as body fat or adipose tissue. Stored fat provides energy when we are exercising or if no food is temporarily unavailable. It gives us a long-term energy supply when our body has used up all its carbohydrates.
- Dietary fat binds to dietary fiber and exits through the digestive system. Dietary fiber helps reduce body fat and cholesterol levels in our blood.

- D. Explain that cholesterol is a type of fat made in the body.** The liver produces cholesterol which is stored in the cells which give our bodies structural support.
- E. Explain that our bodies make about 300 mg of cholesterol per day so we don't consume foods that will dramatically raise the cholesterol level.**
- F. Explain that if we don't eat enough fat, we will see the results in our bodies.** We need the Vitamin E in fat to keep our skin elastic and healthy. Without Vitamin E, we are more prone to damage from pollution and sun. We would also bruise more easily because fat protects us by providing us with padding.
- G. Explain that, on the other hand, if we eat too much fat, we can harm our bodies.** Eating too much fat causes the amount of lipid molecules in our blood stream to rise. This can damage blood vessels and cause a build-up of plaque around artery walls. That is what people are talking about when they refer to having too much "bad cholesterol" in the body. The build-up is called atherosclerosis.
- H. Add that regular cardiovascular exercise can help us avoid plaque build-up.**
- I. Explain that when plaque builds up around the walls of our arteries, there is less space for blood to flow freely.** That causes hypertension – a rise in our blood pressure.
- J. Explain that people with high blood pressure have a higher risk of having cardiovascular disease because the heart has to work extra hard to pump blood.**
- K. Distribute the *Plaque Busters!* Worksheet.** Allow time for students to complete the worksheet and share ideas.

3. What fats should we know about?

- A. Distribute the *Fats to Know* Worksheet.**
- B. Read through the Handout with students.** Highlight information about each of the six fats described on the handout.
- C. Point out that the first four fats listed produce benefits for the human body.**
- D. Point out that the fifth fat listed – transfat – has no known benefits for the human body.** That is why we should avoid foods that contain or are made with transfats.
- E. Referring to the sixth fat listed – dietary cholesterol – point out that we need to give attention to the amount of cholesterol we take in.**

Let's Hear It for Fats!

**Here we go again,
Another rhyme to scat!
This time the macro-nutrient
Is lipids, oil, and fat.**

**They're found in milk and meat,
Some of our basic needs.
They're found in fish and veggies,
Oil, nuts, and seeds.**

**They help our bodies use
The vitamins we need.
They're stored in every cell
To keep us up to speed!**

- ♥ Memorize the rhyme.
- ♥ Create some hip hop movements to use with the lyrics to teach to your classmates. Work with a partner or small group to choose actions drawn from exercise, rope jumping, dance, or sports. Consider dribbling basketballs or tossing tennis balls as part of your routine.
- ♥ Take this rhyme home and teach it to others in your household.
 - Get into a groove by clapping a slow rhythm.
 - Alternate being a leader and a chorus member with your Mom, Dad, sister, brother or a friend.
 - The leader recites one line to the rhythm. Then the chorus member recites the rhyming phrase.

Plaque Busters!

Below is the list of activities you reviewed in previous units. Check the list A or B that includes the most – cardio-vascular activities.

List A

Baseball	Basketball	Rugby	Dancing
Baton twirling	Jumping rope	Football	Canoeing
Climbing	Running	Bike Riding	Swimming
Horseback Riding	Yoga	Skipping	Hiking

Add more here:

List B:

Writing stories	Talking with friends	Model-building	Reading
Designing outfits	Visiting grandparents	Gardening	Creating art
Acting in plays	Learning new things	Singing	Crafting
Playing board games	Walking the dog	Organizing stuff	Cooking

Add more here:

Can you think of a way to combine an activity from List B with an Activity from List A to increase its cardiovascular value? Write your idea below:

Fats to Know About

Oil Group Food Categories:	Function of fat in the body	Examples:
Polyunsaturated Fat	Decreases the risk of heart disease, cancer, high blood pressure, irregular heart rhythms, inflammation and obesity	Vegetable Oils: safflower, corn, sunflower, and cottonseed Nuts and Seeds: walnuts, pumpkin and sunflower seeds
Monounsaturated Fat	Decreases the risk of heart disease, cancer, high blood pressure, irregular heart rhythms, inflammation and obesity	Oils: canola, peanut and olive oil Avocados Nuts and Seeds: sesame seeds, almonds, cashews, pecans, and peanuts Nut Butter: peanut, almond, cashew, sesame (tahini)
Omega 3 Fatty Acids	May reduce the risk of cardiovascular disease, heart murmurs, high blood pressure, and minimize growth of atherosclerosis plaque	Fatty Fish: tuna, salmon, mackerel, and sardines Nuts and Seeds: walnuts, flaxseed, pumpkin, and sunflower Oils: flax oil, canola oil and any fish oil Soy bean products
Saturated Fat	Maintains the structure of the cells in our body and is needed for cell messaging. If consumed in concentrated amounts it can increase the risk for obesity and heart disease	Animal Products: meat, poultry, dairy, eggs, butter Tropical Oils: coconut and palm
Trans Fat or Partially Hydrogenated	No function. Can damage the structure of a cell causing improper build-up of unhealthy cells in the body.	Partially Hydrogenated Oils: Processed foods - like cookies and crackers. Fried foods - like doughnuts and French fries. Margarine and Shortening.
Dietary Cholesterol	Adds to the cholesterol made in the body to help produce hormones that support growth and development. Too much can add to the cholesterol levels in the blood and increase risk for atherosclerosis.	Any food product that comes from a mammal.

Closure Activity:

- A. Distribute the *Searching!* Worksheet.
- B. Allow time for students to complete the worksheet.
- C. Review responses.
- D. Allow time for students to complete their project for display.

Enrichment Activity:

Why Oil and Water Don't Mix

You will need:

- Small paper cups for each student
- Water to fill the cups from a pitcher or small bottles
- Vegetable oil (any type)
- Vinegar
- Dropper
- Small whisk

- A. Distribute the *Oil/Water Mix?* Worksheet
- B. Explain the term hydrophobic -- The structure of a lipid will reject water molecules instead of mixing with them.
- C. Distribute cups to students.
- D. Instruct students to fill cups about half full with water.
- E. Instruct students to come to the table and put a few drops of oil into their cup of water.
They can use the whisk to mix the combination.
- F. Explain that the structure of the fat does not let it bind with water.
- G. Explain that something similar happens in the body. We need some type of acid in our bodies to break down fats.
- H. Instruct students to add a few drops of vinegar and whisk the mixture. The mixture will become homogenous.
- I. Explain that that is similar to how fat is digested in our bodies.

Searching!

When you find the spelling words below in the puzzle, circle each one.

1. OIL	6. BUTTER
2. FAT	7. SATURATED
3. FISH	8. POLY
4. PEANUT	9. MONO
5. AVOCADO	10. OMEGA



Searching!

Teacher Key

When you find the spelling words below in the puzzle, circle each one.

1. OIL	6. BUTTER
2. FAT	7. SATURATED
3. FISH	8. POLY
4. PEANUT	9. MONO
5. AVOCADO	10. OMEGA

O	A	N	A	M	O	N	O	N	C	A	A
S	I	C	A	R	T	A	R	T	D	V	C
N	P	L	A	R	L	M	A	R	O	M	A
A	F	F	S	A	Y	C	N	C	R	B	P
C	A	A	B	S	H	Y	A	R	A	T	O
K	T	F	I	S	H	D	P	L	N	S	L
B	W	R	O	B	O	P	E	Y	G	N	Y
U	L	I	M	E	A	E	A	F	E	U	T
T	N	K	E	R	R	A	N	R	E	T	O
T	M	O	G	R	U	N	U	U	R	R	S
E	R	V	A	Y	I	U	T	I	W	I	E
R	O	S	A	T	U	R	A	T	E	D	S

Oil / Water Mix?

Write or sketch your observations in the chart below:

Water with oil droplets	After whisking in oil	After adding vinegar	After whisking in vinegar

Please Define:

1. Hydrophobic –
2. Homogeneous -
3. Bile -

Please Answer:

- 1) Why didn't the water and the oil droplets mix?
- 2) What changed in appearance after mixing the water and the oil droplets?
- 3) Describe the appearance of the mixture after the vinegar was whisked in?
- 4) This activity can be compared to the digestion of fat in our bodies. What in our bodies is similar to the vinegar in this experiment?

Oil / Water Mix?

Teacher Guide

Write or sketch your observations in the chart below:

Water with droplets	After whisking	After adding vinegar	After whisking

Please Define:

1. Hydrophobic – Is afraid of Water
2. Homogeneous - Being the same throughout
3. Bile - An acid stored in the gallbladder that gets released into the intestine when fats oils needs to be broken down and digested.

Please Answer:

- 1) Why didn't the water and the oil droplets mix? Fats can't bind with water.
- 2) What changed in appearance after mixing the water and the oil droplets? The oil droplets became smaller but still stayed on the surface of the water.
- 3) Describe the appearance of the mixture after the vinegar was whisked in? The mixture became homogeneous.
- 4) This activity can be compared to the digestion of fat in our bodies. What in our bodies is similar to the vinegar in this experiment? Bile.

SAMPLE ACTIVITY
Dancing to Measure
Teacher Activity Guide

Equipment:

- 6 pint-sized (2 cup) non-breakable containers with air-tight lids (screw on if possible)
- 6 large marbles
- Music with steady beat including hip hop, calypso, reggae, rock and roll, blues.
- A 2-cup glass measuring cup to measure liquid remaining after shaking.
- Bowl for draining buttermilk
- A sink nearby for rinsing butter
- Knife for spreading butter
- Paper plates
- Napkins
- Small rubber spatulas
- Food scale (*optional*)
- Music: Anything with a strong, even rhythm beat (4/4 time). Try a combination including: hip hop, rock, blues, reggae, calypso, R&B, Souza-style marches, classical



Ingredients:

- Heavy cream
- Whipping Cream
- Light Cream
- Whole milk
- 2% milk
- Fat free milk
- Salt
- Loaf of whole grain bread or box of whole grain crackers

A. Distribute *Dancing to Measure!* Worksheet.

B. Select information from the following to share with students:

How does milk become butter?

The butter making process is the formation of a water-in-fat emulsion where water droplets are suspended in the fat. The fat droplets are held in suspension by milk proteins. When you make butter from cream, you force the fat droplets to come together. They form larger and larger globules until they separate from the water part of the mixture. This process is called coalescing. Butterfat coalesces because the fat globules are more attracted to each other than they are to the water in which they are suspended.

In this activity, when you shake the cream, you force the fat droplets to come into contact with each other. The marble stirs up the mixture as you shake the jar, increasing the opportunity of fat droplets from different parts of the mixture to come in contact with each other.

Can all types of milk be used to make butter?

This science experiment demonstrates:

- The type of milk products that contain enough fat to make butter
- How cream is a fat-in-water emulsion
- How butter is made; the shaking by hand gives a glimpse of how butter was made by hand in the past
- What milk products have the least amount of fat, and which of them are healthier to drink each day.

- C. Label the containers prior to filling.** Wide masking tape is a good choice as it is easy to write on, sticks well to dry surfaces, and is easily removed. Label the containers with an ink that will not come off on student's hands as they shake them. Each container will contain a different type of liquid milk product so students can compare the results of the experiment. Label them accordingly:

Container 1: Whipping cream
Container 2: Heavy cream
Container 3: Light cream
Container 4: Regular milk
Container 5: 2% milk
Container 6: fat-free milk

- D. Fill each container with 1-cup of the different milk products.** Add a clean marble to each jar which will act as a mini whisk. Close each lid tightly.

- E. Form a dance circle:** Have the students form a circle holding hands. Have them take one large step back to make sure there is a space between each of them.

- F. Distribute the jars around the circle to 6 students.** Make sure that there are an equal number of students standing between the students holding jars. The jars will be passed around the circle during the dance.

- G. Start the Game:** Instruct the students holding jars to shake them in time with the music. Students in between will dance.

- ♥ Choreography - The teacher can give specific choreography, and/or students can take turns entering the circle and offer follow-the-leader dance moves.
- ♥ Pass the container – When the teacher calls out “Freeze” or “Vogue” the class freezes in position and students holding containers pass them immediately to the right.
- ♥ The dance ends when the marble in one of the containers stops moving because it is stuck in butter.

- H. Measure the liquids and solids:** Bring all containers to a central measuring table. Students will record findings on the “Measure the Fat in Milk” sheet.

- ♥ Liquids: Using a 2-cup liquid measuring cup, students compare how much liquid remains in each jar after the dance by pouring it into the measuring cup.
- ♥ Solids: To measure any butter created during the dance, fill a 2 cup measure with 1 cup of cold water. Use the spatula to scrape the butter into a mound and then scrape it gently into the water. When the water becomes still, figure out how much water was displaced by the addition of the butter. For example if the water started at 1 cup but rises to 1-1/2 cups when the butter is added. The answer is: $\frac{1}{2}$ cup butter was created because the butter made the water rise (or displaced it) by $\frac{1}{2}$ cup.

- **Draw Conclusions:** Have students complete the *Dancing to Measure Worksheet*.
 - What milk product produced the most butter? Why?

- What milk product produced no butter? Why?
- How much liquid was left in each jar when the shaking ended?
- Which had the best taste?
- **Create butter.** Knead the butter under cold running water for several minutes to work out any remaining buttermilk (otherwise the butter will spoil quickly). Knead in salt, if desired. Refrigerate. After butter has solidified, let students spread it on a piece of bread or whole wheat cracker to taste their creation.

Choreography Suggestions:

For 8 –beat phrases. Use these to inspire choreography of your own

Combo	Beat 1	Beat 2	Beat 3	Beat 4	Beat 5	Beat 6	Beat 7	Beat 8
1	jump right	clap	jump left	clap	jump right	clap	jump left	clap
2	R knee lift/ Reach both hands high	Walk forward into circle R. foot/ Clap hands	L. knee lift/ Reach both hands high	Walk forward L. foot/ Clap hands	Walk backwards/ R. foot/ Clap hands	Walk backwards L. foot/ Clap hands	Walk backwards Rt. foot/ Clap hands	Walk backwards L. foot/ Clap hands

Dancing to Measure!

Measure the Fat in Milk Experiment

During your circle dance, you just shook six containers filled with different types of milk and a marble. You danced and shook them until you couldn't hear or feel the marble moving easily in one or more of the containers. Those containers have the most milk fat. It turned to butter which slowed down the marble.

To discover which milk product has the most and least milk fat after dancing, do the following:

- a. Measure Liquids: **Using a 2-cup liquid measuring cup, pour the liquid from each jar into the measuring cup and record the amount.**
- b. Measure Solids: **To measure any butter created during the dance, fill a 2 cup measure with 1 cup of cold water. Use the spatula to scrape the butter into a mound and then scrape it gently into the water. When the water becomes still, figure out how much water was displaced by the addition of the butter. For example if the water started at 1 cup but rises to 1-1/2 cups when the butter is added, the answer is: $\frac{1}{2}$ cup butter was created because the butter made the water rise (or displaced it) by $\frac{1}{2}$ cup.**

Rank the liquids and the solids in the columns **at the end. 1 = the most amount and 6 = the least amount.**

Write your conclusions below and on page 2:

Container	Contents:	Amount of milk left after shaking	Amount of butter created	Rank the liquids: 1-6 most to least	Rank the solids: 1-6 most to least
Container 1:	Whipping cream	_____ cup	_____ cup		
Container 2:	Heavy cream	_____ cup	_____ cup		
Container 3:	Light cream	_____ cup	_____ cup		
Container 4:	Regular milk	_____ cup	_____ cup		
Container 5:	2% milk	_____ cup	_____ cup		
Container 6:	fat-free milk	_____ cup	_____ cup		

Dancing to Measure – Page 2



1. Which milk product had the most milk fat?

2. Which milk product had the least milk fat?

3. Which milk product is easiest to use for making butter?

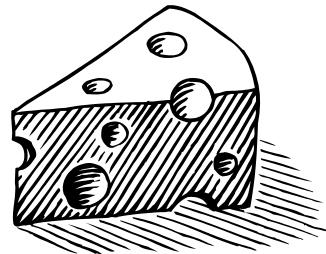
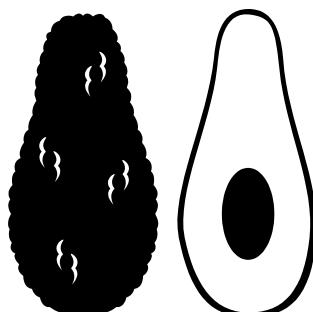
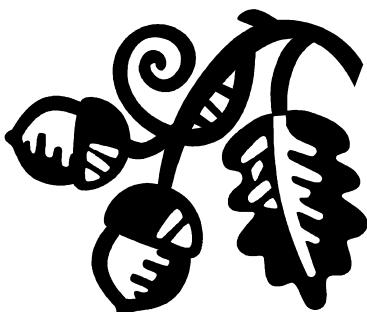
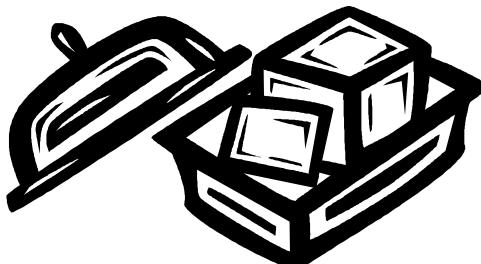
4. Which milk product would be the healthiest to drink each day?

5. Why is it the healthiest? Explain →

SAMPLE Worksheets Grade K-3

Healthy Fat Foods

Write the name of each food on its line: **salmon, butter, nuts, avocado, milk and cheese.**
Color the salmon pink, the butter yellow, the nuts brown, the avocado green, the milk white and the cheese orange.



Draw a circle around foods that include healthy fats:



yogurt



Olive Oil



potato chips



chocolate chip cookie



butter



cracker



tortilla chips



carrots



pancakes



waffle



cake



eggs whites



corn



asparagus



white rice



dry cereal



salmon



macaroni



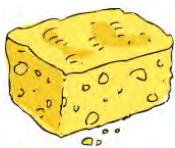
avocado



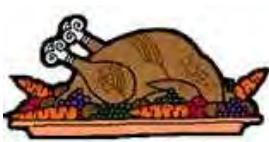
doughnut



popcorn



corn bread



turkey



low fat cheese



bran muffin



fat free milk

Teacher Key



yogurt



olive oil



potato chips



chocolate chip cookie



cracker



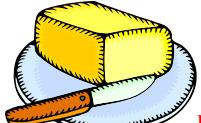
tortilla chips



carrots



pancakes



butter



egg whites



corn



doughnut



peanut butter



asparagus



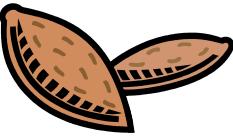
white rice



dry cereal



salmon



almonds



macaroni



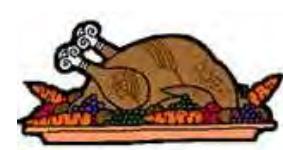
avocado



bran muffin



fat free milk



turkey



low fat cheese

SAMPLES from the APPENDIX

Healthy Fats! Vocabulary Words

Dear Parent,

This week we are learning about how fats and oils fit into healthy meals and snacks. Below are some words we learned in class today. Please review them with your child tonight.

Vocabulary Word	Part of Speech	Definition	Draw a picture or write a sentence
1.			
2.			
3.			
4.			
5.			
7.			
8.			
9.			

Teacher Guide

Choose five or more words from the list below and direct your students to write them in the first column of the *Healthy Fats -- Vocabulary* Handout.

Vocabulary Word	Part of Speech	Definition	Write a sentence about or draw a picture of the word
atherosclerosis	noun	disease of the artery caused by plaque buildup on the inner walls composed of fat.	Regular exercise reduces plaque build-up and the chance of developing atherosclerosis.
bile	noun	acid stored in the gallbladder that gets released into the intestine when fats oils needs to be broken down and digested	Bile helps break down fats and oils so they can be digested.
cholesterol	noun	type of fat made by the liver	Cholesterol is present in any food that comes from an animal.
emulsify	verb	When water and fat do not combine, adding an acid changes the pH and allows for them to mix and combine as an even combination.	It was interesting to see how water and oil did not mix well.
essential fatty acid	noun	fatty acid that is not made in the body enough to meet nutritional needs.	We need to be sure to eat foods with essential fatty acids.
flash point	noun	lowest temperature at which a mixture can be ignited in air	Chefs choose oils that do not have low flash points.
hydrogenated oils	noun	oils that have been chemically altered to obtain a solid structure and to preserve food.	I can read the labels to find out if an oil is hydrogenated.
hydrogenation	noun	The addition of hydrogen molecules into a liquid fat causing it to be solid	Hydrogen molecules added to a liquid fat can create a solid fat like shortening.
hydrophobic	adjective	afraid of water.	Because oil is hydrophobic, oil and water don't mix.

Vocabulary Word	Part of Speech	Definition	Write a sentence about or draw a picture of the word
hypertension	noun	when blood pressure levels elevate above normal blood pressure levels.	Exercise can help reduce hypertension.
lipid	noun	compound serving as a main macronutrient. Fats and oils serve as the main food sources	Fats and oils are lipids.
macro-nutrient	noun	nutrient required in large amounts for the normal growth and development of an organism.	Carbohydrates, protein, lipids and water are examples of macro-nutrients.
marbled	adjective	when fat is dispersed throughout a cut of meat appearing as continuous swirls of fat.	Marbled steak is very tasty to eat once in awhile!
monosaturated fatty acid	noun	a fatty acid chain of carbons separated by a double bond	
polyunsaturated fatty acid	noun	a fatty acid chain of carbons separated by multiple double bonds	
rancid	adjective	having the disagreeable odor or taste of decomposing oils or fats	When we don't store oil properly, it can become rancid
saturated fatty acid	noun	a very stable fatty acid that contains no double bonds in the carbon chain	
shelf life	noun	length of time a packaged food will last unrefrigerated on a shelf	We need to eat foods with a short shelf life shortly after buying them.
smoke point	noun	the temperature at which a cooking fat or oil begins to break down	I don't like the smell when oil reaches its smoke point.



Fats and Oils



Olives



Oil-based Dressing



Avocado



Guacamole Dip



Salmon



Tuna Sandwich



Hummus Dip



Nuts and Seeds



Granola Bar



Trail Mix



Peanut Butter and Jelly Sandwich



Butter



Mayonnaise

**Oil based Salad dressing,
non-dairy
Ranch Dressing/Dip**





Cookies



Ice Cream



Marbled Meat: Beef Steak



Lean Meat: Pork Tenderloin

Take the Quiz!

Unit 5 – Healthy Fats!

Underline the correct response in the items below:

1. Fat should make up 20-30% of our daily calories.
 - a. True
 - b. False
2. Our body can make all but two fatty acids.
 - a. True
 - b. False
3. Fat provides our short-term energy supply.
 - a. True
 - b. False
4. Which of the following has no function in our body?
 - a. Partially hydrogenated fat (trans fat)
 - b. Cholesterol
 - c. Polyunsaturated fat
 - d. Saturated fat
5. Fish is high in what type of fat?
 - a. Saturated fat
 - b. Omega 3 fatty acid
 - c. Monounsaturated fat
 - d. Partially hydrogenated fat
6. Which of the following is NOT a fat-soluble vitamin?
 - a. A
 - b. B
 - c. D
 - d. K



Take the Quiz!

Unit 5 – Healthy Fats!

Underline the correct response in the items below:

1. Fat should make up 20-30% of our daily calories.
 - a. True
 - b. False
2. Our body can make all but two fatty acids.
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 - b. **Cholesterol**
 - c. Polyunsaturated fat
 - d. Saturated fat
5. Fish is high in what type of fat?
 - a. Saturated fat
 - b. **Omega 3 fatty acid**
 - c. Monounsaturated fat
 - d. Partially hydrogenated fat
6. Which of the following is NOT a fat-soluble vitamin?
 - a. A
 - b. **B**
 - c. D
 - d. K

