

EATING FOR LIFE

Eat for life? Eat to improve your chances long and healthy life? Yes, you can.

At a time when we seem to be overwhelmed by conflicting diet and health messages, the National Cancer Institute (NCI) and the National Heart, Lung, and Blood Institute (NHLBI) have some good news: by making the right food choices, you may reduce your risk of developing cardiovascular disease and cancer.

These diseases take the lives of more Americans than all other illnesses and causes of death combined. Each day, about three out of every four deaths in the United States will occur as a result of cardiovascular disease or heart disease (like heart attacks and strokes) and cancer. This need not be. Although no diet can ensure you won't get a heart attack, stroke or cancer, what you eat can affect your health. This has been shown by research of the National Cancer Institute and the National Heart, Lung, and Blood Institute (two of this country's National Institutes of Health), along with the research of other scientists.

How does a person eat for life? It's easier and more enjoyable than you might think. The practical ideas in this booklet show you how to make healthful, tasty, and appetizing food choices at home and when you're eating out. They are consistent with the Dietary Guidelines for Americans, published by the U.S. Department of Agriculture and the U.S. Department of Health and Human Services. These seven basic guidelines are:

- * Eat a variety of foods.
- * Maintain desirable weight.
- * Avoid too much fat, saturated fat, and cholesterol.
- * Eat foods with adequate starch and fiber.
- * Avoid too much sugar.
- * Avoid too much sodium.
- * If you drink alcoholic beverages, do so in moderation.

The first two guidelines form the framework of a good diet: eat a variety of foods so that you get enough of the essential nutrients you need, and eat only enough calories to

maintain desirable weight. The next five guidelines describe special characteristics of a good diet-getting adequate starch and fiber and avoiding too much fat, sugar, sodium, and alcohol. Although the guidelines are designed for healthy adult Americans, these suggestions are considered especially appropriate for people who may already have some of the risk factors for chronic diseases. These risk factors include a family history of obesity, premature heart disease, diabetes, high blood pressure, or high blood cholesterol levels.

This pamphlet focuses on five guidelines that are particularly related to the prevention of heart disease and/or cancer: eat a variety of foods; maintain desirable weight; avoid too much fat, saturated fat, and cholesterol; eat foods with adequate starch and fiber; and avoid too much sodium.

Keep in mind that staying healthy requires more than just good nutrition. Regular exercise, getting enough rest, learning to cope with stress, and having regular physical checkups are important ways to help ensure good health. Checkups are especially important for early detection of cancer and heart disease. Another important way to reduce your risks of heart disease and cancer is not to smoke or use tobacco in any form. Controlling high blood pressure (hypertension) can also greatly reduce your risk of heart disease and stroke. Remember, three of the major risk factors for heart disease are largely under your control. They are smoking, high blood pressure, and high blood cholesterol.

How Do the Foods We Eat Affect Our Chances of Getting Cancer and Heart Disease?

There is much still to be learned about the relationship between the foods we eat and our risk of getting cancer and heart disease. The NHLBI and NCI are conducting a great deal of research to find out more about this relationship. There is, however, a lot that we know now. The relationship of diet to cancer and the relationship of diet to risk factors for heart disease are summarized below:

Obesity

- * We know that obesity is associated with high blood pressure, high blood cholesterol, diabetes, heart disease, and stroke. Extreme obesity has also been linked to several cancers. This means that if you are obese, losing weight may reduce your chances of developing these serious diseases or conditions. If you already suffer from

hypertension and are overweight, weight loss alone can often lower your blood pressure to normal levels. Because fat (both saturated and unsaturated fat) provides more than twice the number of calories provided by equal weights of carbohydrate or protein, decreasing the fat in your diet may help you lose weight as well as help reduce your risk of cancer and heart disease. Today, most Americans get about 37 percent of their daily calories from fat. Many experts suggest that fat should be reduced to 30 percent or less of calories.

Heart Disease

- * We know that high blood cholesterol increases your risk of heart disease, especially as it rises above 200 mg/dl (milligrams of cholesterol per deciliter of blood). The evidence is clear that elevated cholesterol in the blood, resulting in part from the foods we eat and in part from cholesterol made in the body, contributes to the development of atherosclerosis, a disorder of arteries that results in their narrowing and in reduced blood circulation. This condition can lead to a heart attack or stroke.

- * We know that blood cholesterol levels are greatly influenced by the amount of saturated fat and cholesterol found in many of the foods we eat. These raise blood cholesterol levels. (Of the two, saturated fat seems to be the major dietary factor which affects blood cholesterol.) To reduce your blood cholesterol level, it is important to eat less saturated fat and cholesterol. Saturated fat and cholesterol are often found together in foods. Saturated fat in the U.S. diet is provided primarily by animal products such as the fat in meat, butter, whole milk, cream, cheese, and ice cream. There are a few vegetable fats--coconut oil, cocoa butter, palm kernel and palm oils which are also high in saturated fat. Cholesterol is found only in animal products eggs, meat, poultry, fish and dairy products. Plant foods such as vegetables, grains, cereals, nuts, and seeds do not contain cholesterol. A few foods are high in cholesterol but relatively low in fat--for example, egg yolks and liver.

Watch out for items in the grocery store that are labeled "no cholesterol or, contains no animal fat." They may still contain a large amount of fat or saturated fat. Examples are peanut butter, solid vegetable shortening, nondairy creamer, and baked products like cookies, cakes, and crackers. For

people trying to lose blood cholesterol level, these foods should be chosen less often.

- * We know that substituting unsaturated fatty acids (which are usually liquid and usually come from plant sources) for saturated fats can help reduce high blood cholesterol. Safflower, corn, soybean, olive, and canola oils are major sources of unsaturated fats. The omega-3 fatty acids which are found in fish and seafood, may have a favorable effect on blood fat and reduce the risk of heart disease. No one is sure yet.
- * We know that there is an association between too much sodium in the diet and high blood pressure in some individuals. Sodium is a mineral that occurs naturally in some foods and is added to many foods and beverages as salt or other additives. Most sodium in the American diet comes from salt. One teaspoon of salt contains about 2 grams of sodium. In countries where people eat only small amounts of sodium, high blood pressure is rare. We also know that when some people with high blood pressure greatly reduce their sodium intake, their blood pressure will fall. Because Americans generally eat much more sodium than they need, it is probably best for most people to reduce the amount of sodium they eat. According to the National Academy of Sciences, a safe and adequate amount of sodium in the diet of the average adult is between 1 and 3.3 grams daily.

Some recent studies indicated that the substitution of monosaturated fats, such as those saturated fats may lower blood cholesterol.

Cancer

- * The National Cancer Institute estimates that about 80 percent of all cancers may be related to smoking, diet, and the environment.
- * The National Cancer Institute estimates that about one-third of all cancer deaths may be related to the foods we eat. Studies at the National Cancer Institute suggest that eating foods high in fiber may reduce risks of cancers of the colon and rectum. Adult Americans now eat about 11 grams of fiber daily according to NCI studies. NCI recommends that Americans increase the daily amount of fiber they eat to between 20 and 30 grams, with an upper limit of 35 grams. The NCI also emphasizes the importance of choosing fiber rich foods, not supplements. Good sources of fiber are whole grain breads and bran cereals,

vegetables, cooked dry peas and beans, and fruits.

- * We know that diets high in fats of all kinds have been linked to certain cancers, particularly those of the breast, colon, lining of the uterus, and prostate gland. Some studies have suggested that fat may act as a cancer promoter (an agent that speeds up the development of cancer).
- * There is some evidence that diets rich in vitamin A, vitamin C, and beta-carotene (the plant form of vitamin A) may help reduce the risk of certain cancers. The evidence we have about vitamins A and C comes from studies of these vitamins as they are found in foods. That is why NCI recommends that you eat a variety of foods rich in vitamins rather than relying on vitamin supplements. Good sources of vitamin A include yellow-orange vegetables such as carrots, winter squash, sweet potatoes and pumpkin; and yellow-orange fruits such as peaches, cantaloupes and mangoes. Sources of vitamin C include dark-green leafy vegetables such as kale, spinach, and watercress; broccoli and asparagus; and tomatoes. Some fruit sources of vitamin C are oranges, lemons, grapefruit, peaches, berries, and cantaloupe.
- * There is some evidence that vegetables in the cabbage family may help protect against cancer of the colon. These vegetables are also good sources of fiber, vitamins, and minerals. Cabbage family vegetables include cabbage, broccoli, cauliflower, Brussels sprouts, collards, kale, turnips, mustard greens, turnip greens, kohlrabi, watercress and radishes.

Reducing Your Risk of Heart Disease and Cancer

Based on what we know, the National Heart, Lung, and Blood Institute and the National Cancer Institute have joined together to suggest some ways you may reduce your risks of heart disease and cancer. These suggestions emphasize the need to eat a variety of foods each day. They also include some "mealtime strategies" that you can use to plan meals that avoid too much fat, saturated fat, cholesterol, and sodium, and that help you to get adequate starch and fiber. These strategies are consistent with the Department of Agriculture and Department of Health and Human Services Dietary Guidelines for Americans. These strategies should encourage you to think about the foods you eat, how to prepare them, and what food choices you can make when you go grocery shopping or eat away from home.

The key is following a Choose More Often approach. It doesn't mean giving up your favorite foods. It means taking steps to choose more often foods that are low in fat and high in fiber. For example, if you enjoy eating steak, choose a low-fat cut such as round steak, trim off the excess fat, broil it, and drain off the drippings. Pizza? To try a low-fat version that is rich in fiber, use a whole-grain English muffin or pita bread topped with part-skim mozzarella, fresh vegetables, and tomato sauce. And cookies or other desserts? In many recipes you can reduce the fat, and substitute vegetable oils or margarine for butter. To increase fiber, use whole wheat flour in place of white flour.

Here's how the Choose More Often approach works:

Choose More Often:

Low-fat meat, poultry, fish

Lean cuts of meat trimmed of fat (round tip roast, pork tenderloin, loin lamb chop), poultry without skin, and fish, cooked without breading or fat added.

Low-fat dairy products

1 percent or skim milk, buttermilk; low-fat or nonfat yogurt; lower fat cheeses (part-skim ricotta, pot, and farmer); ice milk, sherbet.

Dry beans and peas

All beans, peas and lentils--the dry forms are higher in protein.

Whole grain products

Breads, bagels, and English muffins made from whole wheat, rye, bran, and corn flour or meal; whole grain or bran cereals; whole wheat pasta; brown rice; bulgur.

Fruits and vegetables

All fruits and vegetables (except avocados, which are high in fat, but that fat is primarily unsaturated). For example, apples, pears, cantaloupe, oranges, grapefruit, pineapple, peaches, bananas, carrots, broccoli, Brussels sprouts, cabbage, kale, potatoes, tomatoes, sweet potatoes, spinach, cauliflower, and turnips, and others.

Fats and oils high in unsaturates

Unsaturated vegetable oils, such as canola oil, corn oil, cottonseed oil, olive oil, and soybean oil, and margarine; reduced-calorie mayonnaise and salad dressings.

To assure an adequate diet, choose a variety of foods daily including selections of vegetables; fruits; whole-grain breads and cereals; low-fat dairy products; poultry, fish, and lean meat, dry beans and peas. Here are some tips for following the Choose More Often approach in three important areas: grocery shopping, food preparation, and eating out.

Grocery Shopping

Focus on variety. Choose a wide selection of low-fat foods rich in fiber. Include whole grain breads and cereals, vegetables, fruits, low-fat dairy products, and poultry, fish, and lean meat. Although the goal is to reduce fat to 30 percent or less of calories, when choosing foods that do contain fat, try to choose ones that contain primarily unsaturated fats. For example, choose an unsaturated-rich margarine instead of butter; choose vegetable oils.

Read food labels. To help you find foods that are low in fat and cholesterol and high in fiber, get into the label-reading habit. Many nutritional labels on packaged foods show the amount of unsaturated and saturated fatty acids and the amount of cholesterol and fiber they contain. Check the type of fat on the ingredients list. Is it an animal fat, coconut or palm kernel oil high in saturated fat? Or, is it corn or soybean oil high in polyunsaturated fat? Choose a product with the lowest proportion of saturated fat. The label also tells you something else about a product. Ingredients are listed in order of amount from most to least by weight. So, when you buy a breakfast cereal, for example, choose one that has a whole grain listed first (such as whole wheat or oatmeal).

Pay attention to sodium. Many processed, canned, and frozen foods are high in sodium. Cured or processed meats, cheeses, and condiments (soy sauce, mustard, tartar sauce) are also high in sodium. Check for salt, onion or garlic salt, and any ingredient with "sodium" on the label. If the sodium content is given on the nutritional label, compare products and choose the ones with lower levels.

Food Preparation

Use small amounts of fat and fatty foods. There are lots of ways to use less fat. For example, when you sauté or stir-fry, use only 1/2 teaspoon of fat per serving. When you use margarine, mayonnaise, or salad dressing, use half as much as usual. And, decrease portion sizes of other high fat foods--rich desserts, untrimmed and fatty types of meat, poultry with skin, and fried foods, especially breaded foods.

Use less saturated fat. While reducing your total fat intake, substitute unsaturated fat and oils for saturated fat in food preparation. For example, instead of butter, use margarine or vegetable oil. One teaspoon of butter can be replaced with equal portions (or less) of margarine or 3/4 teaspoon of vegetable oil in many recipes without affecting the quality. Saturated fat may be reduced even more if you want to experiment with recipes. Poultry without skin and fish are good choices because they are often lower in fat and saturated fat than many meats.

Use low-fat alternatives. Substitute 1 percent, skim, or reconstituted nonfat dry milk for whole milk. Use low-fat yogurt, buttermilk, or evaporated skim milk in place of cream or sour cream. Try reduced-calorie mayonnaise and salad dressing in place of regular.

Choose lean meat. When you buy meat, choose lean cuts such as beef round, pork tenderloin, and loin lamb chops. Be sure to trim all visible fat from meat and poultry and remove poultry skin.

Use low-fat cooking methods. Bake, steam, broil, microwave, or boil foods rather than frying. Skim fat from soups and gravies.

Increase fiber. Choose whole grain breads and cereals. Substitute whole grain flour for white flour. Eat vegetables and fruits more often and have generous servings. Whenever possible, eat the edible fiber-rich skin as well as the rest of the vegetable or fruit.

Use herbs, spices, and other flavorings. For a different way to add flavor to meals, try lemon juice, basil, chives, allspice, onion, and garlic in place of fats and sodium. Try new recipes that use less fat or sodium-containing ingredients, and adjust favorite recipes to reduce fat and sodium.

Eating Out

Choose the restaurant carefully. Are there low-fat as well as high-fiber selections on the menu? Is there a salad bar? How are the meat, chicken, and fish dishes cooked? Can you have menu items broiled or baked without added fat instead of fried? These are important things to know before you enter a restaurant--fast food or otherwise. Seafood restaurants usually offer broiled, baked, or poached fish, and you can often request butter and sauces on the side. Many steak houses offer small steaks and have salad bars.

Try ethnic cuisines. Italian and Asian restaurants often feature low-fat dishes. though you must be selective and alert to portion size. Try a small serving of pasta or fish in a tomato sauce at an Italian restaurant. Many Chinese, Japanese, and Thai dishes include plenty of steamed vegetables and a high proportion of vegetables to meat. Steamed rice, steamed noodle dishes, and vegetarian dishes are good choices too. Ask that the chef cook your food without soy sauce or salt to decrease sodium. Some Latin American restaurants feature a variety of fish and chicken dishes that are low in fat.

Make sure you get what you want Here are just a few things you can do to make sure you're in control when you eat out. Ask how dishes are cooked. Don't hesitate to request that one food be substituted for another. Order a green salad or baked potato in place of french fries or order fruit, fruit ice, or sherbet instead of ice cream. Request sauces and salad dressings on the side and use only a small amount. Ask that butter not be sent to the table with your rolls. If you're not very hungry, order two low-fat appetizers rather than an entire meal, split a menu item with a friend, get a doggie-bag to take half of your meal home, or order a half-size portion. When you have finished eating, have the waiter clear the dishes away so that you can avoid postmeal nibbling.

Mealtime Strategies

We've given you some basic information on fat, fiber, and sodium. And, we've provided some tips on decreasing fat, saturated fat, cholesterol and sodium; and increasing fiber. But, how do you put it all together when it comes to breakfast, lunch, and dinner? These mealtime strategies should help.

Breakfast

Strategy #1--Choose fruit more often. Just a few great

choices in the fruit family are: cantaloupe, grapefruit, strawberries, oranges, bananas, pears, and apples.

Strategy #2--Choose whole-grain cereals and products more often. Examples are whole wheat or bran breads, bagels, and cereal.

Strategy #3--Try making pancakes and waffles with whole wheat flour instead of white flour and one whole egg and one egg white rather than two whole eggs. For a low-fat topping with fiber, try applesauce, apple butter and cinnamon, or fruit and low-fat plain yogurt.

Strategy #4--Fruit juice and skim milk are familiar breakfast drinks. For an extra boost in the morning, why not try a fruit smoothie made from juice, fruit and nonfat plain yogurt blended together. Other nonfat choices are seltzer water, coffee, and tea.

These breakfast choices are sound nutrition choices because they are not only low in fat and cholesterol but also provide fiber, vitamins, and minerals. Some foods that you should choose less often are sausage, bacon, butter, whole milk and cream (including commercial nondairy creamer). These foods are high in saturated fat and cholesterol.

Lunch

Strategy #1--Try a fiber-rich bean, split pea, vegetable, or minestrone soup. Use commercially canned and frozen soups and cream soups less often--they can be high in sodium and fat. If you make your own soup, use broth or skim milk to keep the fat content low.

Strategy #2--Have a bean salad or mixed greens with plenty of vegetables. For fiber include some vegetables like--carrots, broccoli, cauliflower, and kidney or garbanzo beans. For a low-fat dressing, try lemon juice or a reduced-calorie dressing. If you use regular dressing, use only a very small amount.

Strategy #3--Try sandwiches made with water-packed tuna, sliced chicken, turkey, lean meat, or low-fat cheese, and use whole-grain bread or pita bread. To decrease fat, use reduced-calorie mayonnaise, or just a small amount of regular mayonnaise, or use mustard. Mustard contains no fat.

Strategy #4--For dessert, have fresh fruit, low-fat yogurt, or a frozen fruit bar.

Strategy #5--Fruit juice and skim milk are good beverage choices. Club soda with a twist of lemon or lime, hot or iced tea with lemon, or coffee without cream are refreshing drinks.

At lunch, try to eat these foods less often: processed luncheon meats, fried meat, chicken, or fish; creamy salads, french fries and chips, richer creamy desserts, high-fat baked goods, and high-fat cheeses such as Swiss, cheddar, American, and Brie.

Dinner

Strategy #1--Eat a variety of vegetables. To increase variety, try some that might be new to you, such as those from the cabbage family (broccoli, Brussels sprouts, cauliflower, and cabbage), dark-green leafy vegetables (spinach and kale), and yellow-orange vegetables (winter squash and sweet potatoes). For old favorites, like peas and green beans, skip the butter and sprinkle with lemon juice or herbs. Or, how about a baked potato, with the skin, and topped with low-fat yogurt and chives, tomato salsa, or a small amount of low-fat cheese?

Strategy #2--Try whole wheat pasta and casseroles made with brown rice, bulgur, and other grains. If you are careful with preparation, these dishes can be excellent sources of fiber and low in fat. For example, when milk and eggs are ingredients in a recipe, try using 1 percent or skim milk, reduce the number of egg yolks and replace with egg whites. Here are some ideas for grain-based dishes:

--Whole wheat spaghetti with fresh tomato sauce;

--Whole wheat macaroni and chickpea stew in tomato sauce;

--Tuna noodle casserole, using water-packed tuna (or rinsed, oil-packed tuna), skim milk, and fresh mushrooms or sliced water chestnuts;

--Turkey, broccoli and brown rice casserole using skim milk and egg whites;

--Eggplant lasagna, made with broiled eggplant and part-skim mozzarella or ricotta cheese.

Strategy #3--Substitute whole-grain breads and rolls for white bread.

Strategy #4--Choose main dishes that call for fish, chicken, turkey or lean meat. Don't forget to remove the skin and visible fat from poultry and trim the fat from meat. Some good low-fat choices are:

- Red snapper stew;
- Flounder or sole florentine (make the cream sauce with skim milk);
- Salmon loaf (use skim milk, rolled oats, and egg whites);
- Baked white fish with lemon and fennel;
- Chicken cacciatore Italian-style (decrease the oil in the recipe);
- Chicken curry served over steamed wild rice (choose a recipe that requires little or no fat; "sauté" the onions in chicken broth instead of butter);
- Light beef stroganoff with well-trimmed beef round steak and buttermilk served over noodles;
- Oriental pork made with lean pork loin, green peppers and pineapple chunks served over rice.

Strategy #5--Choose desserts that give you fiber but little fat such as:

- Baked apples or bananas, sprinkled with cinnamon;
- Fresh fruit cup;
- Brown bread or rice pudding made with skim milk;
- Oatmeal cookies (made with margarine or vegetable oil; add raisins).

For many, the end of the workday, represents a time to relax, and dinner can be a light meal and an opportunity to decrease fat and cholesterol.

Snacks

Strategy #1--Try a raw vegetable platter made with a variety of vegetables. Include some good fiber choices:

carrots, snow peas, cauliflower, broccoli, green beans.

Strategy #2--Make sauces and dips with nonfat plain yogurt as the base.

Strategy #3--Eat more fruit. Oranges, grapefruit, kiwi, apples, pears, bananas, strawberries and cantaloupe are all good fiber sources. Make a big fruit salad and keep it on hand for snacks.

Strategy #4--Plain, air-popped popcorn is a great low-fat snack with fiber. Watch out! Some prepackaged microwave popcorn has fat added. Remember to go easy on the salt or use other seasonings.

Strategy #5--Instead of chips, try one of these low-fat alternatives that provide fiber: toasted shredded wheat Squares sprinkled with a small amount of grated Parmesan cheese, whole-grain English muffins, or toasted plain corn tortillas.

Strategy #6--When you are thirsty, try water, skim milk, juice, or club soda with a twist of lime or lemon.

The National Heart, Lung, and Blood Institute and the National Cancer Institute are committed to promoting good health and reducing the loss of life from heart disease and cancer. You can help. By using the ideas in this booklet, trying recipes that have been modified to decrease fat and sodium and increase fiber, and planning menus that are high in fiber and low in fat, especially saturated fat, you may reduce the risk of these diseases for yourself and for those you love.

So Eat Well, Eat Healthy... And Eat For Life!