



Jr. Chef Club II Cooking for Heart Health Lesson 7



Educator Information Preparing to Teach the Lesson

Healthier Fast Food Choices

Most youth today eat fast food. Whether they eat it on a frequent or occasional basis, students need to have the tools to determine which fast foods are healthier choices.

This lesson reviews basic information learned about fats—healthful oils and unhealthy solid fats, as presented in Jr. Chef Level 1, Lesson 8. The students apply their basic knowledge by evaluating the total fat, saturated fat, and trans fat content of fast foods. Students learn how to read fast food nutrition brochures and make healthier food choices based on fat content.

Review of Fats

For a complete review of the Educator's Information on fats, see the Level 1, Lesson 8. Selected material selected material from that lesson that is pertinent to this lesson is included below.

Types of Fat

For years the standard nutrition message was to decrease total fat. According to the 2005 U.S. Dietary Guidelines decreasing total fat should no longer be the emphasis. Instead, nutrition educators need to focus on helping consumers decrease **solid fats**—saturated fats and trans-fats—while consuming recommended amounts of healthful **oils**.

Healthful Oils

Foods rich in healthful oils include: canola and olive oils, nuts and nut butters, seeds, fatty fish such as salmon and tuna, avocados and olives. Margarine with no trans-fats is considered an oil. Oils contain the essential fatty acids and Vitamin E needed for good health

Unhealthful Fats

Solid fats are unhealthful. **Saturated fat** and **trans-fats** are types of solid fats.

Saturated fats are turned into cholesterol in the body. Too much cholesterol in the bloodstream can result in plaque formation on the walls of the arteries. Eventually this thickens the artery walls, and decreases blood flow through them. This can increase

blood pressure. Guidelines recommend that no more than 10 percent of calories come from saturated fat. The students' saturated fat budget is 20 grams (5 teaspoons).

Trans-fats seem to have even more ill effects on the body's health than saturated fat. Not only do they turn into cholesterol in the body, but they may play a role in decreasing immune function and increasing the risk of some cancers. Guidelines recommend keeping trans-fat to a bare minimum; experts suggest no more than 1–2 grams per day. This being the case, the 20 grams is not only the Saturated Fat Budget, but also the total Solid Fat Budget.

Health Implications of Solid Fats

Too much fat, especially the unhealthy types of fat (saturated fat and trans-fat) have been linked to many health problems such as:

- **Coronary Heart Disease.** This is the type of heart disease is most closely associated with diet. Eating too much solid fat (saturated and trans-fat) leads to high concentrations of it in the blood. This results in fatty buildup and formation of plaques in the arteries which eventually blocks blood flow. If oxygen-rich blood is blocked from getting to the heart, the victim suffers a heart attack. Use plastic models and/or pictures to show clogged arteries. High blood pressure is a typical complication of coronary heart disease because the fatty plaques thicken the blood vessel walls and makes them less elastic to accommodate blood volume. Think of an old rubber band. When it becomes less flexible if you stretch it, it will break.
- **Overweight and Obesity.** Because fat has more than twice-as-much energy as other macronutrients, it's easy to over eat. Eating more than you need can result in gaining more weight than is healthy. This extra energy is stored as adipose tissue (what we refer to as 'fat' on our body). Fat tissue is like 'dead weight' and adds stress to the cardio-vascular and skeletal systems just having to carry it around. This type of extra weight can raise the risk of developing high blood pressure, stroke, joint disease, and Type 2 Diabetes.
- **Type 2 Diabetes.** This used to be reserved for overweight adults but now children are being diagnosed with it in record numbers. As the rate of childhood obesity climbs so does the number of children who become diabetic. In this type of diabetes the body is no longer as sensitive to insulin as it used to be. Weight loss and exercise help the body regain its sensitivity.
- **Certain Cancers.** Breast, prostate, and colon cancer are associated with a high fat intake.

To help prevent the above conditions, children ages 4–18 should limit fat intake to no more than 25 percent to 35 percent of their calories according to the 2005 U.S. Dietary Guidelines. If we use an "average" of 30 percent for 4th and 5th grade students who typically eat 1600-2000 calories per day, this means they have a total fat "budget" of 53–66 grams of fat each day, maximum.

Fat in Fast Foods

Fast food is notoriously high in fat. The ingredients used to make fast food are typically high in fat themselves, such as regular (not lean) ground beef, whole milk ice cream, salad dressings using regular mayonnaise, cheese, special sauces, and mayonnaise added to sandwiches, wraps and more. In addition, many foods are fried, adding even more fat to them.

At home, one can make healthier versions of fast foods by changing ingredients and cooking methods. For instance, extra lean ground beef, reduced fat milk, 2 percent cheese, light ice cream, and light mayonnaise can significantly reduce the amount of fat in these types of food. Cooking methods, such as baking or pan-frying, as in the oven-roasted potatoes Jr. Chefs are preparing in this lesson, further reduce the fat content.

Typically fast food restaurants use a type of liquid shortening that is very high in trans-fats, thus making French fries and other fried foods high in this unhealthy fat. Because of the public's increased awareness of the harmful effects of trans-fats, many restaurants are changing the type of fat they use for frying, thus decreasing the amount of trans fats that end up in fast foods. Because of these recent changes, it's a good idea to check recent versions of a restaurant's Nutrition Facts Brochure or their website for the most up-to-date information on trans-fats.

Suggest that students do not need to avoid fast food altogether. They can still eat fast food with family and friends but they might try these strategies:

- eat fast food less often
- go to a deli or sandwich or sub shop instead, at least some of the time
- make lower fat choices, at least some of the time, when you do go to fast food restaurants

Fast Food Posters

Posters are included electronically. They contain the information that is listed below. These values are up-to-date as of May 2006. Each "X" equals 1 teaspoon or 4 grams of total fat.

	Total Fat
Burger Place	
Hamburger	2X
Cheeseburger	3X
Chicken "Nuggets" (6 pieces)	4X
Fish Sandwich	5X
Large Fries	8X
Small Fries	3X
Apple Pie	3X
Cookies & Cream Milkshake (12 ounce)	4X
Mexi-Fast Food	
Hard or Soft Beef Taco	2X
Taco Salad with Shell	12X

Bean Burrito	3X
Mexican Pizza	8X
Tostado	5X
Cheese Quesadilla	7X
Pinto Beans & Cheese Side Dish	2X
Mexican Rice	2X
Cinnamon Twists	1X

Sub Shop

Cold Cut Trio (6 inch)	4X
Tuna Salad Sandwich (6inch)	8X
Turkey Sandwich (6 inch)*	1X
Ham Sandwich (6 inch)*	1X
Potato Chips (baked)	1X
Bag of Chips (1 ounce)	3X
Cookie	4X

*(6 inch turkey and ham sandwiches without cheese)

Food Safety

One of the recipes in this lesson uses chicken. However, DO NOT handle or prepare raw chicken with students in a classroom setting because of the risk of salmonella contamination. Salmonella can cause food borne illness. Instead, encourage students to try the recipe at home, or ask school food service personnel to prepare the recipe. It is included in the cookbook because it is a student favorite and teaches the concept of a lower-fat version of a typical fast food.