

Volunteer Leader Training Guide

How to Eat Better With Less Fat, Sodium and Sugar

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Introduction

The relationship between diet and health is very important. Food alone cannot make you healthy. But good eating habits, based on moderation, can help keep you healthy and can even improve your health. The Dietary Guidelines for Americans suggest that we eat less fat, sodium and sugar and more complex carbohydrates, fruits, vegetables and fiber. One way to do that is to decrease the amount of fats, sodium and sugars that you eat daily.

Fat is a nutrient that helps the body function in several of ways; for example, it supplies the body with energy. It also helps other nutrients work. When it becomes fatty tissue, it protects organs and provides insulation, keeping you warm. But the body only needs small amounts of fat. Too much fat can turn into unwanted, excess pounds and increase cholesterol in the bloodstream.

On average, the higher an individual's salt intake, the higher an individual's blood pressure. Nearly all Americans consume substantially more salt than they need. Decreasing salt intake is advisable to reduce the risk of elevated blood pressure. Keeping blood pressure in the normal range reduces your risk of coronary heart disease, stroke, congestive heart failure and kidney disease. Many American adults will develop high blood pressure during their lifetime. Lifestyle changes can prevent or delay the onset of high blood pressure and can lower elevated blood pressure. One important lifestyle change is to reduce salt intake.

Eaten in large amounts, sugar may have a more noticeable effect on your blood sugar. Sweet foods, such as candy, cookies and soda pop, have little nutritional value. You receive empty calories devoid of the nutrients your body needs to function. In addition, those extra calories can lead to weight gain. The key with sugar is moderation, not deprivation. You can have your candy and eat it too, as long you eat a reasonable amount and eat it as part of a meal.

Target Audience

- EHC leaders
- Adult audiences

Objectives

Participants will:

- Learn general information about fats, sodium and sugars.
- Learn about different sugar substitutes.
- Learn how to decrease their fat, sodium and sugar intake.

Main Teaching Points

- What are fats, salts and sugars?
- What About Sugar Substitutes: Non-caloric Sweeteners?
- Healthy CHOICES: Reduce Fats, Sodium and Sugars.

Handouts

- Handout 1: Ingredient Substitutions That Are Heart-Smart
- Handout 2: Salt Substitutes
- Handout 3: Facts About Low-Calorie Sweeteners

Suggestions for Teaching

- Review the lesson introduction and study the major teaching points.
- Make copies of:
 - Handout 1: Ingredient Substitutions That Are Heart-Smart
 - Activity 1: Where's the Fat?
 - Activity 2: Think What You Drink, Parts I and II
 - Handout 2: Salt Substitutes
 - Handout 3: Facts About Low-Calorie Sweeteners

What Are Fats?

Fat is part of a healthy diet and is the most concentrated source of food energy (calories). However, the type of fat makes a difference to heart health, and the total amount fat consumed is also important. High intake of saturated, trans and mono/polyunsaturated fats increase the risk of unhealthy blood lipid levels which, in turn, may increase the risk of coronary heart disease. The requirement for fat intake should be less than 20 percent of calories.

Fats contain a mixture of:

- Saturated fatty acids – Major sources are butter, cheese, whole milk and cream, meat, poultry, chocolate, coconut, palm oil, lard and solid shortenings.
- Monounsaturated fatty acids – Olive oil and canola oil, as well as in many margarines and solid vegetable shortenings.
- Polyunsaturated fatty acids – Liquid vegetable oils (safflower, sunflower, corn, cottonseed and soybean), margarines and salad dressings.
- Trans fatty acids – When vegetable oil is hydrogenated to form margarine or shortening, trans fatty acids are formed.

Fats usually provide flavor and richness, improve texture and tenderness in baked goods, provide fat-soluble vitamins A, D, E and K and promote flakiness and lightness.

Saturated and trans fats increase your risk of coronary artery disease by raising your blood cholesterol levels. High blood levels of cholesterol can lead to narrowing of your arteries and an increased risk of heart attack and stroke. Keep your intake of saturated and trans fats low.

Polyunsaturated fats lower your blood cholesterol, but also seem to be susceptible to oxidation. Oxidation is a process that enables cells in your arteries to absorb fats and cholesterol. Over time, oxidation speeds the buildup of plaque, which narrows arteries.

In the right amounts, monounsaturated fats may help lower blood cholesterol and are resistant to oxidation.

Although both trans and saturated fats raise blood cholesterol levels, foods containing saturated fats are more prevalent in typical diets. Saturated fat intake should be no more than 10 percent of total calories.

Ask participants to share heart smart ingredient substitutions they have tried.

Distribute Handout 1, Ingredient Substitutions That Are Heart-Smart.

Conduct Activity 1, Where's the Fat? with participants.

Alternate activity: Borrow the fat vials from your family and consumer sciences agent and discuss the fat content of the foods.

What Are Salts (Sodium)?

Sodium is a mineral that is necessary for good health and is present in all foods. Generally most people eat more than they need. Sodium has several functions: regulate body fluids, maintain normal blood volume and conduct the normal function of nerves and muscles. If the body cannot get rid of the extra sodium, fluid builds up. The extra fluid increases the work of the heart and kidneys and may increase blood pressure in certain people. Eating less sodium may help control these problems. You will sometimes see the term *sodium* abbreviated "Na," as in NaCl (sodium chloride), commonly known as table salt. Sodium makes up 40 percent of table salt. The recommended sodium intake per day for most people is no more than 2,400 milligrams (mg).

Sodium is found in most foods you eat and drink. Sodium is a part of salt. Sodium is also found in other substances in foods. Most dietary sodium or salt comes from foods to which salt has already been added during processing or preparation.

Eating less salt and sodium may be better for your heart and your blood pressure. Foods that are often higher in salt include cured and processed meats (bologna, sausage and ham), canned vegetables and some cheeses. Sodium is also found in many seasonings like soy sauce, garlic salt and onion salt. Sodium provides or acts as the following:

- Flavor
- Preservative (meats and vegetables)
- Controls the action of yeast

Many foods now contain less sodium. These foods will have labels that say “reduced sodium,” “no-salt-added” or “low sodium.”

You can control sodium by limiting processed foods. Also, cut back on the salt you add to food in cooking and at the table. As you use less salt, your preference for salt will lessen, allowing you to enjoy the taste of the food itself.

How many of you have tried salt substitutes or herbs and spices in place of salt? Let’s look at some of these substitutes on our handout.

Distribute Handout 2, Salt Substitutes.

What Is Sugar?

Sugar is best known as a carbohydrate with a sweet taste. Sugar is a quick and easy fuel for the body to use. Sugar comes in many forms including white sugar, brown sugar, honey, corn syrup, molasses and maple syrup. Sugar provides or acts as the following:

- Flavor and volume
- Texture
- Tenderness and browning in baked goods
- A preservative in jams, jellies and pickles
- Food for yeast

Sugars occur naturally in many foods – milk, fruits, some vegetables, breads, cereals and grains – that also supply other nutrients. Some sugars are used as natural preservatives, thickeners and baking aids in foods. They are often added to foods during processing and preparation or when they are eaten.

Using sugar in moderation is for most healthy people; individuals with low calorie needs should use sugar sparingly. Sugars have been blamed for obesity, diabetes, heart disease and hyperactivity in children. However, scientific studies do not show a direct link between sugars and these conditions, except for tooth decay. Weight gain results from eating too many calories, regardless of their source. One of the easiest ways to reduce calories is to cut down on eating foods with added sugar.

Let’s do an activity to see how much sugar there is in one of America’s favorite beverages.

Conduct Activity 2, Think What You Drink.

What About Sugar Substitutes: Non-Caloric Sweeteners?

Non-caloric sweeteners are used in many foods. Most non-caloric sweeteners do not provide significant calories; however, foods containing non-caloric sweeteners may not always be lower in calories than similar products that contain sugars.

The FDA has approved four non-caloric sweeteners: saccharin, aspartame, acesulfame-K and sucralose. The body does not metabolize saccharin, acesulfame-K or sucralose; they pass through the body unchanged. The body does digest aspartame. Technically, it is a caloric sweetener, but the calories provided are insignificant. Three other non-caloric sweeteners have petitioned FDA and are awaiting approval: cyclamate, alitame and neotame.

- **Saccharin.** Used around the world since the turn of the century. It is 300 times sweeter than sugar. It is very stable in foods, but has a bitter aftertaste. The common brand name is **Sweet and Low**.
- **Aspartame.** Aspartame is 180 times sweeter than sugar. It contains two amino acids, phenylalanine and aspartic acid. It is an excellent sweetener with no aftertaste. Aspartame cannot be used in baking, because it breaks down with heat. Persons with PKU (phenylketonuria) should avoid its use. The common brand names are **Nutra-Sweet** and **Equal**.
- **Acesulfame-K.** Acesulfame-K is 200 times sweeter than sugar. Acesulfame-K is stable and does not break down in cooking. The common brand name is **Sunette**.
- **Sucralose.** Sucralose is about 600 times sweeter than sugar. Sucralose is extremely stable and does not break down in cooking. The common brand name is **Splenda**.

Sugar is not “bad” in terms of being harmful. But its use should be monitored because it contains more calories than nutrients. Eating too many sugary foods can cause individuals to bypass more nutritious foods or take in more calories than needed. This lead to weight gain. Weight gain and/or obesity lead to degenerative diseases such as cardiovascular disease, diabetes and hypertension and may aggravate other diseases such as arthritis.

Distribute Handout 3, Facts About Low-Calorie Sweeteners, and discuss.

Healthy CHOICES: Reduce Fats, Sodium (Salts) and Sugars

To Reduce Fats

- Use two egg whites or an egg substitute product instead of one whole egg. In some recipes, you can simply decrease the total number of eggs.
- Use margarine instead of butter. Look for margarines with liquid vegetable oil as the first ingredient.
- Use vegetable oils instead of solid fats. To substitute liquid oil for solid fats, use about one-fourth less than the recipe calls for. For example, if a recipe calls for 1/4 cup (4 tablespoons) of solid fat, use 3 tablespoons of oil. For cakes or pie crusts, use a recipe that specifically calls for oil because liquid fats require special mixing procedures and different proportions of sugar.
- Use small amounts of salad dressings and spreads such as butter, margarine and mayonnaise. Consider using low-fat or fat-free dressings for salads.
- Select lean cuts of meat and trim off visible fat. Remove skin from poultry.
- Bake, broil, grill, poach or microwave meat, poultry or fish instead of frying in fat.
- Use skim or low-fat milk instead of whole milk. For extra richness, try evaporated skim milk.
- Check the Nutrition Facts label to see how much fat and saturated fat are in a serving. Choose foods lower in fat and saturated fat.

To Reduce Salts (Sodium)

- Salts may be omitted or reduced in most recipes. Do not reduce salt in cured meats or pickled or brined vegetables because it acts as a preservative. It is best not to omit the salt in yeast breads because it helps control the rising action of yeast.
- Start with a gradual reduction. For example, if a recipe calls for 1 teaspoon of salt, try $\frac{1}{2}$ teaspoon. If you reduce the amount of salt gradually, you'll soon adjust to the less salty favor.
- Choose fresh or low-sodium versions of products. For example, choose low-sodium soups and broths, soy sauce, canned vegetables and tomato products.
- Rely on herbs and spices rather than salt for favor.
- Use garlic or onion powder instead of garlic or onion salt.
- Try fruit juice or wine for cooking liquid instead of broth or bouillon.
- Read the Nutrition Facts label to help identify foods lower in sodium within each group.
- Fresh fruits and vegetables are a lower sodium alternative to salted snack foods.

To Reduce Sugars

- To cut down on sugar, try new recipes or adjust old ones by using one-third less. To add flavor, use more vanilla or spice.
- Satisfy your longing for something sweet with fruits for snacks and desserts. Eat baked sweets and candies less frequently and/or in smaller portions.
- Read labels of commercially prepared products; many are high in sugar. Whenever possible, substitute home-prepared items made with less sugar.
- Decrease or eliminate sugar when canning or freezing fruits, or buy unsweetened frozen fruit or fruit canned in its own juice or water.
- Recognize the following types of sugars: sucrose, sorbitol, maple syrup, corn syrup, high fructose corn syrup, glucose, fructose, mannitol, molasses, dextrose, maltose, honey and lactose.
- Non-sugar sweeteners can be used in moderation, but their use is not necessary to decrease sugar in the diet. Some do not work well in cooked or baked foods, while others may leave a bitter aftertaste. They do not provide the volume or structure that sugar does. Rather than substituting, it's best to choose recipes especially tested with non-sugar sweeteners.
- If you are trying to lose weight and/or have diabetes, then select alternate sweeteners, such as saccharin (Sweet 'N Low[®]), aspartame (Equal[®] or NutraSweet[®]) or acesulfame-K (SweetOne[®]). Either saccharin or acesulfame-K can be used for cooking because they are not destroyed by heat. Aspartame is a protein-derivative and is destroyed by heat, losing its flavor.
- Avoid excessive snacking.

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Salt Substitutes: University of Connecticut and University of Rhode Island Family Nutrition Program.