

Therapeutic Lifestyle Changes Diet (TLC)

Low Cholesterol, Moderate Fat, Low Saturated Fat, Reduced Salt Program

Now is the time to begin with more intensive life-habit changing to reduce your risk for developing heart disease and having a heart attack. This approach is referred to as “The Therapeutic Lifestyle Changes (TLC) diet”.

These changes include watching intake of saturated fat, cholesterol, increasing use of soluble fiber, maintaining your weight to prevent weight gain over time. Extra weight contributes to heart disease and elevated blood pressure level.

Introduction

The purpose of this program is to help you to reduce your intake of sodium, cholesterol and saturated fat. Making changes in your nutrition habits will help reduce blood cholesterol or maintain desirable blood cholesterol levels, help control high blood pressure and reduce the tendency to retain excess fluid in the body.

Cholesterol

Cholesterol is important for certain body functions such as the building of brain, nerve and other issues. It also aids in the formation of hormones, bile acids and vitamin D. The liver produces half of the cholesterol that is found in the blood. The rest is provided by your diet.

Many of us eat too much cholesterol, saturated fats and trans fats – raising our blood cholesterol levels and increasing the risk of heart disease. Decreasing the saturated fats and trans fats in your diet and substituting monounsaturated and some polyunsaturated fats, will help lower your blood cholesterol.

Cholesterol is present only in foods of animal origin such as meat, poultry, seafood, eggs, dairy products, butter and lard. Foods of plant origin, such as vegetables, fruits and grains contain no cholesterol. Foods with no cholesterol may still contain saturated fats.

Triglycerides

Triglycerides are a type of fat used by your body as a source of energy. High triglyceride levels are a risk factor for heart disease.

Triglyceride levels over 190 have been shown to increase how thick your blood is, increasing your risk of heart disease. If your triglyceride level is high it is a good idea to exercise regularly, maintain a healthy weight and limit your intake of sugar, alcohol and dietary fat.

To help reduce triglyceride levels, you may also increase intake of Omega 3 fatty acids by eating more fish, using ground flaxseeds in foods or taking fish oil supplements. (See Omega 3 fatty acid section).

Blood Lipid Panel

You may need to change your diet based on results from a lab test called a “lipid panel”. There are several different types of fat in our body that are measured in a lipid panel. A lipid panel includes: Total Cholesterol, LDL Cholesterol, HDL Cholesterol and Triglycerides.

- **HDL** – the “healthy” cholesterol that acts like a scavenger and helps grab onto and then rid the body of LDL cholesterol. Desirable levels are: >40 for men, and >50 for women. The higher the number, the better!!
- **LDL** – the “lousy” cholesterol that adds to plaque build-up in the arteries. The goal for this type of cholesterol will vary based on your specific health needs. For people who have no known heart disease or diabetes: the goal is <130. For people with diabetes: the goal is <100. For people with known heart disease, your doctor may want you to have a level less than 70.
- **Triglycerides** – another storage form of fat that comes from fat in the diet (like the visible fat in meat or poultry skin) or from breakdown of certain sugars in the diet. This form of fat can also add to plaque formation in the arteries. Normal triglyceride level is <150, although some cardiologists recommend a level of 100 or less.

The fats and foods we eat can either help to decrease or add to an increase in the various forms of fats in the blood. **Physical activity** is one factor in helping to reduce LDL cholesterol and triglycerides. In addition, a high level of activity can help to increase HDL more than other lifestyle changes.

Plant Foods

Choose More Plant Foods

Plant foods such as fruits, vegetables, grains, beans and nuts do not contain cholesterol. Plant foods add to your health by providing fiber, vitamins and minerals to your diet.

Choose plant food servings each day:

- 1½- 2½ cups vegetables
- 1-2 cups fruits
- 6-11 grain servings = 6 or more grains (with at least 3 from whole grains)

Dietary Fiber

Eating more soluble dietary fiber has been linked with lowering blood cholesterol. Eating a variety of high fiber foods each day is suggested.

Foods high in **soluble fiber** include:

- Oatmeal
- Oat bran
- Dried peas
- Beans (navy, garbanzo, pinto, northern, butter, black, kidney, etc.)
- Lentils
- Barley

- Fresh fruits and vegetables (especially apples, oranges, pears, potatoes with skin)
- Psyllium
- Ground flax seed (1 Tbsp = 1 gram soluble fiber)
- Soybeans

It is recommended to get in 10-25 grams of soluble fiber per day. A good starting point is to include four soluble fiber foods per week.

Eating more **insoluble dietary fiber** also promotes regularity and prevents constipation.

Foods high in insoluble fiber include:

- Whole fiber cereal (look for folic acid fortified cereals)
- Whole grain breads
- Brown rice
- Bulgar
- Bran
- Wheat germ

Folate/Folic Acid

Plant foods also are a good source of folic acid (a B vitamin) which may help reduce heart disease and stroke. The recommended intake of folic acid for most adults is 400 mcg. Most multi-vitamin supplements provide 200-400 mcg of folic acid. Some of the best food sources for folic acid include:

Vegetables:

- Asparagus
- Brussel sprouts
- Black-eyed peas
- Spinach
- Peas

Fruits

- Cantaloupe
- Orange juice
- Oranges

Grains

- Fortified cereals
- Oatmeal
- Wheat germ

Nuts or seeds:

- Sunflower seeds
- Soybeans

Antioxidant Food Sources

Antioxidants can be found in many bright and colorful plant foods such as fruits, vegetables and whole grains. Antioxidants help the body repair cell damage that can lead to heart disease. Foods to include are:

Fruits	Vegetables	Cereal	Other
Apricots	Broccoli	Shredded wheat	Tea
Berries	Carrots	Wheat germ	Peanut butter
Peaches	Garlic		Nuts
Red grapes	Leafy green vegetables		Dark chocolate
Watermelon	Onions		
	Peppers		
	Sweet potato		

Try to get as much variety and color in your food choices during the week.

Meat and Protein Foods

Cholesterol is found in foods from animal sources such as meat, egg yolks, animal fats.

Most grocery stores stock select and choice grades of meats; choice grades contain moderate amount of fat; and prime cuts of meat have the highest amount of fat.

General Guidelines for Meat/Protein Intake:

- 5-6 ounces of lean meat, fish, poultry per day
- 1-2 egg yolks per week
- Low saturated fat intake
- Include meat and meatless meals that are low in saturated fat content.
- 1 ounce of meat, fish, poultry or cheese = 1 meat unit
- ½ cup beans, peas or lentils = 1 meat unit

Beans do not count in the 5-6 ounces of meat allowed per day and do not contain cholesterol but provide protein in your diet. If you are a vegetarian, ½ cup of beans will provide as much protein as 1 ounce of meat.

- Read labels to find meat products that are low in fat and cholesterol.

Very Lean Meat Options

1 ounce of meat =

7 grams of protein

0-1 grams of fat

35 calories

- White meat chicken or turkey (no skin)
- Fresh or frozen fish such as cod, haddock, halibut, flounder, trout, tuna or water packed canned tuna
- Wild game such as skinless duck or pheasant, venison, buffalo, ostrich
- Crab, shrimp, lobster, scallops, clams, imitation shellfish
- Fat-free cheese* or cheese containing 1 gram of fat or less per ounce*
- 2 egg whites (0 mg cholesterol) or ¼ cup plain egg substitute (1 mg cholesterol)
- Deli-type meats*, shaved meats*, chipped beef*, turkey ham* or processed sandwich meats* with 1 gram of fat or less per ounce
- These foods provide additional protein, but do not count as part of the meat allowance per day.
 - 1/2 cup cooked dried beans, peas or lentils
 - 1/4 cup fat free cottage cheese
 - 1/4 cup low fat or 2% cottage cheese
 - 1 cup fat free soy milk. If you are vegetarian, they do not count as a source of protein.

**Higher sodium choices.*

Lean Meat Options

1 ounce of meat =

7 grams of protein

3 grams of fat

55 calories

- Dark meat of chicken or turkey (no skin), chicken breast with skin, domestic duck or domestic goose (drained of fat, no skin)
- Lean pork such as fresh, canned, cured or boiled ham*, Canadian bacon*, pork tenderloin, center or loin pork chops
- USDA select or choice grades of lean beef, trimmed of fat including round, sirloin or flank steak, tenderloin, rib roast, chuck roast, rump roast, T-bone steak, porterhouse steak, cubed steak, ground round steak

- Roast lamb, lamb chops, leg of lamb
- Lean roast beef, lean veal chop
- Fish such as salmon, catfish, herring*, oysters, sardines*, tuna (drained, canned in oil)
- Wild game such as skinless goose or rabbit
- Cheese with 3 grams of fat or less per ounce
- Processed meats* with 3 grams of fat or less per ounce such as turkey, pastrami, kielbasa, sandwich meats or hot dogs
- ¼ cup cottage cheese
- 2 Tbsp. Grated parmesan cheese*
- Soy milk (reduced fat)

**Higher sodium choices.*

Medium Fat Meat Options

1 ounce of meat =

7 grams of protein

5 grams of fat

75 calories

- Dark meat of chicken (with skin), ground turkey, ground chicken, fried chicken with skin.
- Top pork loin, pork chop, Boston pork butt, and pork cutlet
- Sausage with 5 grams of fat or less per ounce*
- Most beef choices such as ground beef, meatloaf, corned beef*, short ribs, prime grades of trimmed meats
- Rib lamb roast, ground lamb
- Any fried fish product
- Cheese with 5 grams of fat or less per ounce*, such as feta or mozzarella
- ¼ cup ricotta cheese (2 ounces ricotta = 1 ounce of meat)
- 1 egg (limit yolks to 2 per week)
- 1 cup soy milk
- ¼ cup Tempe*
- ¼ cup tofu (or 4 ounces = 1 ounce of meat)

**Higher sodium choices*

High Fat Meat Options

Limit higher fat meat choices as they are high in saturated fat.

1 ounce of meat =

7 grams of protein

8 grams of fat

100 calories

- Pork spareribs, ground pork, pork sausage*
- Regular cheese such as American*, cheddar*, Monterey Jack*, or Swiss*
- Italian sausage*, bratwurst*, knockwurst*, polish sausage* smoked sausage*
- Processed meats with 8 grams or less fat per ounce such as bologna*, pimento loaf*, salami*, turkey hotdogs or chicken hotdogs**

**Higher sodium choices*

*** Regular hotdogs (beef, pork or combinations) count as 1 added fat choice also per ounce*

Fat Facts

The goal of this nutrition plan is a diet low in saturated fat. You should use more liquid oil and lower your use of solid fats. A moderate fat intake will give you a feeling of fullness after a meal.

Choose 6 - 8 fat servings per day as a good starting point. Your dietitian will work with you to personalize your fat amounts based on your calorie needs.

_____ fat servings per day

It is recommended to **avoid or limit saturated fat and trans fat.**

- **Limit Saturated Fat** – This is fat that is usually solid at room temperature. Saturated fat is found in high fat dairy products (like butter, whole milk or high fat cheese), marbled or fatty meats, poultry skin, coconut oil and palm oil. Foods high in saturated fat increase LDL levels. Typically, the harder the fat, the higher it is in saturated fat.
- **Limit Trans Fat** – Like saturated fat, trans fats can increase your LDL cholesterol levels. Most trans fats are artificially made when liquid oil is made into more solid fat by a process called hydrogenation. Look for “partially hydrogenated oil” on ingredient labels of food to spot foods that contain trans fats. Nutrition Facts labels will now list information on trans fat in foods. Keep in mind that if a product is less than 0.5 gm trans fat *per serving*, it can call itself trans-fat free. If you eat more than the serving amount and there is partially hydrogenated oil on the ingredient label, you may still be getting trans fats. Trans fat sources include hydrogenated margarines, vegetable shortening, cookies, dessert, crackers and deep fat fried foods made from partially hydrogenated vegetable oils.

- **Choose Monounsaturated Fats** – These fats are liquid at room temperature. They will start to harden if put in the refrigerator. These are the best kinds of fat for the heart as they can help to lower your LDL cholesterol without having a lowering effect on the HDL cholesterol. Some examples are: canola oil, olive oil (and olives) and peanut oil (and peanuts or peanut butter). Nuts are also rich in monounsaturated fats. A small handful of nuts (1-2 Tablespoons) can be a nice snack to also provide some protein and fiber that can help to curb appetite. Nuts are also good sources of magnesium and vitamin E. Keep your calorie needs in mind when eating nuts as the calories can add up fast!
- **Choose Polyunsaturated Fats** – are also liquid at room temperature and at refrigeration temperatures. Examples are: soybean oil, corn oil, sunflower oil, safflower oil and “vegetable” oil. These fats can help to lower LDL cholesterol, but if eaten in a large amount, they can also lower the HDL cholesterol. You will also find these fats in salad dressings and mayonnaise.

Omega 3 Fatty Acids

Omega 3 fatty acids are a type of polyunsaturated fat that can help protect your heart. The most complete form (contains EPA and DHA) and is found mostly in fatty ocean-type fish such as salmon, herring and tuna. It is recommended that we eat these types of fish at least twice per week (two 3-4 ounce servings per week).

If you do not like fish and have higher triglyceride levels, you may want to think about taking fish oil supplements. Fish oil supplements can have a slight blood thinning effect in very high doses. Typically, the recommended dose is 2000 to 4000 mg per day to help lower triglycerides. Please talk with your doctor about using a fish oil supplement.

A plant form of Omega 3 fats is found in ground flax seed. The flaxseed must be ground to get any of the Omega 3 fat benefit. Try to include two tablespoons of ground flax daily. Once the flax seed is ground it needs to be kept refrigerated to prevent rancidity.

Good Sources of Omega 3

- Fish: herring, salmon, sardines, tuna (chunk light). Aim for two servings per week.
- Plants: ground flaxseed, walnuts and oils such as canola, soybean and walnut.
- Omega 3 supplements labeled as “USP”, “GMP” or “NSF” have been quality tested.

Suggestions for Fat Choices

Monounsaturated Choices

In recommended amounts, monounsaturated fats help lower total blood cholesterol levels and plaque build-up in the arteries. Sources of monounsaturated fats include olive, canola and peanut oils.

The following are considered as a single serving = 5 grams of fat

- 1/8 medium avocado
 - 1 tsp. canola oil
 - 1 tsp. olive oil
 - 1 tsp. peanut oil
 - 2 tsp. peanut butter
 - 2 tbsp. nuts (almonds, mixed, peanut, pecans)
 - 1 tbsp. sesame seeds
 - 2 tsp. Tahini paste
 - 8 large black (ripe) olives*
 - 10 large green olives*
- *High in sodium*

Polyunsaturated Choices

Polyunsaturated fats also help lower blood cholesterol levels and are an acceptable substitute for saturated fat in your diet. Sources include safflower, sunflower, corn, soybean, sesame seed and cottonseed oils.

The following are considered as a single serving = 5 grams of fat

- 1 tsp. soft margarine
 - 1 tbsp. diet margarine (lower fat)
 - 2 tbsp. English walnuts
 - 1 tsp. corn oil
 - 1 tsp. safflower oil
 - 1 tsp. soybean oil
 - 1 tbsp. regular salad dressing*
 - 2 tsp. regular Miracle Whip®
 - 1 tbsp. sunflower seeds
 - 2 tbsp. liquid non-dairy creamer (made with soybean oil)
- *High in sodium*

Combination Fats / Spreads

There are now margarine like blends containing Omega 3 fats, plant sterols or plant stanols and combinations of monounsaturated and polyunsaturated fats.

The following are considered a single serving = 5 grams fat

- 1 tsp. Take Control®
- 1 tsp. Benecol®
- 1 Tbsp. Lite spread
- 1 tsp. Smart Balance®
- 1 tsp. Promise®

It is a myth that margarine is like plastic. Margarine is not a plastic. Margarine is a mixture of water, triglycerides, colorings, flavorings, salt, etc.

Saturated Fat

It's important to limit saturated fat. Saturated fat will raise blood cholesterol levels.

The following are considered as a single serving = 5 grams of fat

- 1 slice bacon*
 - 1 tsp. bacon fat*
 - 1 tsp. stick butter
 - 2 tsp. whipped butter
 - 2 tbsp. boiled chitterlings*
 - 2 tbsp. shredded sweetened coconut
 - 2 tbsp. half and half or cream
 - 1 tbsp. regular cream cheese
 - 2 tbsp. reduced fat cream cheese
 - 1 tsp. lard or shortening
 - 2 tbsp. sour cream
 - 3 tbsp. reduced fat sour cream
- *High in sodium*

Saturated fats are also found in sour cream, lard, salt pork, fatty gravies, and commercial whip toppings made with coconut or palm oil. Tropical oils like coconut, palm, palm kernel oil should also be avoided as these contain more saturated fat.

You may wish to try some fat free alternatives for substitutions to lower fat intake.

Fat Free Foods include:

- Fat free cream cheese
- Fat free salad dressing
- Fat free Miracle whip
- Fat free sour cream
- Fat free half & half (1 oz = 18 calories)

A quick guide for the best fat choices

- Soft, non-hydrogenated margarine and vegetable oils. Recommend margarines and spreads that state “non-hydrogenated” and “no trans fat” on the package.
- Monounsaturated oils (olive, canola or peanut oil)
- Polyunsaturated oils (safflower, corn, sunflower, soybean, sesame, or cottonseed)
- Salad dressings made with unsaturated oil

Hint

To ensure that you are buying an appropriate brand of margarine, please refer to the ingredient list on the package. The first ingredient listed should be liquid oil or a non-hydrogenated oil.

If the first ingredient listed is “hydrogenated fat” or “shortening”, the product likely contains trans fat.

Chocolate

Chocolate contains cocoa butter, which is a fat source, but is not a fat that raises blood cholesterol levels. However, it is advisable to limit chocolate as it does contribute to calories in the diet. Cocoa powder may be used in recipes.

Dark chocolate contains substances called flavonoids which are natural antioxidant that can help decrease risk of heart disease and blood clots.

White chocolate has no flavonoids. Dutch processed cocoa contains less flavonoid than dark chocolate. Dark chocolate has 2-4 times the antioxidants as in milk chocolate.

Plant Sterols and Plant Stanols

Plant sterols and stanols are found naturally in foods such as vegetables, nuts and seeds. The American Heart Association recommends two grams of plant sterols per day. Plant sterols and stanols help to lower LDL cholesterol, which helps to lower your risk of heart disease.

Plant sterols have been added to some foods, these include:

- ◆ Take Control®
- ◆ Benecol®
- ◆ orange juice
- ◆ granola bars
- ◆ cereals
- ◆ yogurt

Dietary Sources of plant sterols

Dietary Source	Serving Size	Calories	Fat	Free Plant Sterols**
Almonds	1 oz	164	14 g	0.03 g
Avocados	1 small	227	20 g	0.13 g*
Corn Oil	1 T	120	13 g	0.13 g
Olive Oil	1 T	119	13.5 g	0.03 g
Orange Juice with plant sterols	8 oz	110	0 g	1.0 g ⁺
Oat Bars with plant sterols	1 bar	160	4 g	0.4 g
Soy Beans	1 cup	254	11.5 g	0.09 g
Sunflower Seeds	¼ cup	186	16 g	0.19 g
Promise Take Control® Spread*	1 T	80	8 g	1.0 g ^{**#}
Promise Take Control® Spread, Light	1 T	45	5 g	1.0 g ^{**#}

USDA Nutrient Database unless otherwise specified.

*www.promisehealthyheart.com

+ www.minutemaids.com

**In some foods plant sterols are combined with a fatty acid from a vegetable oil to form a plant sterol ester (this improves the solubility of the plant sterols in foods low in saturated fat). The free plant sterols generally represent about 65% of the sterol ester.

⁺Contains 1.7g plant sterol esters, providing 1.0 g of plant sterols.

Cooking Tips

Healthy food preparation tips for meat, fish and poultry

- Trim all visible fat before cooking. Remove any skin from poultry after cooking.
- Bake, broil, or roast on a rack. Low temperature roasting (325-350 degrees F) promotes fat loss. Sauces made with a low salt tomato juice, vinegar, or wine help tenderize meat. Fruit sauces containing sugar will tenderize and add flavor, but need to be added towards the end of cooking to avoid surface burning.
- Prepare pans with non-stick sprays to eliminate need to use cooking oils or grease.
- Limit foods fried in fat. Seasoned flour coatings, corn flake crumbs, etc. may be used for breading. Bread meats with skim milk, egg whites or water and then bake.
- If you wish to weigh your meat, the meat weight is the meat after removing bones and fat, and after cooking. Three ounces of cooked meat is about equal to four ounces of raw meat. Some examples of meat portions are:
 - 2 ounces meat = 1 chicken leg or small thigh, ½ cup cottage cheese or tuna, ½ cup browned, drained hamburger.
 - 3 ounces meat = 1 medium pork chop, 1 small hamburger (approximately ¼ lb. Prior to cooking), ½ of a whole chicken breast, 1 unbreaded fish fillet, cooked meat, about the size of a deck of cards.
- Stir-fry in water, low sodium fat-free broth, fruit juice, or wine.
- Prepare soups and stews in advance to allow cooled, hardened fat to be removed.
- Ground meats (beef, pork, veal, lamb or poultry) should be labeled lean. If unsure, have the butcher grind meat to order, with lean cuts of meat.

Cooking without meat

1. Try more meatless meals
 - Use legumes such as black beans, butter beans, kidney beans, navy beans, pinto beans, baked beans, black-eyed peas, chick peas (Garbanzo beans), lentils, split peas, soybeans and soy products in your cooking. Legumes are high in protein and fiber but low in fat and do not contain cholesterol since they are a plant food.
2. Try adding soy products to your usual fare.
 - Soymilk is the liquid from soaked, ground and strained soybeans. Consider trying soy milk and soy yogurt as a compliment to or substitute for dairy products. Some brands of soymilk are fortified with vitamins and minerals and are good sources of calcium, vitamin D and vitamin B-12.
 - Soybeans contain more plant estrogen than prepared soy foods. Use in chili or bean casseroles.
 - Soyburgers contain textured soy protein and can easily be used for meatless meals.
 - Tempe (a thin cake like tofu) and Miso (a paste used for marinades, soups or flavoring) are made from fermented soybeans.
 - Tofu is soybean curd. It is spongy in texture and absorbs flavors from other foods. Often used in stir-fry dishes or cubed and added to salads.

- Soy flour can be substituted for up to 20 percent of regular flour in baked goods. For example, if a recipe calls for 3 cups of flour, use $\frac{1}{2}$ cup of soy flour and $2\frac{1}{2}$ cups of regular flour.

A guide to choosing low-saturated fat, low-cholesterol, moderate-salt foods

The food guide pyramid encourages a variety of foods. To eat a well-balanced diet you need to select foods from each of the following food groups every day. To select more foods that are low in saturated fat, use the far-left “choose” column more often. As a guide, the recommended portions are listed for each food group, but the number and size of each portion may be adjusted to reach or maintain your desirable weight.

Food Group & Daily Servings	Choose	Limit or decrease use
Breads, cereals, pasta, rice, dried peas and beans (include whole grains) 6-11 servings per day	Breads including whole grain, whole wheat, rye, pita bread, bagel, English muffin, dinner roll, rice cakes, cornbread, low-fat, low salt crackers, Rye Krisp®, Zwieback®, unsalted top crackers, hot cereals, dry cereals. Pasta, rice, noodles, spaghetti, dried peas, beans, lentils.	Croissant, butter roll, sweet roll, fried roll, doughnut, Danish pastry, granola type cereals, snack crackers with butter or saturated fat, pasta and rice packaged mixes made with cheese, cream or butter (macaroni and cheese, dry soup mixes, Hamburger Helper®)
Fruits and vegetables 1-2 cups of fruit per day 1½-2½ cups of vegetables per day	Fresh, frozen, canned or dried fruits and vegetables. Low sodium V-8™ Juice and tomato juice	Coconut, vegetables prepared in butter or cream sauce, salted tomato juice, vegetable juice, pickles, sauerkraut.
Dairy products 3-4 servings per day	Skim or fat free milk, buttermilk, fat-free evaporated milk, fat-free yogurt, and low-fat soft cheeses such as farmers and cottage. Hard cheese with no more than 2 to 6 grams of fat per ounce and 200 mg sodium per ounce, low fat cheeses.	Whole milk, cream, half-and-half, most non-dairy creamers, imitation milk products, whipped cream, regular cheeses, cream cheese and sour cream.
Meat, poultry, fish and shellfish 5-6 oz per day 2 servings fish per week	Leaner cuts of beef, lamb, pork, veal (see lists). Poultry without skin, fish, shellfish. Frozen dinners/entrees with 300-500 mg sodium per serving.	Prime grade cuts of meat, fatty cuts (brisket, short ribs, spareribs, goose, and domestic duck) organ meats, sausage, bacon, regular luncheon meats, frankfurters, salty TV dinners, and canned meats.

Food Group & Daily Servings**Eggs**

1-2 egg yolks per week

Choose

Egg whites and cholesterol-free egg substitutes

Limit or decrease use

Egg yolks

Fats & oils

Up to 6-8 tsp per day (5 grams of fat per tsp)

Unsaturated vegetable oils: corn, olive, peanut, canola, safflower, sesame, soybean, margarine (liquid or tub), commercial salad dressing, unsalted nuts.

Butter, coconut oil, palm kernel oil, lard, bacon fat, hydrogenated margarine, solid shortening.

**Sweets & snacks
in moderation**

Low fat frozen desserts (sherbet, sorbet, popsicles, frozen yogurt), low-fat cake, cookies (fig bars, angel food cake), jelly beans, hard candy, low fat snacks (plain popcorn), low sodium snacks.

Ice cream, high fat cakes, pies, chocolate bars, high fat snacks (chips, buttered popcorn), salty snacks

Shopping Tips

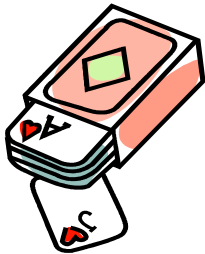
Here are some ideas to improve the health of your cupboards and refrigerator.

- Make a list and plan for meals and snacks.
- Don't go shopping when you are hungry so you can follow your list. It will help to limit you buying higher calorie and higher fat foods.
- Shop the perimeter of the store and buy whole foods, avoiding highly processed and refined foods. This would include whole wheat breads with wheat or rye as the first ingredient.
- Choose lean meats such as poultry without skin, lean cuts of beef like the loin, and meat without large amounts of marbling. Remember to purchase fish such as salmon, tuna and herring which have the heart protective omega 3 fats in them.
- Choose low fat milk and cheeses to ensure enough calcium and vitamin D intakes.
- Increase the amount of fruits and vegetables in your diet. Consider starting with one cup of fruit and vegetables per day and gradually add more. Think of using fresh or frozen and even canned product with "no salt added".
- Nuts – buy nuts with no salt added.
- Lentils – add to soups or casseroles. Lentils cook in the same amount of time as rice, so give lentils a try.

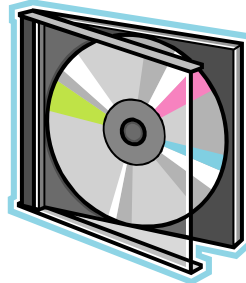
Portions

Size up your servings

Measure food portions so you know exactly how much food you're eating. When a food scale or measuring cup is not handy, you can still estimate your portion with this easy guide.



3 ounce of meat is about the size and thickness of a deck of playing card



A CD Case = 1 oz grain
(1 slice of bread or 1 pancake)



One teaspoon of butter or peanut butter is about the size of the tip of your thumb.



Baseball = 1 cup
 $\frac{1}{2}$ Baseball = $\frac{1}{2}$ cup

Lower Sodium Guidelines

National guidelines recommend 2.3-2.4 grams sodium per day (=2300 – 2400 mg per day). The typical American diet averages 4 - 8 grams sodium per day. To make changes try to include more fresh or frozen fruits and vegetables for lower sodium content in your diet.

Cook foods with spices instead of salt to add more flavor (See the spice list).

Lower sodium levels help to reduce fluid retention and blood pressure.

Some individuals may achieve therapeutic control by reducing to a moderate salt level (such as addition of only ½ tsp. salt in cooking per day); others may need to limit salt or avoid adding salt to foods.

The Moderate Salt Controlled Diet (NAS)

Following these suggestions will provide you with a 3 - 4 gram sodium diet. With this diet, one-half teaspoon of salt per person per day may be used at the table or in cooking. (Note: 1/2 tsp. of salt = 1200 mg of sodium)

- Instead you may use 1/2 tsp. of salt or if you choose not to cook with salt, you can use two servings of higher sodium condiments/sauces as listed below:
 - Accent® 1/2 tsp.
 - Barbecue sauce 1/4 cup
 - Chili sauce 2 tbsp.
 - Ketchup 3 Tbsp.
 - Meat tenderizer 1/4 tsp.
 - Monosodium glutamate (msg) 1/2 tsp.
 - Mustard, prepared 2 Tbsp.
 - * Salt 1/4 tsp.
 - Seasoned salt 1/4 tsp.
 - Soy sauce 1 tsp.
 - Low sodium soy sauce 2 tsp.
 - Steak sauce 2 Tbsp.
 - Taco sauce 1/4 cup
 - Tamari sauce 1 tsp.
 - Teriyaki sauce 2 tsp.
 - Worcestershire sauce 2 Tbsp.

- Choose foods processed with less salt. Avoid foods that have been processed with a lot of salt.

High sodium foods to limit or avoid:

Anchovies
Corned beef
Luncheon meats
Sausage
Bacon
Frankfurters
Pastrami
Sardines
Canned meat and fish
Ham
Pickled herring
Scrapple
Caviar
Dried beef
Processed cheese
Smoked meat, fish or fowl
Cheese spreads
Kosher meats
Salt pork
Cold cuts

Snack foods

Cheese curls
Olives
Potato chips
Salted crackers
Salted popcorn
Corn curls
Pickles
Pretzels
Salted nuts
Pickle relish

Seasonings

Catsup
Bottled sauce for gravies
Mustard
Soy sauce
Celery salt
Monosodium glutamate (MSG)
Onion salt
Steak sauce
Chili sauce
Meat tenderizer
Popcorn salt
Barbecue sauce
Garlic salt
Worcestershire sauce
Salt
Taco sauce
Horseradish
Hot pepper sauces
Lite Salt

Miscellaneous

Broth
Tomato juice and other vegetable juices
Bouillon cubes
Gravy
Canned soups
Buttermilk
Foods in a brine
Regular commercial salad dressing such as
French, Italian, Thousand Island, etc.
Pizza
Sauerkraut

Prepared entrees (canned stew, pot pies, TV dinners, frozen entrees, dry soup or dry casserole mixes) contain large amounts of sodium and therefore should be avoided.

A word about salt substitutes

Salt substitutes may be used unless your doctor tells you otherwise. Salt substitutes are made of potassium chloride and may be found in your grocery or drug store. Use sparingly, as too much salt substitute may taste bitter to some people.

Healthy herbs and seasonings for flavorful foods

Allspice	Nutmeg
Almond extract	Onion, onion juice or onion powder
Anise	Orange extract
Basil	Oregano
Bay leaf	Paprika
Caraway seed	Pepper, fresh green or red
Cardamom	Pepper, black, red or white
Celery seed	Peppermint extract
Chili powder	Pimento peppers for garnish
Chives	Poppy seed
Cinnamon	Purslane
Cloves	Rosemary
Cumin	Saffron
Curry	Sage
Dill	Savory
Fennel	Sesame seeds
Garlic, garlic juice, or garlic powder	Sorrel
Ginger	Sugar
Horseradish root or horseradish prepared without salt	Sugar substitute
Juniper	Tarragon
Lemon juice or extract	Thyme
Mace	Tumeric
Maple extract	Vanilla extract
Marjoram	Vinegar
Mint	Wine
Mustard, dry or mustard seed	Walnut extract

Spice combinations

Here are some tasty spice blends you may wish to try. They do not contain any sodium and will add flavor to unsalted foods. Simply mix ingredients well and place in a shaker. Commercial low sodium spice blends are also available.

Savory Seasoning

3 tps. ground mustard
1 tsp. garlic powder
3 tps. onion powder
1 1/2 tsp. white pepper
1 tsp. thyme
1/4 tsp. ground basil
3 teaspoons paprika

*Rub parsley flakes together in a small plastic bag. This will make the flakes small enough to fit through a shaker.

Flavor Delight

6 tps. onion powder
3 tps. garlic powder
1 1/2 tps. ground basil
3 tps. paprika
*6 tsp. dried parsley flakes

Spice Pizzazz

1 tsp. onion powder
1/2 tsp. white pepper
1 tsp. ground mustard
1 tsp. paprika

Food preparation hints

Limit salt used in cooking or added at the table to approximately 1/2-teaspoon salt per person per day.

Prepare foods with less fat (butter, cream sauces or cheese sauces). Look for modified recipes or foods that can be used (fat free sour cream, fat free cream, evaporated skim milk, etc.).

Breakfast Ideas for Heart Disease

Why is eating breakfast so important? Studies show that people who eat three meals per day (including breakfast) have improved insulin response and burn more calories during the day than those who eat the same number of calories the rest of the day, but skip breakfast. There also appears to be an improvement in LDL cholesterol (the “lousy” one) in those who eat breakfast.

Make the Most of Breakfast

- Go for FIBER!!! Try for a breakfast cereal that has a minimum of three grams of Dietary Fiber in a serving. Try to have a cereal that has at least one gram of soluble fiber per serving. Soluble fiber helps lower cholesterol by attaching to it and taking it out of the body. Insoluble fiber is good too as it helps with digestion and to prevent colon cancer.
 - **Men** – goal of 30-35 grams of fiber per day
 - **Women** – goal of 25-30 grams of fiber per day
- Some fiber, protein and fat at breakfast can help keep you from getting over hungry by noon. It can help prevent overeating at lunchtime. Whole-wheat bagels or toast with some peanut butter or fat-free cream cheese is a good idea.
- Try to **eat within one or two hours** of getting out of bed in the morning.
- Use skim, 1%, calcium-fortified skim or calcium-fortified 1% milk.
- Have some fruit for breakfast. Fruit naturally contains soluble fiber and many other antioxidants (natural chemicals and vitamins/minerals) that protect the body against disease. Many fruits contain between 2 and 4 grams of fiber per serving.
- Look for Plant Sterols on the ingredient list in margarine replacements such as “Take Control®” or “Benecol®”, “heart healthy” yogurts and fortified orange juice.
- Add Oat Bran to cooked cereal or muffins to provide even more soluble fiber.
- Adding Wheat Bran or Wheat Germ for more fiber and minerals.
- Add Ground Flax Seed to cereals, muffins, juice or yogurt to provide the plant form of Omega 3 Fatty Acids that are protective to the heart. Try for a goal of 2-4 tablespoons per day.
- Psyllium – which is found in some fiber products such as Metamucil®, is a soluble fiber. You can take this with a meal to reduce cholesterol.
- In a hurry? Consider a breakfast drink with added fiber to drink as you are running out the door or eat a breakfast cereal bar that contains at least 2 grams of fiber.

- Use whole-wheat flour for pancakes, waffles, or muffins. Use canola oil for mellow-flavored oil that is high in monounsaturated fats (good to lower LDL cholesterol). In any recipe, try replacing all-purpose flour with the same amount of whole-wheat flour. For yeast breads, you may need to add some gluten (found in the baking section of the grocery store) to help the bread rise well.
- Drink green tea or even black tea for more protective antioxidants.
- Keep egg yolks to two or less per week. Try egg substitutes in omelets when eating out.

Basic Muffin Recipe

2 cups whole wheat flour	3 tablespoons canola oil
½ teaspoon salt	1 tablespoon light corn syrup
1 tablespoons baking powder	1 teaspoon vanilla extract
½ cup white sugar (or Splenda®)	1 cup fresh or frozen fruit pieces
1 large egg (try the omega-3 fortified ones)	OR
1 cup skim or 1% milk	½ cup of chocolate chips or dried fruit

Preheat oven to 400 degrees. Coat a non-stick muffin pan with canola cooking spray or use muffin paper liners. Mix dry ingredients in a bowl. Mix together liquid ingredients and add to dry ingredients. Stir just until mixed together; don't over-mix. Add fruit or chips. Bake 15-18 minutes or until done.

Menu Ideas

Breakfast Choices

Unsweetened dry cereals – high fiber ones are the best (Cheerios®, Wheaties®, Shredded Wheat®, Bran Flakes®, Raisin Bran, Fiber One®, Bran Buds®, etc). Have fruit with the cereal to help fill you up and provide more fiber.

Oatmeal or other hot cereal – try adding some diced apples (may want to microwave the diced apple for one to two minutes to soften before adding to cereal) or applesauce, sliced banana, frozen berries. Can also add cinnamon and vanilla extract to flavor cereals. Add one to two tablespoons oat bran for additional fiber.

Pancakes, waffles or French toast – try some canned, fresh or frozen (thawed) fruits to top them. If you are making pancakes or waffles, choose the kind of mix that requires adding milk, eggs and oil. Then use canola oil and replace each whole egg with two egg whites or ¼ c. Egg substitute. Maybe even try some of the whole-wheat mixes. For added flavor, add vanilla and/or cinnamon to the batter. Frozen Nutragrain® waffles are a good and quick choice. Try lite syrup or sugar-free syrup for fewer calories.

Eggs – try to use one whole egg and add two egg whites for scrambled eggs or an omelet. Egg substitutes (such as Eggbeaters®) are also a good choice. Add some sautéed onions, green peppers, mushrooms or any other vegetable for an omelet. Try the lower fat cheese to top scrambled eggs or omelets. Canadian bacon* or ham* is a lower fat meat choice than regular bacon* or sausage*. If you do have some bacon or sausage, stick to two pieces and try to have them only one to two times per month.

Toast, English Muffins or Bagels – choose whole grain if possible. Use low sugar jam or jelly, peanut butter, or lite or fat-free cream cheese. Have fruit and a glass of milk with the bread to add some fiber, protein and calcium.

Lunch Ideas

Salads – Try a mixture of different kinds of greens. Please wash all salad greens before using. Mix fresh baby spinach leaves into iceberg lettuce or romaine lettuce. The precut, prewashed bags of greens work wonderfully! Add grape or cherry tomatoes, or other sliced tomatoes, cucumber slices, green pepper, carrots or any other fresh vegetable. Choose light or fat-free salad dressings or mix balsamic vinegar with some olive oil for a nice flavor and some monounsaturated fat. For added protein, try some deli roast beef or turkey sliced on top of the salad. Try low-fat or fat-free cheese shreds* to top the salad as well.

Sandwiches - Choose lean cuts of meat, low-fat bologna*, or deli meats* such as honey ham, roast beef, roast pork, roast turkey or smoked turkey*. If salad spreads sound good, try the light or fat-free salad dressing or Miracle Whip® to mix with canned tuna, crab or chicken. Add chopped onions, celery and seasonings for more flavors. Try fat-free* or low-fat cheese slices*, farmers cheese* or part-skim mozzarella cheese* on sandwiches. For a grilled sandwich, use butter-flavored pan spray to coat the outside of the bread for grilling instead of butter or margarine.

Soups* – most broth-based soups will be lower in fat. Lower fat cream soups are available in most grocery stores. Try soups with added dried beans (kidney, pinto, great northern, etc) for more fiber. Barley is also great in soups to provide a soluble fiber that can help lower cholesterol. Add barley to any homemade vegetable soup. When making homemade soup, boil the meat one-day in advance. Put the broth in the refrigerator overnight. This allows the fat to come to the top and solidify. Skim the fat off of the top of the broth and add the remaining soup ingredients.

Dinner/Supper Ideas:

Casseroles/Hotdishes – Brown 80/20 ground beef or leaner ground beef if desired. Place the browned ground beef in a strainer and rinse with hot water to remove more fat. Add lower fat cream soups or tomato soup as a base sauce for any casserole. Try adding canned kidney beans, pinto beans, great northern beans, etc for added fiber. Adding any frozen vegetable is also a great idea. Try brown rice in place of white rice in any rice casserole. It may require 20 minutes of extra time to bake to desired doneness with brown rice. Use Calci Skim or Calci 1% milk to add to the cream soup base. These are creamier in texture and more like a 2% milk without the extra fat.

Meats – Baking, broiling, grilling or using a crock-pot are great ways to prepare meats.

- Roasts– try adding dry onions instead of a package of dry onion soup mix. Add a can of cream of celery* or other cream soup*. Roasting it longer with a slow oven or using a crock-pot make the roast very tender and moist. The soups added give it ready-made gravy!
- Pork chops – again, after browned, some of the lower fat cream soups reconstituted with calcium added low fat milk make a good sauce/gravy. Marinating pork chops in a marinade prepared from a seasoning mix*, vinegar and canola or olive oil works great. Grilling or broiling them is good. There are now low sodium marinades available.
- Steaks – choose the lean cut of steak. Also watch portions and try for a 5-ounce steak or fillet. Marinating as above is helpful to make the meat more tender and juicy.
- Chicken – marinating and grilling chicken is good. It is fine to cook chicken with the skin on it, but don't eat the skin after it is prepared. Chicken breast or chicken thighs can be purchased in the boneless and skinless forms for adding to casseroles, soups or pasta dishes. Use olive oil to brown or cook chicken if adding it to a pasta dish.
- Barbecue sauces*– can be added to any meat. These are generally low in fat. If cooking ribs, choose the leanest boneless type of rib that you can find.

Side Dishes – Use a variety of side dishes with meats.

- Pasta – try some of the whole-wheat pastas. Tomato-based sauces are generally very low in fat. Alfredo sauces can be made with the packaged mixes and calcium-fortified low-fat milks. Just don't add the butter that it calls for it on the package. Add some frozen vegetables such as broccoli/cauliflower to the pasta as it is cooking. Add the sauce once the pasta is cooked.

- Potatoes – baked white potatoes can be jazzed up with fat-free sour cream or low fat cottage cheese. Chives can be added to the sour cream for more flavors if desired. Try to add only a minimal amount of butter or margarine on potatoes. For more fiber, eat the skin of the potato. Baked sweet potatoes are a fantastic way of getting some extra flavor and vitamins. Hashbrowns can be fried using butter flavored pan spray coating and maybe a small amount of canola oil. Adding onions and/or green peppers also gives extra flavor.
- Rice – try replacing brown rice in any rice side dish. It will require extra time to cook.

Vegetables –

- Try a variety of frozen vegetables. To save calories and increase your vegetable intake, cover half of your dinner plate with vegetables and one fourth with the meat and the other fourth with the pasta, potato or rice.
- Melt fat-free cheese on top of steamed vegetables for more flavor.

Recipes On-Line

<http://www.mealsforyou.com>

<http://www.kwwd.com>

<http://www.ivillage.com>

<http://www.deliciousdecisions.org>

<http://www.diabeticcooking.com>

How to choose from a Truck Stop menu.....

When you eat out, foods are higher in sodium and fat.

All You Can Eat Breakfast Buffet

Least Healthy	More Healthy	Most Healthy	Comments
Unlimited bacon, sausage, scrambled egg with cheese, hashbrowns, pancakes, waffles, French toast with regular syrup, pastries, caramel rolls.	Skim the bacon and sausage and have ham or Canadian bacon. Do not use cheese sauces. Take a few scrambled eggs and skip the hashbrowns.	Pancakes, waffles, French toast with sugar-free syrup & fresh or thawed frozen fruit. Canned fruit can be a good choice if you don't need to avoid sugar due to diabetes.	Skipping the buffet may be best – both for nutrition and the pocketbook.

Omelettes

Least Healthy	More Healthy	Most Healthy	Comments
Sausage, bacon and cheddar cheese and hashbrowns.	Ham, Swiss or American cheese, vegetables and hash browns cooked with little oil and butter on the side.	No cheese, eggbeaters and lots of vegetables. Ask for fresh, canned or frozen fruit in place of hashbrowns.	

Skillets

Least Healthy	More Healthy	Most Healthy	Comments
Sausage, bacon, cheddar cheese or Hollandaise sauce	No Hollandaise or cheese sausage	Skip the skillets all together – they are high in fat.	

Sausage & Gravy Over Biscuits With Eggs

Least Healthy	More Healthy	Most Healthy	Comments
Sausage and gravy over biscuits with eggs.	Eat no eggs with it.	Skip this entrée– choose oatmeal or other hot cereal & whole-wheat toast (margarine, butter or peanut butter on the side).	

Eggs With Breakfast Meat & Pancakes Or Muffin

Least Healthy	More Healthy	Most Healthy	Comments
Eggs with steak, chicken-fried steak, sausage or bacon and pancakes or muffin.	Eggs with ham or Canadian bacon and pancakes with sugar-free syrup.	Eggbeaters with ham or Canadian bacon and whole wheat toast, unbuttered with peanut butter on the side or multigrain pancakes with sugar-free syrup	Some muffins are very large and can be more sugar and fat than pancakes with 2 tablespoons of syrup. If meat portion is high, eat half and save the other half for later in the day.

French Toast, Waffles Or Pancakes

Least Healthy	More Healthy	Most Healthy	Comments
French toast, waffles and pancakes with butter and regular syrup and sausage or bacon	French toast, waffles and pancakes with butter on the side, ham or Canadian bacon. For those without diabetes, the fruit toppings are	French toast, waffles & pancakes with butter on the side, sugar-free syrup & either no breakfast meat or scrambled egg substitute	

Oatmeal Or Other Cereal And Toast

Least Healthy	More Healthy	Most Healthy	Comments
Sugared cereals (Frosted Flakes, Fruit Loops, etc) or hot cereal with whole milk or half-n-half. Buttered white toast with jelly.	Cold cereal (unsweetened) or Cream of Wheat, Malt-o-Meal with 2% milk. White toast with butter or peanut butter on the side and jelly.	Oatmeal, high fiber cold cereal with skim milk. Add a side of whole-wheat toast with peanut butter or margarine on the side.	

Burgers

Least Healthy	More Healthy	Most Healthy	Comments
Bacon cheddar cheeseburger, burgers with mayonnaise or special sauce, and fries or onion rings.	4 oz or smaller burger. If have cheese, use American or Swiss or Mozzarella. Skip the mayonnaise or special sauce. Ask for a salad with dressing on the side in place of fries or rings	No cheese. Load the burger with lettuce, tomato, pickles. Catsup and mustard are fine. Skip the mayo. Have a salad with fat-free or lite dressing on the side instead of fries or rings. A side of beans is also fine. Chiliburger (if chili contains beans) or a garden burger with cheese.	Cheese: 1 oz Cheddar = 9 gm fat 1 oz Swiss = 7 gm fat 1 oz American = 6 gm fat 1 oz Part-Skim Mozzarella = 4.5 gm fat

Sandwiches

Least Healthy	More Healthy	Most Healthy	Comments
Grilled bun or white bread or croissant with deep fried chicken or fish, tartar sauce or mayo. Club sandwiches with bacon and mayo. Egg or tuna salad on croissant.	French Dip or Ham and Cheese on a non-grilled bun. Grilled chicken sandwich with mayo on the side. Hold the bacon and mayo for a club sandwich. Skip the cheddar cheese.	Sandwiches on Whole Wheat bread. Use some of the lower fat cheeses. Ask for mustard. Skip the mayo and grilled breads.	Skip the fries and get a side salad with fat-free dressing or a side of beans or a side of broth-based soup.

Dinners

Least Healthy	More Healthy	Most Healthy	Comments
7-10 (or more) oz meat, liver or breaded/fried chicken or fish, loaded baked potato or hashbrowns or mashed potatoes with gravy, salad with regular dressing or cream soup, bun with butter, corn or peas for a vegetable.	5-6 oz meat, baked potato with butter and sour cream on the side or mashed with gravy on the side, broth-based soup or salad with lite dressing, hot vegetable, bun with margarine.	3-4 oz meat (no breading or frying), grilled or broiled chicken or fish, baked potato or rice. Use a minimal amount of sour cream or margarine on potato. Broth-based soup or salad with fat-free dressing. Hot vegetable besides corn or peas.	If meat portion is large, save half in a to-go container and use it for a sandwich later.

Dinner Buffets

Least Healthy	More Healthy	Most Healthy	Comments
Greater than 5-6 oz of meat, deep fried chicken or fish, buttered or sugared vegetables, mashed potatoes with gravy, cream soups.	5-6 oz Roasted meats, mashed potatoes with a small amount of gravy, broth soups, desserts other than pudding.	3-4 oz roast beef, roast pork, ham, broiled fish, roast chicken, baked potato with a small amount of sour cream or some cottage cheese on top, unbuttered vegetables.	

Salad Bar

Least Healthy	More Healthy	Most Healthy	Comments
Macaroni salads, marinated salads, lots of cheddar cheese, croutons, whipped cream salads, chips/cheese sauce. Regular fat dressings, real bacon bits, cream soups.	Lettuce, fresh vegetables, coleslaw, small amount of shredded cheese, sunflower seeds, lite dressing or vinegar and oil, canned fruits, broth-soups.	Lettuce, fresh vegetables, imitation bacon bits, fresh fruit, broth-soups, cottage cheese, beans, fat-free salad dressings.	

Pasta

Least Healthy	More Healthy	Most Healthy	Comments
Alfredo or cream sauces over pasta. Pasta with breaded and fried chicken or shrimp.	Spaghetti with red (marinara) sauce with meatballs.	Grilled chicken or shrimp or crab and steamed vegetables over a pasta with red or light wine sauce.	Limit the garlic bread. Ask to have whole wheat bread instead.

Desserts

Least Healthy	More Healthy	Most Healthy	Comments
Pie with whipped cream or ice cream, cheesecake, brownie sundaes with hot fudge sauce, cake with cream cheese frosting.	One scoop of ice cream, a cookie (3" diameter), canned fruit	Sherbet, frozen yogurt, pudding, fresh fruit	

Beverages

Least Healthy	More Healthy	Most Healthy	Comments
Regular pop, lemonade or sugared iced tea, whole milk	Juice, 2% milk, regular coffee or tea.	WATER, skim milk, diet pop, decaf coffee or tea.	

Keep in mind - - using a cooler packed with fresh fruits and some bagged carrots or other pre-cut vegetables is a good way to increase your intake of fruits and vegetables, get more fiber and decrease calories from high fat snacks. Bring along some unsalted pretzels or a bag of whole-wheat bagels and a jar of peanut butter for other snack alternatives.

Creative and healthy ingredient substitutions

Ingredients	Possible Substitutes
1 whole egg	¼ cup egg substitute or 2 egg whites
1 cup butter, hydrogenated shortening or lard	1 cup margarine or ¾ cup canola or peanut oil
½ cup hydrogenated shortening or lard	1/3 cup canola or peanut oil
1 cup milk	1 cup skim milk
Buttermilk	1 cup skim milk + 1 Tbsp. vinegar or lemon juice
1 oz hardened cheese	1 oz mozzarella cheese 1 oz ricotta cheese 1 oz parmesan cheese 1 oz (2 Tbsp.) cottage cheese, low fat/fat free 1 oz fat free or lower fat cheese
Cream cheese	Fat free or lower fat cream cheese
1 cup light cream (20%)	1 cup fat free cream or 1 cup evaporated skim milk
1 cup sour cream	1 cup plain fat free yogurt or 1 cup low fat or fat free cottage cheese + 2 Tbsp. lemon juice, blended until smooth 1 cup light or fat free sour cream
1 cup ice cream	1 cup sherbet 1 cup fruit sorbet 1 cup frozen yogurt, fat free/low fat 1 cup light ice cream or fat free ice cream
1 oz (1 square) chocolate	3 Tbsp. powdered cocoa + 1 Tbsp. oil
1 cup condensed soup	1 cup homemade white sauce (1 cup skim milk + 2 Tbsp flour + 2 Tbsp. margarine) + flavoring
Ex. Cream of Mushroom	Low fat condensed soup 1 cup white sauce + 1 can drained mushrooms
2 Tbsp. flour (as thickener)	1 Tbsp. cornstarch
White flour	½ cup white + ½ cup whole wheat ¾ cup white + ¼ cup wheat or bran
Mayonnaise, mayo-type dressing	Use light or fat free mayonnaise or substitute low fat sour cream or yogurt
Bacon (Two strips)	1 oz lean ham, 1 oz Canadian bacon or 1 oz turkey bacon 1 Tbsp. bacon bits
Meat / ground beef	Rinse with hot water after cooking. Substitute extenders like beans, grains,veggies, tofu or textured vegetable protein for some of meat in casseroles.

Recipe modifications and Recipes

Ingredient

Oil, margarine or shortening

In Baking

May substitute pureed fruit (e.g.; applesauce, pureed prunes) for all or some of the fat. Product will be moister.

May also substitute fat-free yogurt, fat-free sour cream or low-fat buttermilk for part of the oil or margarine.

Light margarine

May substitute light or fat-free margarine for part of oil or margarine. In baking, more flour may be needed.

Fat

Use no more than 1 to 2 Tbsp. of added oil or fat per cup of flour. Compensate by increasing low fat, moist ingredients such as buttermilk to add moistness.

Sugar

Reduce amount. Reduction can be up to ¼ to ½ of the original amount.

Salt

Reduce amount or omit completely. Only yeast breads need a small amount of salt.

Ingredient

Oil, margarine or shortening

Cooking

Non-stick spray

Vegetable juice

Wine vinegar

Reduced sodium broth

Egg substitute recipes

#1 Egg substitute

5 egg whites

green onions

yellow food coloring

1 Tbsp. instant mashed potatoes

1 Tbsp. skim milk

#2 Egg substitute

1 egg

3 egg whites

skim milk or 1 Tbsp. Water (may omit)

Stir together. Prepare only what you intend to use. Discard unused portion.

Low salt, low fat breakfast sausage

1 pound ground turkey

1/2 teaspoon salt

1/2 teaspoon pepper

1/2 teaspoon paprika

1 teaspoon ground sage

1 small onion, diced

1/4 cup dry bread crumbs

1 tablespoon oil

Place all ingredients into a bowl and mix well. Chill overnight and form into patties. Cook slowly in non-stick pan sprayed with non-stick cooking spray until brown. Makes 6 to 8 patties.

Nutrition information: Calories 129; Fat 5 grams; Sodium 17 mg.

Combine this with your own homemade egg substitute, toast, juice and milk and you will have a very nutritious breakfast.

Casserole sauce mix

2 c. dry skim milk	2 Tbsp. dried onion flakes
3/4 c. cornstarch	1/2 tsp. Pepper
1 tsp. basil (optional)	1 tsp. thyme (optional)
1/4 c. instant sodium free, chicken bouillon	

Combine all ingredients. Mix well. Store in airtight container. To make the equivalent of 1 can of soup: mix 1/3 cup of mix with 1 1/4 cups water in saucepan. Cook and stir over low to medium heat until thick. If desired, add one-teaspoon corn oil margarine, chopped mushrooms cooked celery or dried herbs while sauce is warm.

3 cups dry mix is equal to nine 10 1/2 oz. cans of cream soup.

Nutrition information: Calories 104, Fat 0g, Cholesterol 0mg, and Carbohydrate 16g. Protein 10g. Sodium 143 mg.

Rice Krispie bars

6 cups Rice Krispies®	1/4 cup margarine
40 large marshmallows	

Prepare: Use non-stick spray to coat 9x13 inch pan. Cook: Melt margarine and marshmallows in saucepan or microwave. Add Rice Krispies®. Spread into sprayed 9x13 inch pan.

Nutrition information: 1 Bar = Calories 86, Fat 2 gm, Carbohydrate 16g, Protein 1g. 24 Servings.

Low calorie gravy recipe

1/2 c. defatted beef drippings
1/2 cup beef broth
1 Tbsp. cornstarch + 2 Tbsp. water

Heat broth to boiling in saucepan. Mix together cornstarch and water. Add slowly to boiling beef broth, stirring constantly to avoid lumping. Cook over medium heat stirring occasionally, until thickened.

Note: Defatted beef drippings are beef drippings that have been cooled and the fat is taken off the top. Can substitute 1-cup low sodium canned beef or chicken broth (for the 1/2-cup beef drippings and 1/2-cup beef broth).

Nutrition information: Calories 7, Fat 0g, and Carbohydrate 2g. Source: MeritCare Nutrition Service/Food Service.

Baked donut holes

2 Tbsp oil	2/3 cup skim milk
1/2 cup sugar	2 cups white flour
1 Tbsp baking powder	1 tsp vanilla\
2 egg whites or 1/4 cup egg substitute	1/2 tsp nutmeg (or cinnamon)

Preheat oven to 400 degrees. In medium mixing bowl with mixer at medium speed cream oil, 1/2-cup sugar and egg whites or egg substitute. Add vanilla and skim milk: stir well. Sift dry ingredients and add gradually to the creamed mixture. Lightly oil small muffin tins and fill 2/3 full with batter. Bake 15-18 minutes, watch carefully.

While doughnuts are baking, prepare topping. Melt 1 1/2 Tbsp margarine and place in a small bowl. Mix 1/2 cup sugar and 2 tsp. cinnamon together in another small bowl. Brush warm doughnuts lightly with the melted margarine and then roll in the cinnamon sugar mixture.

Nutrition information: Calories 57, Fat 1 g., Protein 1 g. Makes 36 donut holes.
Source: The New American Diet by Sonya Connor and William Connor.

Multi Grain Omega Muffin

1/4 cup + 3 2/3 Tbsp. Margarine solids	1 cup hot water
1 1/2 cup sugar	1 cup Bran 100%
Cream margarine and sugar – scrape the bowl.	Bring water to a boil and add bran. Cool and set aside.
2 eggs	
Add eggs to sugar mixture. Mix well.	2 1/2 cup whole-wheat flour
1 3/4 cup + 3 Tbsp. Buttermilk	2 1/2 tsp. Baking soda
Add buttermilk to sugar and egg mixture. Mix well	Sift dry ingredients together, mixing until smooth.
	1 3/4 cup + 3 Tbsp. All Bran
	3 oz. Ground flax seed
	Stir in All Bran and rehydrated 100% bran

Makes 12 large muffins or 24 medium muffins. Bake at 325 for 25-30 minutes.

Nutrition Information:

Large muffin

393 calories
12 grams of fat
15 grams of fiber
71 grams carbohydrates (4 starch and 2 fat servings).

Medium muffin

196 calories
6 grams of fat
7.5 grams of fiber
35 grams carbohydrates (2 starch and 1 fat serving).

If you need further assistance with recipes or cookbook suggestions, please talk to your dietitian or look in the website: AmericanHeart.org

How do I read the label?

Most foods in the grocery store must now have a nutrition label and list of ingredients.

Claims like “low cholesterol” and “fat free” can be used only if a food meets government standards.

The “Nutrition Facts” label contains the information listed below:

Nutrition Facts			
Serving Size: 1 oz (28g/29 chips)			
<ul style="list-style-type: none"> Note portion listed. If you eat a different size than listed, you may need to multiply or divide the calories, fat and nutrients. 			
Servings Per Container: 10			
Amount Per Serving			
Calories		Calories from Fat	
<ul style="list-style-type: none"> This is helpful to know if you're cutting calories to lose weight. 			
			% Daily Value*
Total Fat	10g		15%
<ul style="list-style-type: none"> Too much fat may contribute to heart disease and cancer so it is good to compare different items. 			
Saturated Fat	1.5g		6%
<ul style="list-style-type: none"> Saturated fat is part of the fat in food which may raise blood cholesterol and the risk of heart disease or stroke. 			
Trans Fat	0g		
<ul style="list-style-type: none"> Trans fats are made when liquid oils are made into solid. Examples are hard margarines and shortening. Trans fats increase LDL and the risk of heart disease. 			
Monounsaturated Fat			
<ul style="list-style-type: none"> This is the best type of fat to have in the diet to promote more HDL (“healthy”) cholesterol and lower LDL (“lousy”) cholesterol. 			
Polyunsaturated Fat			
<ul style="list-style-type: none"> This is the second best type of fat to have in your diet to reduce LDL (“lousy”) cholesterol. 			
Cholesterol	0mg		0%
<ul style="list-style-type: none"> Too much of it in your diet can lead to heart disease or stroke. 			
Sodium	280mg		12%
<ul style="list-style-type: none"> Keep your salt intake low if you have high blood pressure or swelling. 			
Total Carbohydrate	16g		5%
<ul style="list-style-type: none"> Focus on healthy carbohydrates. Examples are fruits, vegetables and whole grain foods. 			
Dietary Fiber	1g		
<ul style="list-style-type: none"> Fruits, vegetables, whole grains, oats, peas and beans are good sources of fiber and can lower cholesterol. 			
Sugars less than	1g		
Protein	2g		
Vitamin A	6%	Vitamin C	0%
Calcium	4%	Iron	2%
Vitamin E	6%	Vitamin B6	2%
*Percentage Daily Values are based on a 2000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.			

Appendix A: Supplements, Vitamins and Minerals

Dietary Supplements

The use of dietary supplements is quite controversial. There is no clear scientific proof that supplements actually promote health and disease prevention. Because supplements are not considered drugs, the government does not require testing for effectiveness, content levels or safety. Some of the supplements we hear the most about include:

- Psyllium is a soluble fiber from the seed husk of the plantago plant. Ten grams of psyllium a day lowers total cholesterol by 5 percent and LDLs by 9 percent. Psyllium is found in Kellogg's® Bran Buds® (2/3 cup = 10 grams of psyllium), and Metamucil® or similar product (1 rounded tsp = 3.4 gm of psyllium).
*for those taking Metamucil® prescription medications should be taken one hour before or two hours after.
- Fish oils are abundant in cold water fish like salmon, mackerel, sardines and tuna. Fatty fish are a good source of omega 3 fatty acids, which help to lower triglyceride levels and reduce blood clotting. Check with your doctor before combining large doses of fish oils with other anti-coagulants (such as fish oil capsules and coumadin).
- Most people do not eat enough fruit and vegetables so it is a good idea to take a generic multi-vitamin mineral supplement. If you are male or older than 55 years, choose a senior vitamin.

Appendix B: Medications

Some food and drug interactions to be aware of:

- **Grapefruit and grapefruit juice** should be avoided if you are on any of these statin medications: Lovastatin (Mevacor), Simvastatin (Zocor), Atovastatin (Lipitor), Fluvastatin (Lescol).
- **Vitamin E** is used by many people for its antioxidant properties. If you are on a statin medication, please discuss Vitamin E supplementation with your doctor.
*For those patients taking Coumadin, Vitamin E should be avoided.
- **Foods high in vitamin K** may interfere with an anti-coagulant medication called Coumadin (Warfarin). Generally a **consistent intake of vitamin K** foods is recommended. Some herbal products contain a lot of vitamin K.
- **Green tea leaves** are high in vitamin K. Note: Vitamin K is a fat soluble vitamin. Only small amounts of this vitamin is transferred from the leave leaves into the tea that you drink. Do not eat or drink the tea leaves.

Vitamin K in tea = 1428 micrograms of vitamin K/100 grams of dry tea leaves (high) **but** only 0.03 micrograms vitamin K per 3.5 ounce (1/2 cup) serving of brewed tea.

If you are taking coumadin do not chew or consume the tea leaves (watch out for tea capsules too).

You can feel comfortable consuming a couple of small cups of brewed green tea on a daily basis. DO NOT drink gallons.
- **Cranberry juice** – use with caution when taking coumadin. Avoid excessive drinking of cranberry juice.
- **Salt substitutes** should be used with caution if you are taking ace inhibitors such as Lisinopril (Zestril, Prinivil), Vasotec (Enalapril), Capoten (Captopril) and or if you are taking potassium diuretics such as Dyazide (HCTZ/Triamterene) and Aldactone (Spironolactone).

Your pharmacist or doctor can inform you about any drug interactions. Review your medications with your pharmacist as they change for possible interactions.

Appendix C: Action Planning

When trying to reach a health goal, behavior changes made in a series of small steps will lead you there. Trying out new skills is the best way to fit them into your life. Remember that you are in charge of making changes that work for you.

The first step is to decide what your goal is. For instance, you may want to lower your cholesterol or add more plant foods into your diet. Once you have a goal, then decide on the steps or action plan that will lead you to it. Goals are sometimes too big to tackle all at once, so take it a step at a time.

What many people have found successful is to make action plans that are:

- Something you want to do, this is most important
- The plan is an actual behavior. In other words, someone could see you do it
- Your action plan answers these questions:
 - What will I do or accomplish? (Only snack on raw veggies)
 - When will I do it? (after supper)
 - How often will I do it? (3 evenings this week)
 - What days of the week? (Tuesday, Wednesday, and Saturday)

Another thing that makes an action plan work well, is to assess your confidence level. How confident are you that you can accomplish your whole action plan. One measurement is to rate your confidence level by picking a number between one and ten; one is not confident at all and ten is totally confident that you will accomplish the whole action plan. This will help you decide if the plan is too aggressive for now, or something you really want to do. Even small changes are important, because they will build confidence as you begin improving your health by lessening and preventing the effects of cardiovascular disease.

On the following page is a form you may find helpful as you decide on the steps you need to accomplish your goals.

Some possible ideas for action plans:

- I will eat three meals per day
- I will read this material
- I will eat five servings of fruit and vegetables each day
- I will eat no more than two egg yolks per week
- I will decrease my meat portion to 6 ounces per day (3 ounces = the size of a standard deck of cards)
- I will limit my fat servings to 6-8 servings per day
- I will drink fat-free or low fat milk
- I will add soluble fiber (oats, dry beans, and barley) to my diet three times per week
- I will try two different fats or oils to see what is acceptable to my family or myself



MY GOAL FOR _____
Month Year

Signature

- | | |
|-----------|-----------|
| 1. _____ | 17. _____ |
| 2. _____ | 18. _____ |
| 3. _____ | 19. _____ |
| 4. _____ | 20. _____ |
| 5. _____ | 21. _____ |
| 6. _____ | 22. _____ |
| 7. _____ | 23. _____ |
| 8. _____ | 24. _____ |
| 9. _____ | 25. _____ |
| 10. _____ | 26. _____ |
| 11. _____ | 27. _____ |
| 12. _____ | 28. _____ |
| 13. _____ | 29. _____ |
| 14. _____ | 30. _____ |
| 15. _____ | 31. _____ |
| 16. _____ | |

_____ (# Yes) Divided By _____ (# of Days) = _____ (decimal number)

_____ X 100 = _____ (percentage)

(decimal number) If you are meeting your goal 75% of the time you are doing really well.