

General Dietary Guidelines



 MARSHFIELD CLINIC
 MINISTRY HEALTH CARE



Two Leaders, One Leading Heart Care Team

A healthy diet and lifestyle are the best weapons you have to fight cardiovascular disease. Changing your habits can be tough.



Follow these strategies to kick start your way to a heart healthy diet.

Although you probably know some of your behaviors contribute to your risk of heart disease, it's often tough to change day-to-day habits. Whether you have years of unhealthy eating under your belt or you simply want to fine-tune your diet, try these heart-smart strategies to get started. Once you know which foods to emphasize and which ones to limit or avoid, you can create satisfying meal plans to keep you on track.

Limit Unhealthy Fats and Cholesterol

Fat

Fat is a major source of energy for the body and aids in the absorption of vitamins A, D, E, and K and carotenoids (provitamin A and an antioxidant). When eaten in moderation, fat is important for proper growth, development and maintenance of good health. It is recommended to limit your fat intake to 30% of your total daily calories.

Types of Fat

Saturated fat – raises total blood cholesterol even more than dietary cholesterol. Therefore, it is recommended to limit this fat intake to no more than 7% of your total daily calories. It is found in animal fat products such as butter, meat, poultry, whole milk and cheese; and vegetable fats such as hydrogenated shortening, palm oil, coconut oil and cocoa butter.

Trans fats (hydrogenated fats) – made when manufacturers add hydrogen to vegetable oil —a process called hydrogenation.

Hydrogenation increases the shelf life and flavor stability of foods. Though they are made from polyunsaturated fats, they act like saturated fats and increase LDL (bad cholesterol). It is recommended to limit trans fat intake to no more than 1% of your total daily calories.

Monounsaturated fat – found in oils such as olive and canola, can decrease LDL, while maintaining or even increasing levels of HDL (good cholesterol).

Polyunsaturated fat – found in oils such as safflower, sunflower, soybean, corn, sesame and many nuts and seeds, can decrease total cholesterol—both HDL and LDL.

Of the possible dietary changes, limiting how much saturated and trans-fats you eat is the most important step you can take to reduce your blood cholesterol and lower your risk of coronary artery disease.

Use low-fat substitutions when possible. For example, top your baked potato with salsa or low-fat yogurt rather than butter, or use sugar-free fruit spread on your toast instead of margarine.

When you do use fat, choose monounsaturated and polyunsaturated fats. When used in place of saturated fat, monounsaturated and polyunsaturated fats may help lower your total blood cholesterol, but moderation is essential. All types of fat are high in calories.

If you're not sure which fats or oils to use when cooking or baking, use this guide:

CHOOSE	AVOID
+ Olive oil	- Butter
+ Canola oil	- Lard
+ Margarine labeled "trans fat-free"	- Bacon
+ Cholesterol-lowering margarine, such as Benecol or Take Control	- Gravy
	- Cream sauce
	- Nondairy creamers
	- Hydrogenated margarine and shortening
	- Cocoa butter, found in chocolate
	- Coconut, palm and palm-kernel oils

Cholesterol

Cholesterol is a fat-like, waxy substance in our blood which is produced by the liver. We also get cholesterol from the animal products we eat. These include meat, eggs, fish, cheese, poultry and whole milk.

It's important to have some cholesterol in your bloodstream but too much is unhealthy. It can lead to plaque build-up in your arteries which increases your risk of heart attack and stroke. The American Heart Association recommends limiting your total cholesterol intake to no more than 300 milligrams per day and less than 200 milligrams if you have cardiovascular disease.

The two types of cholesterol most commonly referred to are:

Low-density lipoprotein (LDL) cholesterol – also known as bad cholesterol because it can build up in your arteries and lead to blockage.

High-density lipoprotein (HDL) cholesterol – also known as good cholesterol because it actually carries cholesterol away from your arteries. Therefore, it may help lower your risk of developing cardiovascular disease.

Choose Low-fat Protein

Meat, poultry and fish along with low-fat dairy products and eggs are some of your best sources of protein. But be careful to choose lower fat options, such as skim milk rather than whole milk and skinless chicken breasts rather than fried chicken patties.



Fish is another good alternative to high-fat meats. Some types of fish, such as cod, tuna and halibut, have less total fat, saturated fat and cholesterol than do meat and poultry. And certain types of fish are

heart healthy because they're rich in omega-3 fatty acids. These fats may help lower blood fats called triglycerides and may reduce your risk of sudden cardiac death. Omega-3 fats are

most abundant in fatty, cold-water fish, such as salmon, mackerel and herring. Lesser amounts are in flaxseeds, walnuts, soybeans and canola oil.

Legumes — beans, peas and lentils — also are good sources of protein and contain less fat and no cholesterol, making them good substitutes for meat.

Soybeans, one type of legume, may be especially beneficial to your heart. Regularly substituting soy protein for animal protein — for example, a soy burger for a hamburger — may help lower your cholesterol and triglyceride levels.



To help you decide which high-protein foods are best, use this guide:

CHOOSE	AVOID
+ Skim or low-fat (1 percent) milk	- Full-fat milk and other dairy products
+ Fat-free or low-fat dairy products, such as yogurt and cheese	- Organ meats, such as liver
+ Egg whites or egg substitutes	- Egg yolks
+ Fish, especially fatty, cold-water fish	- Fatty and marbled meats
+ Skinless, white-meat poultry	- Spareribs
+ Legumes	- Cold cuts
+ Soybeans and soy products, for example, soy burgers	- Frankfurters, hot dogs and sausages
	- Bacon
	- Fried, breaded or canned meats

Eat More Vegetables and Fruits



Vegetables and fruits are low in calories, are good sources of vitamins and minerals, and are rich in dietary fiber. A diet high in soluble fiber, the kind found in fruits and vegetables, can help lower blood cholesterol and reduce your risk of heart disease. Vegetables and fruits also contain phytochemicals, substances found in plants that may help prevent cardiovascular disease.



Keep a variety of fresh fruits and vegetables handy to grab for a quick snack. Choose recipes that have vegetables or fruits as the main ingredient, such as vegetable stir-fry or fresh fruit mixed into salads. Don't smother vegetables in butter, dressings, creamy sauces or other high-fat garnishes. Avoid fruits in cream or heavy sauces.



This guide can help you sort out which fruits and vegetables offer the most health benefits:

CHOOSE	AVOID
<ul style="list-style-type: none"> + Fresh or frozen vegetables and fruits + Low-sodium canned vegetables + Canned fruit packed in juice or water 	<ul style="list-style-type: none"> - Coconut - Creamy sauces - Fried or breaded vegetables - Canned fruit packed in heavy syrup

Select Whole Grains



Daily Recommended Fiber Intake

WOMEN

- 25 grams per day, for women younger than 50
- 21 grams per day, for women older than 50

MEN

- 38 grams per day, for men younger than 50
- 30 grams per day, for men older than 50

Whole grains haven't had their bran and germ removed by milling, making them good sources of fiber — the part of plant-based foods your body can't digest — and other nutrients. Whole grains are also a source of vitamins and minerals, such as thiamin, riboflavin, niacin, vitamin E, magnesium, phosphorus, selenium, zinc and iron and also contain phytochemicals. Various nutrients found in whole grains play a role in regulating blood pressure and heart health.

You can increase the amount of whole grains in your diet by making simple substitutions. For example, choose whole-grain breads instead of those with refined white flour, whole-wheat pasta over regular pasta and brown rice instead of white rice. Select high-fiber cereals for breakfast, such as bran flakes or shredded wheat, instead of muffins or doughnuts. And select whole-wheat flour rather than white flour when buying or making baked goods.

Use this guide to help you choose cereals, breads, rice or pasta:

CHOOSE	AVOID
<ul style="list-style-type: none"> + Whole-wheat flour + Whole-grain bread, preferably 100% whole-wheat or 100% whole-grain bread + High-fiber cereal with 5 or more grams of fiber per serving + Brown rice + Whole-grain pasta + Oatmeal 	<ul style="list-style-type: none"> - Frozen waffles - Corn bread - Quick breads - Granola bars - Egg noodles - Buttered popcorn - High-fat snack crackers - Muffins - Doughnuts - Biscuits - Cakes - Pies - Chips

Limit Sodium

Sodium is essential for good health. You must have a certain balance of sodium and water in your body fluids and tissues at all times. Sodium and water work together to maintain this balance – a certain amount of salt maintains the right amount of water in the body and vice versa. Too much salt or too much water will upset the balance and cause fluid retention and increased blood pressure.

Our body needs small amounts of sodium, about 250 milligrams. The average American consumes about 4000-6000 milligrams per day! Table salt is the largest dietary source of sodium (40%). The American Heart Association recommends limiting daily sodium intake to no more than 2300 milligrams, which is about one teaspoon. *Ways to limit sodium:*



- Choose fresh, frozen or canned food items without added salt.
- Select unsalted nuts or seeds, dried beans, peas and lentils.
- Limit the amount of salty snacks like chips and pretzels.
- Avoid adding salt and canned vegetables to homemade dishes.
- Select unsalted, fat-free broths, bouillions or soups.
- Select fat-free or low-fat milk; low-sodium, low-fat cheeses and low-fat yogurt.
- When dining out, ask for your dish to be prepared without salt.
- Use spices and herbs to enhance the taste of your food.

Practice Moderation and Balance



Limit Portions

Being aware of the foods we should eat is the first step in a healthy diet. We also need to know the amounts of the food we ingest. Eating too much food leads to excess calories, fat and cholesterol. Be aware of and take proper serving sizes to control the amount of food you consume.

A serving size is a specific amount of food, defined by

common measurements such as cups, ounces or pieces.

- A *serving of protein* is about 2 or 3 ounces of cooked meat, poultry or fish (about the size of a deck of cards). Others would be 2 tablespoons of nut butters, 1 egg, or 1/3 cup of dry beans or nuts.
- A *serving of bread* is equal to 1 slice, about 1 cup (1 oz.) of prepared or 1/2 cup of cooked cereal, or 1/2 cup of rice or pasta.
- A *serving of fruit* is equal to 1 piece of fresh fruit, 1/2 cup of chopped fruit, or 1/2 cup of fruit juice.
- A *serving of vegetables* is equal to 1 cup of raw, leafy vegetables, 1/2 cup other vegetables (cooked or raw) or 1/2 cup of vegetable juice.
- A *serving of dairy* is equal to 1 cup of milk or yogurt, or 1-1/2 oz. of natural or 2 oz. of processed cheese.

Balance

A healthy diet is also about balance. Keeping your meat portion to the size and thickness of a deck of cards will allow room for plenty of fruits, vegetables and whole grains.

Certainly you are allowed to indulge every now and then. Just be careful not to let it be an excuse to give up your healthy eating. Those infrequent indulgences will be balanced out over time if you maintain a healthy diet for the most part.

Know How Many Calories You Should Eat



To avoid gaining weight over time, you should aim to burn up as many calories through basic metabolic function and physical activity as you take in. To know whether you're on track, you need to be able to estimate how many calories you need based on your age, gender and level of physical activity.

The calorie ranges shown in this table allow for the needs of people of different ages within an age group.

		Activity Level * and Estimated Calories Burned		
Gender	Age	Sedentary	Moderately Active	Active
Female	19-30	2,000	2,000-2,200	2,400
	31-50	1,800	2,000	2,200
	51+	1,600	1,800	2,000-2,200
Male	19-30	2,400	2,600-2,800	3,000
	31-50	2,200	2,400-2,600	2,800-3,000
	51+	2,000	2,200-2,400	2,400-2,800

* ACTIVITY LEVEL:

Sedentary means you have a lifestyle that includes only the light physical activity associated with typical day-to-day life.

Moderately active means you have a lifestyle that includes physical activity equivalent to walking about 1.5 to 3 miles per day at 3 to 4 miles per hour, in addition to the light physical activity associated with typical day-to-day life.

Active means you have a lifestyle that includes physical activity equivalent to walking more than 3 miles per day at 3 to 4 miles per hour, in addition to the light physical activity associated with typical day-to-day life.

Reading Food Labels

Reading labels can help you make wise food choices. Most packaged foods in the grocery store list nutrition information on the package in a section called the Nutrition Facts.

- The Nutrition Facts tell you the serving size and the amount of various nutrients such as total fat, saturated fat, cholesterol, sodium, and fiber per serving.
- Nutrient content claims such as “low fat” provide a reliable description of the product.
- The list of ingredients shows the ingredients in descending order by weight.
- Foods that are exempt from the label include foods in very small packages, foods prepared in the store, and foods made by small manufacturers.

Nutrition Facts	
Serving Size 1 Package (255 g)	
Servings Per Container 1	
Amount Per Serving	
Calories 340	Calories from Fat 80
% Daily Value*	
Total Fat 9g	14%
Saturated Fat 1.5g	6%
Trans Fat 0g	
Polyunsaturated Fat 3.5g	
Monounsaturated Fat 3g	
Cholesterol 20mg	6%
Sodium 650mg	27%
Potassium 230mg	7%
Total Carbohydrate 49g	16%
Dietary Fiber 2g	10%
Sugars 15g	
Protein 15g	
Vitamin A 4%	Vitamin C 4%
Calcium 4%	Iron 6%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
Calories: 2,000 2,500	
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Potassium	Less than 3,500mg 3,500mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g

Most of the information on the food label is based on a person eating a 2,000 calorie a day diet. Your recommended daily calories may be higher or lower, depending on your age, gender, and how active you are. Keep this in mind as you are reading the label. You may need more or less of certain nutrients than the average person. The footnote at the bottom of the label shows the number of total grams of certain nutrients you need for a 2,000 calorie a day diet and sometimes also for a 2,500 calorie a day diet.

A) Serving Size: At the top of the nutrition label is the serving size and number of servings in the package. The serving size is usually less than most people eat. If you eat 2 servings, make sure you double the calories and all of

the daily values that follow on the rest of the nutrition label. If you are comparing two foods side by side, make sure the serving sizes are the same.

B) Calories: The number of calories per serving is also listed at the top of the label. A calorie is a measure of energy use. A pound of fat stores 3500 calories. To lose a pound of fat per week you would need to eat 500 fewer calories per day than you usually eat, or burn 500 more calories per day through exercise while maintaining your normal calorie intake.

C) Calories from Fat: The number of calories from fat is listed to the right of the total calories. The general rule is that less than a third of your daily calories should come from fat. If the food has 200 calories and 100 calories are from fat, then you know that the food is high in fat.

D) % Daily Value (%DV): The food label also shows what percentage of the recommended amounts of a nutrient you are getting when you eat one serving. Remember that this is based on a 2,000 calorie a day diet. A %DV is less than 5% is low and over 20% is high.

You will notice that some of the nutrients (sugar, protein and trans-fat) do not have a %DV. In these cases, you can compare the amounts of these nutrients to other similar products to see which is the healthiest. Always try to choose the one with the lowest amount of sugar and trans fat.

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Amount Per Serving	
Calories 340	Calories from Fat 80
% Daily Value*	
Total Fat 9g	14%
Saturated Fat 1.5g	6%
Trans Fat 0g	
Polyunsaturated Fat 3.5g	
Monounsaturated Fat 3g	
Cholesterol 20mg	6%
Sodium 650mg	27%
Potassium 230mg	7%
Total Carbohydrate 49g	16%
Dietary Fiber 2g	10%
Sugars 15g	
Protein 15g	
Vitamin A 4% • Vitamin C 4%	
Calcium 4% • Iron 6%	
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
Calories: 2,000 2,500	
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
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Potassium	Less than 3,500mg 3,500mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g



Plan Ahead: Creating Daily Menus

Now that you know the foods you should eat and which ones to limit or avoid, it's time to make a commitment to your heart health.

Create daily menus using these guidelines:

- Select foods for each meal and snack.
- Emphasize vegetables, fruits and whole grains.
- Limit animal products, fatty foods and sodium.
- Watch portion sizes and calories.
- Add variety to your menu choice.

Refer to the **My Pyramid Steps to a Healthier You** information (next page) for help with meal planning.

For more information on the Marshfield Clinic and Ministry Health Care heart care team, ask your healthcare provider or visit www.oneheartcareteam.org.

References:

- American Heart Association
- USDA
- American Dietetic Association

Steps to a healthier you



Grain Group

Make half your grains whole

- Eat at least 3 oz. of whole-grain cereals, breads, crackers, rice, or pasta every day
- 1 oz. is about 1 slice of bread, about 1 cup of breakfast cereal, or 1/2 cup of cooked rice, cereal, or pasta



Vegetable Group

Vary your veggies

- Eat more dark green veggies like broccoli, spinach, and other dark leafy vegetables
- Eat more orange vegetables like carrots and sweet potatoes
- Eat more dry beans and peas like pinto beans, kidney beans, and lentils



Fruit Group

Focus on fruit

- Eat a variety of fruit
- Choose fresh, frozen, canned, or dried fruit
- Go easy on fruit juices



Milk Group

Get your calcium-rich foods

- Go low-fat or fat-free when you choose milk, yogurt, and other milk products
- If you don't or can't consume milk, choose lactose-free products or other calcium sources such as fortified foods and beverages



Meat & Bean Group

Go lean with protein

- Choose low-fat or lean meats and poultry
- Bake it, broil it, or grill it
- Vary your protein routine— choose more fish, beans, peas, nuts, and seeds

Eat 6 oz.
every day

Eat 2-1/2 cups
every day

Eat 2 cups
every day

Adults: get
3 cups
every day

Eat 5-1/2 oz.
every day

For a 2,000-calorie diet, you need the amounts listed here from each food group.

To find the amounts that are right for you, go to

MyPyramid.gov

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For more information on the
Marshfield Clinic and Ministry Health Care
heart care team, ask your healthcare provider or visit

www.oneheartcareteam.org