

## Lesson: Go Fats and Slow Fats

### Supplies Needed:

- 4.3\_L\_Go-Fats-and-Slow-Fats-Visual
- Optional: Printed copies of slides 7-18
- Optional: examples of Go and Slow fats such as olive oil, butter, nuts, etc.

### Goals:

- Students will be able to identify foods containing fat.
- Students will be able to distinguish between saturated, unsaturated and trans fats.
- Students will be able to identify fats on a nutrition label and in the ingredient list.

### Background:

The saturated fats and trans fats listed on the nutrition label may not add up to equal the total fats. This is because manufacturers are not required to list the unsaturated fats but they are included in the total.

Trans fats can be a bit confusing. Here's a link to some additional information:  
<http://www.mayoclinic.com/health/trans-fat/CL00032>

Math Extension Idea: Looking at trans fat on a nutrient label could be a way of reinforcing how rounding works in math. Food manufacturers are allowed to list zero trans fat even if there is  $\frac{1}{2}$  gram per serving. If someone eats three servings, they are not consuming zero grams of trans fat. They could be consuming as much as  $1\frac{1}{2}$  grams.

### Lesson:

**(Start with two or three exercises suggested by the students.)**

Who can tell me the difference between enriched grains and whole grains? (*Whole grains contain the endosperm, bran and germ. Enriched grains contain only the endosperm.*)

How can we tell which type of grain a food contains?  
(*Read the ingredient list.*)

**(Show slide 1.)** Today we're going to learn about fat. Is fat good or bad for you?

Fat is good for you, but in moderation, which means to eat occasionally and in small amounts. Fat is essential because it gives us energy, helps us feel full, and it keeps our skin and nerves healthy. We all need some fat in our bodies. Fat acts like a cushion and helps protect our stomach, liver, intestines and other body organs. But we need to be careful about what kind of fat we eat.

**(Show slide 2.)** Some examples of foods that contain fat are cheese, ice cream, baked goods, meat, olive oil, nuts. Can you think of some others?

There are different types of fat and some of them are better than others. Today we are going to learn about three different types of fats. **(Show slide #3 and any live samples you have.)**

1. Unsaturated fat – this is in plant products and fish. Examples are olive oil and nuts. Unsaturated fats are usually liquid at room temperature. These fats are Go fats and give us the energy and nutrients our bodies need to be healthy and stay full.
2. Saturated fat – this is mostly found in animal products, for example meat and cheese. Saturated fats are solid at room temperature. Saturated fats are Slow fats.
3. Trans fat – most trans fats are manmade and are added to snack foods, for example, margarines, cookies, crackers, even peanut butter may contain trans fat. It is also solid at room temperature. Trans fats are Slow fats.

We use a little trick to remember these fats.

Unsaturated fats starts with a “u” – so remember that these fats are good for *you*.

Saturated starts with an “s” – that means it is a Slow Fat

Trans fat starts with “t” and this means it is a trouble fat - not good for us

Some meats naturally contain a lot of saturated fat. **(Show slide 4.)** In this steak, here is the visible saturated fat. **(Point to the white fat.)** This is called marbling. It is best to avoid eating the visible fat when eating steak. You can trim away the fat or choose leaner cuts that are lower in saturated fat. Another example is chicken. Chicken is a lean protein, but the skin contains saturated fat so it's best to take the skin off the chicken before eating it. We should avoid saturated fat most of the time, but as with all Slow Foods, it is okay to eat these items occasionally or in small amounts.

Foods with trans fats are also Slow fats. Some examples are margarine, packaged cookies and frozen French fries. During the food manufacturing process, some of the unsaturated fats are changed into trans fats to keep food from spoiling as quickly. Trans fats are also called partially hydrogenated fats. They are bad for your heart and if consumed in large amounts can contribute to type 2 diabetes.

Sometimes it is hard to tell what kind of fat is in food. We need to do some detective work. Here are some clues to determine if a product contains Go or Slow fats.

Clue #1- **(Show slide 5.)** Look at the nutrient label. Look for total fat and underneath is a breakdown of the kind of fat. Look to see the percentage of daily allowance of saturated fat contained in one serving. If there is more than 10% saturated fat, then the product is a Slow Food. This olive oil is high in these healthy fats and has only 9% saturated fat, so it is a Go fat.

Clue #2 - **(Show slide 6.)** Look out for the words partially hydrogenated. Remember, partially hydrogenated oil is the one that contains trans fats that are bad for your heart. If you look at the nutrient label and it says zero grams of trans fats, make sure you check the ingredient list for the words partially hydrogenated. The FDA allows food companies to claim zero grams of trans fat as long as the product contains less than ½ of a gram of trans fat. So, you could be eating trans fat without knowing it. Use your detective skills and avoid this Slow fat. **(See tips section for Math Extension Idea.)**

I am going to hand out some nutrition labels from some popular foods that you find in the grocery store. By using the two clues that we discussed, see if you can identify these foods as Go or Slow fat foods. Remember to look for how much saturated fat is in a serving and whether the ingredient list includes the words partially hydrogenated.

First find % of saturated fat in the product and circle it. Then look for partially hydrogenated fat, and if it is there, circle it.

**(Show slide 7.)** Let's look at the first one- Cookies  
(Saturated fat 13% and partially hydrogenated – Slow fats)

**(Show slide 8.)** Granola Bar  
(Saturated fat 5%, no partially hydrogenated – Go fat)

**(Show slide 9.)** Ice Cream  
(Saturated fat 15% - Slow fat)

**(Show slide 10.)** Nut Butter  
(Saturated fat 7%, no partially hydrogenated fats - Go fat)

**(Show slide 11.)** Canned Tuna  
(Saturated fats 0% - Go fat)

**(Show slide 12.)** Hummus  
(Saturated fats 5%, no partially hydrogenated fats - Go fat)

**(Show slide 13.)** Granola  
(Saturated fats 8%, no partially hydrogenated fats – Go fat)

**(Show slide 14.)** Burger  
(Saturated fats 75% - Slow fat )

**(Show slide 15.)** Salad Dressing  
(Saturated fats 10%, - Slow fat)

**(Show slide 16.)** Donut  
(Saturated fats 65% - Slow fat)

**(Show slide 17.)** Cheese  
(Saturated fats 25%, no partially hydrogenated fats – Slow fat)

**(Show slide 18.)** Yogurt  
(Saturated fat 0%, no partially hydrogenated fats – Go fat)

As you'll recall from MyPlate, fat is not a food group. **(Show slide 19 with MyPlate as a reminder.)** However, as we've seen, fat is naturally found in a lot of the foods we eat. We should focus on choosing foods that contain unsaturated fats and occasionally eat foods with saturated fat.

Fat is an excellent source of energy for our bodies. Fat helps our bodies absorb vitamins and minerals and helps keep our bodies healthy. Can you think of ways to replace Slow fats with Go fats in our diets? **(Kids can brainstorm. Provide the following examples if necessary:)**

*For Breakfast: Instead of drinking whole milk, choose low fat or skim.*

*For Lunch: Choose trail mix or nuts instead of chips, cookies or French fries.*

*For Dinner: Try fish like salmon, you just might like it!*