The purpose of this illustrated guide is to teach 15-18 year old students that all healthy Americans, 2 years of age or older, should eat in a way that is low in saturated fat and cholesterol to help reduce the risk of heart disease. The theme reflected throughout the manual is that changes in eating patterns help lower blood cholesterol levels and prevent heart disease in adulthood. The booklet helps students make the switch to good eating habits, shows students how to choose a variety of foods to lower the blood cholesterol level, tells students about other healthful behaviors, such as regular physical activity, and provides special charts and tips to get started. The booklet includes chapters that highlight: (1) eat right--live healthy; (2) break that habit; (3) cholesterol's highs and lows; (4) a winning game plan for heart-health--eat a variety of foods, eat less saturated fat, total fat, and dietary cholesterol, and maintain a healthy weight; (5) putting heart-healthy eating habits into play (teaches about the following food groups and their nutrients--meat, poultry, fish, and shellfish; eggs and dairy products; breads, cereals, pasta, rice, dry peas, and beans, vegetables, fruits, fats and oils, and sweets and snacks); (6) fast foods; (7) vending machine snacks; and (8) the importance of exercise. (LL)
Early Habits
Don't Eat Your Heart Out.

NATIONAL INSTITUTES
OF HEALTH
National Heart, Lung,
and Blood Institute

BEST COPY AVAILABLE
The information contained in this publication should not be used as a substitute for the medical care and advice of your physician. There may be variations in treatment that your physician may recommend based on the individual facts and circumstances.
HEARTY

HABITS

DON'T EAT YOUR HEART OUT
This booklet will help you make the switch to good eating habits. It will:

- Show you how to choose a variety of foods to lower your blood cholesterol level.

- Tell you about other healthful behaviors, such as regular physical activity.

- Get you started with special charts and tips.

So let this booklet be your guide—follow it to a new way of eating and living. And bring your family and friends along for the ride.
EAT RIGHT—LIVE HEALTHY

"Eat right." Sound suspiciously dull? It’s not. It just means choosing more of some foods and less of others.

You’d be surprised how many foods you eat out of sheer habit. You’ve probably picked up a good share of your food habits from your family and friends. After all, you eat at the same table and raid the same refrigerator. You may eat some foods because you saw them advertised on TV or because they’re promoted by celebrities. Sometimes the foods we eat seem to choose us more than we do them.

Pizza affect your entire life?!

Pizza CAN affect ____________

YOUR ENTIRE LIFE!!

DON’T EAT YOUR HEART OUT

What you eat is inseparable from how healthy you are, especially the health of your heart. Eat right and you can lower your high blood cholesterol and thus your risk of developing America’s number one killer—heart disease.

What you eat today can affect your body today, tomorrow, and for decades of tomorrows thereafter. That’s paraphrase a familiar saying: You become what you’ve eaten. So eat well.

BREAK THAT HABIT

Bad habits are made to be broken. The key to lowering blood cholesterol is to be aware of what you eat and replace bad habits with good ones. You’ll find it gets easier with each success. And the good habits you develop can last a lifetime.

Your success may spur your parents and friends to follow your example and start living healthier too.

You and they will soon wonder how you could ever have eaten the way you once did.
About 52 million adults in the United States have HIGH blood cholesterol, increasing their chance of HEART DISEASE. Don't wind up one of them!

**FACTOID.**

High blood cholesterol is called a "risk factor" for heart disease. Okaay. But what's a risk factor?

Here's what:

A risk factor is a behavior or condition that increases one's chance (or risk) of getting a disease.

Heart disease has several risk factors:
- High blood cholesterol
- High blood pressure
- Cigarette smoking
- Diabetes (high blood sugar)
- Obesity
- Lack of physical activity
- Family history of early heart disease

You can tackle most of these risk factors, but not all. You can't alter your family's history of heart disease (see box on "families at risk"). If your family has a history of coronary heart disease, your risk will be somewhat more than that of a person with no such family history. But, keep in mind, you can minimize that increased risk.

And remember, everyone has some risk when it comes to heart disease. The only defense is an active offense. So keep your risk factors under control.
Most people your age don’t know their blood cholesterol level. And, that’s okay.

But some teens come from at risk families, in which relatives suffered heart disease at an early age and/or high blood cholesterol. Such teens should get their cholesterol checked.

Get your blood cholesterol tested if:

- One of your parents has high blood cholesterol. In adults, high blood cholesterol is 240 mg/dL or greater. (See box on page 6 for how cholesterol is measured.)

- One of your parents or grandparents has had heart problems or a heart attack before age 55.

If you don’t know your parents’ or grandparents’ medical history but you have other risk factors for heart disease, you may need to have your cholesterol checked. Ask your doctor or other health professional.
Why food? What's the link between food and heart disease?

What you eat can affect the amount of cholesterol in your body. Cholesterol is a waxy substance that circulates in your bloodstream.

Some cholesterol is needed by your body. Actually, your body produces it. But you also take in cholesterol in what you eat. And you can end up having more cholesterol than your body can process.

Much of this cholesterol ends up deposited in your blood vessels. Over time, these deposits can build up until they clog your blood vessels, blocking the blood flow. This is part of a long process called atherosclerosis (see box on page 5).

If the vessel becomes completely blocked, no blood passes and your tissues become starved for oxygen.

The coronary arteries supply nutrients and oxygen to the heart. When one of these arteries becomes severely clogged, chest pain or angina is felt. If no blood gets through, a heart attack may occur. The muscle of the heart can be forever damaged.
THE PERIL OF ATHEROSCLEROSIS

When you're born, your blood vessels are smooth and open and flexible. They expand and contract as blood flows through them.

But those vessels alter with age. Cells in their walls lose flexibility. Also, cholesterol and other substances, such as fatty matter, build up inside the vessels.

This is called atherosclerosis and it causes most cases of heart disease.

Atherosclerosis usually proceeds very slowly. It can begin before someone becomes a teenager and may not be noticed until that person is 60 or 70 and suffers angina (chest pain) or a heart attack.

Decrease the amount of cholesterol in your bloodstream and slow the atherosclerotic process—and reduce your risk of heart disease.
Finding out you have high blood cholesterol doesn’t mean you have heart disease. It means you have one of the risk factors that influence whether or not you’ll develop heart disease.

So reduce the risk: Reduce your blood cholesterol.

It’s easier than you think.
CHOLESTEROL’S HIGHS AND LOWS

Cholesterol travels through the bloodstream in different types of packages. The package type largely determines what happens to the cholesterol.

The packages are called lipoproteins (fat + protein). Basically, they have either a low or a high density, although there are varieties within each category. The two broad types, then, are called:

- Low-density lipoproteins, or LDL’s; and
- High-density lipoproteins, or HDL’s.

LDL’s are known as “bad” cholesterol, because they deposit fat and cholesterol in the arteries, causing them to become clogged. Unfortunately, LDL cholesterol accounts for about two-thirds of the cholesterol traveling through your body.

HDL’s, on the other hand, are often called “good” cholesterol, because they help clear fat and cholesterol from arteries, hauling it to the liver for removal from the body.

LDL and HDL are two parts of your “total” blood cholesterol. Your total and LDL cholesterol shouldn’t be too high, while your HDL shouldn’t be too low (see the boxes on pages 8 and 9).
Three cholesterol numbers are important: your total cholesterol, your LDL, and your HDL. Your doctor may assess one or all of these to see if you need treatment.

If the total cholesterol is high, LDL may be high too. But not always.

TOTAL CHOLESTEROL LEVELS IN CHILDREN AND ADOLESCENTS FROM HIGH RISK FAMILIES

High
200 mg/dL or greater

Borderline
170 mg/dL to 199 mg/dL

Note: These groups apply to those aged 2 to 19, with a family history of either high blood cholesterol or premature heart disease.
Once your doctor knows your total or LDL cholesterol level, he or she compares the number against the guidelines shown in the charts on page 8 and below. The guidelines, which are from the National Cholesterol Education Program, tell the acceptable, borderline, and high levels of cholesterol. For instance, if your total cholesterol is 180 mg/dL, it's in the borderline zone; which means you should take action to lower it.

For HDL, one number draws the line: Your HDL should be 35 mg/dL or above. What's yours?
Write it down here ________________.

**Note:** These groups apply to those aged 2 to 19, with a family history of either high blood cholesterol or premature heart disease.
There are seven key factors that influence your blood cholesterol levels. Some you can do something about and some you cannot control. Here's the lowdown on all of them.

Factors You Can Do Something About
- Eating Habits
- Weight
- Physical Activity/Exercise
- Smoking

Factors You Cannot Control
- Genetic Factors
- Sex (male or female)
- Age

You've been told to lower your blood cholesterol. Here are the factors that influence it. You'll spot some of them from the list of risk factors for heart disease.

**Eating Habits.** What you eat is a key player in the blood cholesterol drama. The saturated fat and the cholesterol in your food raises your blood cholesterol level. Reduce it by eating foods low in saturated fat and cholesterol.

**Weight.** Obesity may increase your blood cholesterol level. (Obesity in adults also is a risk factor for heart disease.)

If you are overweight now, you may become an overweight adult. And studies indicate that losing weight and keeping it off is one of life's more grueling chores. So, obese teens who have stopped growing taller should try to lose excess weight—with a doctor's help. The best way is trimming calories and stepping up physical activity.

"At first I didn't want to go on a diet. But I learned that what I eat has the biggest effect on my cholesterol level of anything." 
AMY, 15
But heed this warning: If you're not overweight, losing pounds probably won't lower your cholesterol level. So no crash diets—they'll only lead to trouble!

**Physical activity/exercise.** Being physically active helps control weight, can decrease total and LDL cholesterol, and can increase HDL-cholesterol. Activities that are best for you are ones called "aerobic activities." "Aerobic" means that the body uses oxygen to produce energy. In everyday lingo, that means doing an activity continuously over a set period. Thirty minutes, three to four times a week will get you fit and keep you fit. Any activity even if it is done for just a few minutes each day is better than none at all. You can ride a bike, walk, run, skate, or swim. You can shoot hoops. You can even dance.

**Smoking.** Cigarette smoking harms your health in various ways. One of these is by lowering HDL-cholesterol levels. So, don't start smoking. And if you've started, quit.

**Genetic factors.** Your genetic makeup—the traits you inherit from your parents—also play a major role in determining your blood cholesterol levels. It dictates how well your body processes cholesterol, and a diet's ability to lower and control cholesterol levels.

**Sex and age.** Cholesterol levels drop slightly when you become a teenager. This may result from normal hormonal changes your body is going through. Around age 20, however, your cholesterol level begins rising. Hormonal differences also give males a greater risk than females for heart disease at most ages. That holds true even if a man and woman have the same cholesterol level.

What's the difference between "overweight" and "obese"?

**Overweight** = weighing too much for a particular height. This could be due to the amount of muscle or fat you have.

**Obesity** = being overweight and having too much body fat. Not surprisingly, the more overweight a person is, the more the chance they'll have too much body fat. Obesity has been linked to high blood cholesterol AND high blood pressure and diabetes.

Keep your body at a healthy weight now—not too fat and not too thin—and you'll help yourself sidestep health problems later in life.
"What has helped me out is that I talk about high cholesterol with my brother, who has it too. So we help each other out by eating right together."

CLAIRE, 17

BE A LIFEGUARD

Guide your family to healthier behaviors:

- Share what you know about food.
- Think of activities to get your family moving.
- Encourage any smoker to quit.
A WINNING GAME
PLAN FOR HEART
HEALTHY EATING

Let's get to the bottom line: What does heart healthy eating let you EAT?

RULES OF THE GAME

The game plan for lowering blood cholesterol levels starts from what is called the “Step-One Diet.” Your doctor probably has given you a copy of this diet. This booklet gives you the information you'll need to follow Step-One.

Here's a surprise: This diet is similar to the eating pattern recommended for all Americans over age 2 years. The main difference is that you have to stick to it. Your doctor will likely keep an eye on your progress to see if it is helping you.

But a brief introduction: Remember that this diet isn't a quick fix. It's a new way of eating that should last a lifetime.

So don't expect to fall into it overnight. It takes time to pick up habits—bad or good. Gradually, though, you'll find it a snap to choose a healthy good-tasting snack. help plan meals, eat at favorite restaurants, or grab a quick bite with friends.

THE STEP-ONE DIET

The diet has just three rules:

1. Eat a variety of foods.

2. Eat less saturated fat, less total fat, and less dietary cholesterol.

3. Adjust your calories (that is, your energy-intake) to maintain a healthy weight.
STEP IT UP

If there's a Step-One, want to bet there's a Step-Two?

Yup. The Step-Two Diet also lowers blood cholesterol. But it allows you less saturated fat and cholesterol.

The Step-Two Diet is not included in this booklet. But if you're told to follow it, ask a dietitian or nutritionist or your doctor about it.

STARTING AT THE TOP:

RULE 0:
EAT A VARIETY OF FOODS

Your body needs a mixture of nutrients to stay in prime working order for walking, talking, running, sleeping, and even breathing. These nutrients include fats, protein, carbohydrates, vitamins, and minerals. Different foods contain different amounts of the nutrients.

In fact, that's how foods are grouped—by their key nutrients. So, to get a healthy combination of nutrients, you need to eat a variety of foods every day. Just how much you should eat from any food group depends on your age, weight, and degree of activity.

Pages 24-32 list foods by their "food group." The pages also show each group's important nutrients, along with recommended daily servings.
"I think mostly about my high blood cholesterol when I'm eating. But I think the changes I've made in what I eat and how I stay in shape are probably good for the long run."

MARK, 15

IT AIN'T SEAWEED

Say "diet" and most people hear "denial, deprivation, boredom."

But diet isn't a 20th century form of torture. It's a way of eating. And it includes a dazzling variety of foods—treats too. The diet described in this booklet includes spinach...and carrots and...spaghetti, and peanut butter sandwiches, and frozen yogurt, and ice milk, and oven-fried chicken, and home-made oatmeal cookies, and mashed potatoes, and strawberries, and pretzels, and lean roast beef sandwiches, and chicken hot dogs, and...
EAT LESS SATURATED FAT, TOTAL FAT, AND DIETARY CHOLESTEROL

This is the crunch. This is the rule that probably makes the biggest change in your blood cholesterol.

A few timely definitions: Fat is one of three nutrients that supply calories to your body. The other two are carbohydrates and proteins.

The two main types of fat are saturated and unsaturated. Most foods have a mix of both. And together, they are called total fat.

- Saturated fat occurs in greatest amounts in foods from animals, including meat and whole-milk dairy products, including cheese, cream, and butter. Some vegetable oils also have a lot of saturated fat: coconut, palm kernel, and palm oils, for instance. Saturated fat raises blood cholesterol levels more than any other dietary source.

- Unsaturated fat comes mostly from plants. Unsaturated fat stays a liquid when put in the refrigerator. The important subtypes are polyunsaturated and monounsaturated fats.

  • Monounsaturated fat is the main type in olive and canola oils.
  • Polyunsaturated fat is the main type in safflower, sunflower.com, and soybean oils.
So, cut back on foods high in saturated fat and cholesterol. One way is by substituting unsaturated fat for saturated fat. Another is by eating foods high in complex carbohydrates and fiber (see box on page 19).

Dietary cholesterol is also part of the picture. Cholesterol is found only in animal products—meat, even lean meat, fish, and poultry, butterfat and egg yolk.

"Putting Heart Healthy Habits Into Play: Foods to Choose and Lose" lists foods low in saturated fat and cholesterol and high in complex carbohydrates and fiber.

**YOUR RX FOR HEALTH**

The Step-One Diet allows:

- **Saturated fat**—less than 10 percent of your daily calories.
- **Total fat**—an average of 30 percent of your daily calories.
- **Cholesterol**—less than 300 milligrams a day.

**SO...HOW MANY CALORIES DO YOU NEED?**

The recommended calorie intake for someone your age and average activity is about:

- 2,200 calories for girls
- 3,000 calories for guys

You may need more or less calories depending on your size, metabolism, and how active you are.
SO NOW...HOW MANY GRAMS OF SATURATED FAT AND TOTAL FAT DO THESE CALORIES TRANSLATE INTO?

Translation:

How to figure saturated fat and total fat in grams for the Step-One Diet:

<table>
<thead>
<tr>
<th>Calories</th>
<th>Maximum saturated fat in grams</th>
<th>Maximum total fat in grams</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,200</td>
<td>24</td>
<td>73</td>
</tr>
<tr>
<td>3,000</td>
<td>33</td>
<td>100</td>
</tr>
</tbody>
</table>

To figure saturated fat in grams:

1. Multiply calorie intake by 10% to get saturated fat calories. (2,200 calories x 0.10 = 220 saturated fat calories)

2. Divide by 9 (fat has 9 calories per gram) to get saturated fat grams. (220 saturated fat calories + 9 = 24 saturated fat grams)

To figure total fat in grams:

1. Multiply calorie intake by 30% to get total fat calories. (2,200 x 0.30 = 660 total fat calories)

2. Divide by 9 (fat has 9 calories per gram) to get total fat grams. (660 total fat calories + 9 = 73 total fat grams)
Hold it! What’s a rule without an exception? Here’s ours: Egg yolk and liver are not high in saturated fat. But they are high in dietary cholesterol and can pump up your blood cholesterol. So, you still should not eat too many egg yolks (egg whites are fine) or too much liver.

Carbohydrates, one of the body’s three energy sources, come in two main types: simple carbohydrates (or sugars) and complex carbohydrates (starches and fiber). Both types come from plants. Starches are found in breads, cereals, pasta, corn, and peas; fiber is in whole grain breads, whole fruits, and dried beans.

Athletes favor complex carbohydrates as an energy source. Foods high in complex carbohydrates are excellent substitutes for foods high in saturated fat and cholesterol.
RULE 3: MAINTAIN A HEALTHY WEIGHT

Food supplies the calories you need to grow and be active. But eat too much and your body’s left holding the bag—literally. Those extra calories have nowhere to go but storage—as extra pounds.

If you have extra pounds, your doctor may advise you to lose weight. But remember: If you’re still growing taller, your height may catch up with your weight. If so, don’t try to shed pounds. If you’re not sure whether or not you need to lose weight, check with your doctor.

If you must lose weight, eat fewer calories and get more daily physical activity. This works at any age! As overweight people lose weight, their blood cholesterol levels tend to decrease.
LOSING WEIGHT WITH THE STEP-ONE DIET

The Step-One Diet can help you eat fewer calories. A low-saturated fat, low-cholesterol diet isn’t always a weight-loss regimen. **BUT**, by cutting back on your fat intake, you’ll be cutting back on calories big time.

Fat has more than double the calories per gram than protein and carbohydrates. Fat (no matter what type) yields 9 calories per gram; protein and carbohydrates supply 4 calories per gram.

So, to lose weight, select fewer servings of foods high in fats, which means less oils and fewer of some sweets and snacks. Instead, pick foods high in carbohydrates, such as breads, fruits, and vegetables.

And be more physically active! See box on page 49 for activity ideas.
Athletes sometimes try to build their muscles by eating extra protein. Most Americans eat more protein than they need—a normal diet supplies plenty.

Chances are, if you try to eat extra protein, you’ll probably wind up consuming more fat. That’s because many protein-rich foods also have a high fat content, like fatty meats and whole-milk dairy products.

You’ll get plenty of protein from lean cuts of meat, chicken, turkey, and low-fat dairy products. Another good source of protein is a mix of dry peas or beans with rice or other grains—together they give you the high quality protein found in animal products.
PUTTING HEART HEALTHY EATING HABITS INTO PLAY-

Foods to choose and foods to lose

This is a Who's Who of foods. Use it to learn about food groups and their nutrients. It lists foods in choose and decrease columns. It also gives recommended serving numbers and sizes, based on the Step-One Diet. Some serving numbers differ for guys and girls. That's because guys often need more calories. The amount of a single serving is given in parentheses beside the food.

Do:

- Choose foods from each food group every day.
- Select food group items more often from the "choose" column than the "decrease" column.
- Follow the Step-One Diet plan.
Nutrients: Protein, minerals (especially iron), vitamins, saturated fat, and cholesterol.

Servings/day:
Up to 6 ounces cooked (3 ounces of cooked meat is about the size of a deck of cards)

Lean cuts of meat with fat trimmed, like:
- Beef—round, sirloin, chuck, loin, extra lean hamburger
- Lamb—leg, arm, loin, rib
- Pork—tenderloin, I-90, shoulder (arm or picnic)
- Veal—all trimmed cuts except ground

Choose:
- Poultry without skin
- Fish
- Shellfish like crabs, clams, and scallops
- Lean luncheon meat like turkey ham, turkey, lean ham, or lean roast beef. Chicken hot dogs—these are lower in saturated fat than beef or pork hot dogs. But "lower" doesn't equal "low." So make them a once-in-a-while choice.

Decrease:
- Cuts of meat, like:
  - Beef—regular hamburger, short ribs, corned beef brisket
  - Pork—spareribs, blade roll
  - Bacon, sausage
  - Poultry with skin, fried chicken
  - Fried fish and fried shellfish
  - Organ meats like liver, kidney, sweetbread, brain
  - Regular luncheon meat like bologna, salami, sausage, beef or pork hot dogs

MEAT, Poultry, Fish, & Shellfish
Egg yolks are rich in "dietary cholesterol." A large egg yolk contains 214 milligrams of cholesterol. Egg whites do not contain any. Dietary cholesterol is not manufactured by your body but is taken in through the foods you eat. Also it raises blood cholesterol levels, although less than does saturated fat.

**Nutrients:** Yolks are high in cholesterol; whites are a good source of protein.

**Servings/week:** 3–4 whole eggs; count eggs used in recipes

**Egg whites (for recipes—2 whites equal 1 whole egg)**

**Egg substitutes**

**Egg yolks (if more than 3–4 per week)**
Dairy foods are a great source of calcium and protein. Eating foods high in calcium helps bones grow and stay strong. As a teen, your bones are growing quickly. So now is the best time in your life to eat foods rich in calcium. Girls, especially, need to eat foods high in calcium. A very good choice is low-fat dairy products, which are not only rich in calcium but also low in saturated fat and cholesterol.

“...one of the easiest things to change is drinking 1% milk instead of whole milk. And now there are lots of substitutes for ice cream.”

MARIA, 15
**Dairy Products**

**Nutrients:** Protein, vitamins, minerals (especially calcium), saturated fat, and cholesterol.

**Servings/day:** 4

Note: The numbers in parentheses below are equal to 1 serving.

<table>
<thead>
<tr>
<th>Choose</th>
<th>Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk (1 cup)—skim milk; 1% milk (fluid, powdered, evaporated) buttermilk</td>
<td>Whole milk (fluid, evaporated, condensed); 2% low-fat milk; imitation milk</td>
</tr>
<tr>
<td>Yogurt (1 cup)—nonfat or low-fat yogurt; yogurt beverages</td>
<td>Whole-milk yogurt; custard-style yogurt; whole-milk yogurt beverages</td>
</tr>
<tr>
<td>Cottage cheese (1/2 cup)—low-fat or non-fat</td>
<td>Cottage cheese (4% fat)</td>
</tr>
<tr>
<td>Cheese (1 oz.)—low-fat cheeses labeled no more than 3 grams of fat per ounce</td>
<td>High-fat cheese like American, blue, Brie, cheddar, Colby, Edam, Monterey Jack, Parmesan, Swiss; cream cheese</td>
</tr>
<tr>
<td>Frozen dairy dessert (1/2 cup)—ice milk, low-fat frozen yogurt</td>
<td>Ice cream</td>
</tr>
<tr>
<td>Sour cream—low-fat and fat-free</td>
<td>Cream like half and half, whipping cream, sour cream</td>
</tr>
</tbody>
</table>
**Nutrients:** Carbohydrates, protein, vitamins, minerals and fiber.

**Servings/day:** 12 for guys and 8 for girls

Note: The numbers in parentheses below are equal to 1 serving.

### CHOOSE

- **Bread (1 slice)**—whole-grain bread; hamburger and hot-dog buns (½ a bun); bagels (½); tortilla (1)
- **Cereal (1 cup ready-to-eat, ½ cup bran or ½ cup cooked)**—oat, wheat, corn, multigrain
- **Pasta (½ cup cooked)**—plain noodles, spaghetti, macaroni
- **Rice (½ cup cooked)**
- **Low-fat crackers**—animal crackers (8); graham (3); saltine-type (6)
- **Homemade baked goods using unsaturated oil, skim or 1% milk, and egg substitutes**—quick bread (1 slice); 2" biscuit (1); cornbread muffin (1); bran muffin (1); 4" pancake (1); 9" diameter waffle (¼)
- **Dry beans, peas and legumes (½ cup cooked)**—split peas, black-eyed peas, chick peas, kidney beans, navy beans, lentils, soybeans, soybean curd (tofu)
- **Soup like chicken or beef noodle, tomato, vegetable**

### BREADS, CEREALS, PASTA, RICE, DRY PEAS, & BEANS

- **Bread in which eggs are a major ingredient**—croissants, butter rolls, cheese bread
- **Granola-type cereals**
- **Egg noodles and pasta containing egg yolk**
- **Pasta and rice prepared with cream, butter, or cheese sauces**
- **High-fat crackers**—cheese crackers, butter crackers, or others made with saturated fats
- **Commercial baked pastries, muffins, biscuits, doughnuts, sweet rolls, Danish pastry using high saturated fat and cholesterol ingredients**
- **Dry beans, peas and legumes prepared with butter, cheese, or cream sauce**
- **Potato or corn chips**
- **Soups made with cream or whole milk**
Vegetables

Nutrients: Carbohydrates, fiber, vitamins, and minerals.
Servings/day: 4 for guys and 3 for girls
Note: The numbers in parentheses below are equal to 1 serving.

Choose

Vegetables (1/2 cup)—fresh, frozen, or canned
Vegetables prepared with butter, cheese, or cream sauce
Fried vegetables like French fries

Fruits

Nutrients: Carbohydrates, fiber, and vitamins.
Servings/day: 5 for guys and 3 for girls
Note: The numbers in parentheses below are equal to 1 serving.

Choose

Fruit (1/2 cup or medium-size piece)—fresh, frozen, canned, or dried
Fried fruit like banana chips or fruit served with butter, cream sauce, or ice cream
Fruit juice (1/2 cup)—fresh, frozen, or canned
**Nutrients:** Saturated and unsaturated fats, cholesterol, and very small amounts of vitamins and minerals.

**Servings/day:** 10 for guys and 5 for girls

Note: The numbers in parentheses below are equal to 1 serving.

**Choose**

- Unsaturated oils (1 tsp.)—sunflower, safflower, sesame, soybean, corn, olive, canola oil
- Margarine or shortening (1 tsp.)—made from unsaturated oils listed above; light or diet margarine (2 tsp.)
- Salad dressings (1 tbsp.)—dressings made with unsaturated oils listed above; low-fat or oil-free dressings (serving size depends on amount of oil)
- Seeds and nuts (1 tbsp.)—peanut butter, other nut butters*
- Cocoa powder (as desired)
- Olives (5 small) and avocado (1/4 of whole)*

*These are listed because they are high in unsaturated fat.

**Decrease**

- Saturated oils—Coconut oil, palm kernel oil, palm oil
- Butter, lard, bacon fat
- Shortening
- Dressings made with egg yolk, cheese, sour cream, whole milk
- Coconut
- Chocolate
HAVE YOUR CAKE—
AND EAT IT...SOMETIMES

Sweets and snacks. Can't live with them but don't want to live without them? Some are demons typically low in vitamins, minerals, and fiber—and sky-high in fat, especially saturated fat, and calories.

But, surprise, some are low in saturated fat and cholesterol. So enjoy! Choose sweets and snacks lower in saturated fat and cholesterol.

Also remember, a snack does not have to only be made up of sweets. Snacks can also come from the other food groups that provide more nutrients. In fact, snacks from the other food groups should be your first choice.
**Nutrients:** Saturated fat, cholesterol, and carbohydrates.

**Servings/day:** 4 for guys and 3 for girls

*Note: The numbers in parentheses below are equal to 1 serving.*

### Sweets & Snacks

#### CHOOSE

- **Beverages (6 fl. oz.)**—fruit-flavored drinks; lemonade, fruit punch
- **Sweets (1-1/2 tbsp.)**—sugar, syrup, honey, jam, preserves; candy (1/4 oz.) made primarily with sugar (candy corn, gumdrops, hard candy); fruit-flavored gelatin (1/2 cup)
- **Low-fat frozen desserts (1/2 cup)**—sherbet, sorbet, fruit ice, popsicles, low-fat frozen yogurt
- **Cookies (2), cake (1 slice), pie (1 slice), pudding (1/4 cup)**—all prepared with egg whites, egg substitute, skim or 1% milk, and unsaturated oil or margarine; plain popcorn (3 cups); gingersnaps (2); fig bar cookies (1); angel food cake (1 slice)

#### DECREASE

- **Candy made with chocolate, butter, cream, coconut oil, palm oil, palm kernel oil, coconut oil**
- **Ice cream and frozen treats made with ice cream or whole milk**
- **Commercial baked high-fat cookies, cakes, cream pies, doughnuts**
One great trick for picking foods lower in saturated fat and cholesterol is learning to read food labels. Food labels tell you everything you need to know—the amount of fat, saturated fat, cholesterol and calories in a serving, and what percentage of the recommended amount (% Daily Value) the particular food provides. These labels are new and are expected to hit the supermarkets by the summer of 1994.

Here's an example to show you what the label means:
Nutrition Facts

Serving Size 1/4 cup (114g)
Servings Per Container 4

Amount Per Serving
Calories 90
Calories from Fat 30

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount</th>
<th>% Daily Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fat</td>
<td>3g</td>
<td>5%</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>0g</td>
<td>0%</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>0mg</td>
<td>0%</td>
</tr>
<tr>
<td>Sodium</td>
<td>300mg</td>
<td>13%</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>13g</td>
<td>4%</td>
</tr>
<tr>
<td>Sugars</td>
<td>3g</td>
<td>12%</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>3g</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>3g</td>
<td></td>
</tr>
</tbody>
</table>

Vitamin A 80%
Vitamin C 60%
Calcium 4%
Iron 4%

Percent (% of a Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

CHECK FOR

- Serving size
- Number of servings
- Calories
- Total Fat in grams
- Saturated Fat in grams
- Cholesterol in milligrams

Here, the label gives the amounts for the different nutrients in one serving. Use it to help you keep track of how much fat, saturated fat, and cholesterol you are getting from different foods.

Remember, a guy eating 3,000 calories a day, should average no more than 100 grams of fat and 33 grams of saturated fat a day.

A girl eating 2,200 calories should have no more than 73 grams of fat and 24 grams of saturated fat. And, everyone needs to aim for less than 300 milligrams of cholesterol a day.

The % Daily Value shows you how much of the recommended daily amounts the food provides in one serving, if you eat 2,000 calories a day. For example, one serving of this food gives you 5% of your total fat recommendation.

Here you can see the recommended daily amounts for each nutrient for two calorie levels. If you eat a 2,000 calorie diet, you should be eating less than 65 grams of fat and less than 20 grams of saturated fat. Your daily amounts may vary higher or lower depending on your calorie needs.
special cases—eating out; eating fast

"I've told my friends about my cholesterol. They help me when we eat out. We choose places where I can find something to eat. Now, because it's healthy, they sometimes choose what I get."

KASHIA, 18

Go for it!

Okay, you can control what you eat at home. But what happens when you eat out? Do you have to carry doggie bags INTO restaurants?

Sticking to your diet away from home is not as hard as you might think. That's largely because so many Americans want healthy foods that restaurants have responded with low saturated fat, low cholesterol choices.

Further, most restaurants are willing to change a dish. They'll gladly leave off a high-fat, high-calorie sauce, or broil without butter instead of frying. If you're not sure what's in a dish or if an item can be modified, just ask. You'll be surprised how eager restaurants are to please you.

Another trick is to eat smaller amounts. Don't be a slave to the clean plate club. Ask to take your leftovers home. You'll come out ahead in more ways than one—no cooking the next day and an extra meal for free.
"At parties, I try to find the right foods. But often I just eat what's there, only in smaller portions. Sometimes, I eat before I go. At home, I'm more careful, so I guess it all balances out."

DAWN, 17

ASK AND YOU WILL RECEIVE

Don't be afraid to ask questions in a restaurant. Here's a smorgasbord:

- How are items prepared and with what ingredients?
  Avoid breaded or fried fish. Go for grilled, baked, or broiled fish.

- What's the serving size?
  Is the steak 10 ounces huge? If so, ask for a lean 4 ounce version. Or, share a 10 ounce with a friend. Other ideas: eat an appetizer as a main course; order a la carte instead of a full meal.

- Do they take special requests?
  If so, ask that dressings, gravies, and sauces be served on the side. Order meat or fish broiled without added fat, such as butter.

- What's not on the menu?
  Low-fat and skim milk may be available even though they're not listed on the menu.

- Can leftovers be taken home?
  Don't stuff yourself. Nearly all restaurants have take-home bags.
**DANGER WORDS!!**

- Au gratin, in cheese sauce, parmesan
- Buttered or buttery
- Breaded and fried
- Casserole, hash, pot pie
- Creamed, creamy, or in cream sauce
- Fried, French fried, deep fried, batter fried, pan fried, crispy, braised
- Hollandaise
- In its own gravy, with gravy, or pan gravy
- Pastry
- Rich
- Scalloped or escalloped

**WINNING WORDS!**

- Baked, roasted
- Broiled, grilled, poached, steamed
- Broiled, with lemon juice or wine
- Fresh
- Garden fresh
- In its own juices
- Lean
**DO'S AND DON'TS OF DINING OUT!!**

**ORDER MORE OFTEN**

- **Appetizers**
  - fresh fruit medley
  - melon wedge
  - fruit cocktail
  - raw vegetables

- **Soup**
  - minestrone
  - chicken soup with noodles
  - gazpacho

- **Salads**
  - fresh fruit salad
  - mixed greens
  - pasta salad (without cheese, salami, or sausage)

- **Entrées**
  - fish, chicken or turkey
  - without skin, lean meats that are baked, broiled, grilled, steamed, or boiled;
  - pasta primavera with tomato sauce, or with clams

- **Vegetables**
  - all types steamed, baked, or boiled

- **Beverages**
  - skim or low-fat milk
  - juices or cider
  - lemonade or iced tea
  - coffee with skim milk

- **Desserts**
  - sorbet
  - sherbet
  - Italian ice
  - ice milk
  - low-fat frozen yogurt
  - flavored gelatin
  - angel food cake
  - fresh fruit

**DO'S AND DON'TS OF DINING OUT!!**

- **Appetizers**
  - antipasto
  - fried potato skins
  - crispy nachos
  - French-fried onion rings

- **Soup**
  - cream soup
  - cheese soup

- **Salads**
  - egg salad
  - chicken salad
  - tuna or seafood salad
  - other salads with creamy dressings

- **Entrées**
  - fatty cuts of meat, goose, duck, hot dogs, cheeseburgers
  - omelettes
  - fish and chips
  - fettuccine Alfredo or another pasta with a cream sauce

- **Vegetables**
  - all types with cream or butter sauce

- **Beverages**
  - whole milk
  - milk shake
  - malted milk

- **Desserts**
  - cake
  - pie
  - cheesecake
  - ice cream
  - pudding
  - pastry
  - mousse
  - custard
EATING ON THE GO—FAST FOODS

You and your friends probably like fast foods. You may often go to fast-food restaurants. You still can.

Fast foods aren't off limits. But you will have to choose wisely. Your choices can make a difference. Look at the charts on page 41 and 42 to compare how much saturated fat, cholesterol, total fat and calories you can save by picking the right stuff.

Fortunately, fast-food restaurants also have been trying to respond to Americans' health-hunger. Many now offer low-fat selections. Some even post the nutrient content of their foods so you can comparison shop for the item lowest in fat, saturated fat, and cholesterol.

Still, here's some insider information to make selecting a food low in saturated fat and cholesterol quick and easy:

- **Chicken**
  Buy grilled chicken breast sandwiches. Several restaurants now offer these. Be wary of chicken nuggets—they're often made with the chicken skin, then fried. If fried chicken is the only choice, remove the greasy coating and skin. Or, better yet, go for a plain hamburger or a lean roast beef sandwich.

- **Fish**
  When available, order baked fish. Fish naturally has less saturated fat than ground beef. But fast-food fish sandwiches typically have been breaded and fried, giving them a fat content equal to or greater than a quarter-pound hamburger. A grilled chicken sandwich beats either the fish sandwich or the hamburger.

- **Hamburger**
  Choose small, plain, well-done hamburgers. Hold on cheese and bacon toppings, or special sauces. See if the restaurant sells a lean-beef burger.

- **Pizza**
  Pizza's a fairly good choice, provided you don't pile on toppings high in
saturated fat. These include meatballs, beef, sausage, pepperoni, and extra cheese. Go instead for toppings like green peppers, onions, extra sauce, spinach, mushrooms, and olives. And, if possible, order a pizza with half the usual cheese.

Fast food breakfasts can be low in saturated fat. Check out: cereal with skim or 1% milk, juice, fat-free muffins, or pancakes. Steer clear of: egg-sausage-and-cheese-type sandwiches, which are high in saturated fat and cholesterol.

Baked potatoes are a great choice as long as they're ordered without a creamy or cheesy topping. Instead, top your spud with some margarine, low-fat salad dressing, or taco sauce. French fries are deep fried and, even though many fast-food chains have changed their frying oil to one with less saturated fat, fries remain high in total fat and calories. If you're starved for fries, try sharing an order with a friend.
# FAST FOOD FAVORITES: A COMPARISON

Trying to figure out how to eat fast and heart-healthy? Check out these numbers. The foods at the top of each group are lower in saturated fat and cholesterol. Choose these more often.

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>SATURATED FAT(G)</th>
<th>DIETARY CHOLESTEROL(MG)</th>
<th>TOTAL FAT(G)</th>
<th>TOTAL CALORIES</th>
</tr>
</thead>
</table>

## Breakfast

<table>
<thead>
<tr>
<th>Product</th>
<th>SATURATED FAT(G)</th>
<th>DIETARY CHOLESTEROL(MG)</th>
<th>TOTAL FAT(G)</th>
<th>TOTAL CALORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereal with 1 milk and 1 packet sugar</td>
<td>2</td>
<td>10</td>
<td>3</td>
<td>210</td>
</tr>
<tr>
<td>Scrambled egg (1) with English muffin and 1 teaspoon jelly</td>
<td>3</td>
<td>200</td>
<td>9</td>
<td>300</td>
</tr>
<tr>
<td>Egg, cheese, and bacon biscuit sandwich (1)</td>
<td>11</td>
<td>261</td>
<td>32</td>
<td>477</td>
</tr>
</tbody>
</table>

## Entrees

<table>
<thead>
<tr>
<th>Product</th>
<th>SATURATED FAT(G)</th>
<th>DIETARY CHOLESTEROL(MG)</th>
<th>TOTAL FAT(G)</th>
<th>TOTAL CALORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grilled chicken breast sandwich</td>
<td>1</td>
<td>20</td>
<td>9</td>
<td>310</td>
</tr>
<tr>
<td>Cheese pizza, 1 slice</td>
<td>2</td>
<td>9</td>
<td>3</td>
<td>140</td>
</tr>
<tr>
<td>Pepperoni pizza, 1 slice</td>
<td>2</td>
<td>14</td>
<td>7</td>
<td>181</td>
</tr>
<tr>
<td>Bean burrito</td>
<td>3</td>
<td>3</td>
<td>7</td>
<td>224</td>
</tr>
<tr>
<td>Hamburger, on bun</td>
<td>4</td>
<td>36</td>
<td>12</td>
<td>275</td>
</tr>
<tr>
<td>Fish fillet sandwich</td>
<td>5</td>
<td>55</td>
<td>23</td>
<td>431</td>
</tr>
<tr>
<td>Beef and cheese burrito</td>
<td>5</td>
<td>85</td>
<td>12</td>
<td>317</td>
</tr>
<tr>
<td>Hot dog, on bun</td>
<td>6</td>
<td>27</td>
<td>15</td>
<td>265</td>
</tr>
<tr>
<td>Cheeseburger, on bun</td>
<td>6</td>
<td>50</td>
<td>15</td>
<td>320</td>
</tr>
<tr>
<td>Chicken nuggets, 6 pieces</td>
<td>6</td>
<td>62</td>
<td>17</td>
<td>290</td>
</tr>
<tr>
<td>Double cheeseburger, on bun with mayo</td>
<td>18</td>
<td>141</td>
<td>44</td>
<td>706</td>
</tr>
</tbody>
</table>

## Side Dishes

<table>
<thead>
<tr>
<th>Product</th>
<th>SATURATED FAT(G)</th>
<th>DIETARY CHOLESTEROL(MG)</th>
<th>TOTAL FAT(G)</th>
<th>TOTAL CALORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tossed salad</td>
<td>0</td>
<td>0</td>
<td>0.2</td>
<td>198</td>
</tr>
<tr>
<td>Low calorie French dressing (2 Tbsp.)</td>
<td>0.2</td>
<td>2</td>
<td>2</td>
<td>44</td>
</tr>
<tr>
<td>Regular French dressing (2 Tbsp.)</td>
<td>3</td>
<td>0</td>
<td>13</td>
<td>134</td>
</tr>
<tr>
<td>French fries, regular</td>
<td>4</td>
<td>0</td>
<td>12</td>
<td>235</td>
</tr>
<tr>
<td>French fries, large</td>
<td>6</td>
<td>0</td>
<td>19</td>
<td>355</td>
</tr>
</tbody>
</table>
### Desserts

<table>
<thead>
<tr>
<th>Item</th>
<th>Fat (g)</th>
<th>Dietary Cholesterol (mg)</th>
<th>Total Fat (g)</th>
<th>Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanilla low-fat frozen yogurt cone</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>105</td>
</tr>
<tr>
<td>Vanilla soft serve ice milk cone</td>
<td>4</td>
<td>28</td>
<td>6</td>
<td>164</td>
</tr>
<tr>
<td>Vanilla shake</td>
<td>5</td>
<td>32</td>
<td>8</td>
<td>314</td>
</tr>
<tr>
<td>Vanilla ice cream, 1 cup (10% fat)</td>
<td>9</td>
<td>59</td>
<td>14</td>
<td>269</td>
</tr>
</tbody>
</table>

### Drinks

<table>
<thead>
<tr>
<th>Item</th>
<th>Fat (g)</th>
<th>Dietary Cholesterol (mg)</th>
<th>Total Fat (g)</th>
<th>Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cola, 12 ounce</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>151</td>
</tr>
<tr>
<td>Diet cola, 12 ounce</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: USDA Handbook 8-21; and individual manufacturers, for items not available from USDA.

### Sample Fast Food Meals—How Small Changes Add Up

#### Typical Meal
- Chicken nuggets
- Large French fries
- Vanilla shake

**Total**
- Fat: 17 g
- Dietary Cholesterol: 94 mg
- Total Fat: 45 g
- Calories: 959

#### Lower-fat Choice
- Grilled chicken breast sandwich
- 1/2 small French fries
- 12 oz cola
- Low-fat frozen yogurt cone

**Total**
- Fat: 3 g
- Dietary Cholesterol: 62 mg
- Total Fat: 16 g
- Calories: 684

#### Typical Meal
- Cheeseburger
- Large French fries
- 12 oz cola
- Vanilla ice milk cone

**Total**
- Fat: 16 g
- Dietary Cholesterol: 78 mg
- Total Fat: 40 g
- Calories: 990

#### Lower-fat Choice
- Hamburger
- 1/2 small French fries
- 12 oz cola
- Low-fat frozen yogurt cone

**Total**
- Fat: 6 g
- Dietary Cholesterol: 38 mg
- Total Fat: 19 g
- Calories: 649
These days, salads are far from being "rabbit food." No rabbit ever ate this well! Salad bars offer a great way to make a custom designed meal that’s creative, nutritious, and filling. Salad bars typically offer: abundant raw vegetables, ranging from mushrooms to cauliflower to tongue-tingling chili peppers; juicy fresh fruits; and all manner of beans, from chickpeas to kidneys. Top off a heaping plate with a low-fat salad dressing, or oil and vinegar, or just tart vinegar.

But take care: Some salad items are definitely not health-wise. These include: creamy salads, such as prepared potato salad, macaroni salad, egg salad, or tuna or seafood salad (all of which can be high in fat and saturated fat); bacon bits; grated egg; cheese (even cottage cheese, which may be made of whole- rather than low-fat milk); and fried croutons (which are high in saturated fat).
MACHINE-AGE SNACKS

Even vending machines are becoming user-healthy. Many have at least one or two snacks low in saturated fat. However, some of these items may be no-no’s for those watching their weight. Items low in saturated fat can be high in sugar and calories.

Here are some savvy, low-saturated fat vending-machine choices:

- Fresh and canned fruit
- Raisins and other dried fruits
- Fruit and vegetable juices
- Pretzels
- Snack mixes (of cereal and dried fruits with small amounts of nuts and seeds)
- Low-fat cookies and crackers
- Low-fat yogurt
- Hard candy, candy corn, gumdrops

NEVER SAY NEVER

You don’t have to give up French fries for life. Here’s a tip on how to partake of old favorites and not step backward from Step-One:

Assume you’ve gotten into the Step-One groove. Every day, you eat foods low in saturated fat. To eat a food high in saturated fat on a particular day, adjust what you eat on the days before and after your splurge.

Simple!
Remember that the STEP-ONE DIET recommends that an AVERAGE of 30% of your TOTAL calories come from fat.

HEART HEALTHY MENUS

Figuring Out What to Eat

Here are sample menus that can help you to put all the eating info together. Think variety, good taste, and fun! Most of all, these are foods your friends and family will like to eat too!

BREAKFAST

Girls

1/2 cup orange juice
1/2 cup presweetened corn flakes
1 bagel
1 teaspoon margarine
1 cup 1% milk

FAST FOOD LUNCH

1 grilled chicken sandwich
1 regular order fries
1 diet soda
1 lowfat frozen yogurt cone

SNACK

4 fig bar cookies
1 cup 1% milk
1 apple

DINNER

2 tacos
2 ounces extra lean ground beef
lettuce
tomato
1 ounce reduced fat cheese
1 cup 1% milk
15 grapes

SNACK

3 cups microwave popcorn
water or noncaloric beverage
1 orange

Calories .................................................. 2201
Total fat (% of calories) ......................... 30
Saturated fat (% of calories) ................. 8
Cholesterol (milligrams) ....................... 162
HEART HEALTHY MENUS

GUYS

BREAKFAST
1 cup orange juice
3/4 cup presweetened corn flakes
1 bagel
1 teaspoon margarine
1 cup 1% milk

SANDWICH SHOP
Roast beef sandwich
2 cups tossed salad
2 tablespoons Thousand Island dressing
1 ounce bag corn chips
1 medium cola

SNACK
Ham and cheese sandwich:
2 slices bread
1 ounce low-fat ham
1 ounce low-fat cheese
2 teaspoons mayonnaise
lettuce, tomato, pickle
4 commercial oatmeal cookies
1 cup orange juice

DINNER
3 ounces chicken cacciatore
1/2 cup green beans
1 cup white rice
1 teaspoon margarine
1 slice bread
15 grapes
1 cup nonfat yogurt with fruit flavor
water or noncaloric beverage

SNACK
6 homemade peanut butter cookies
1 cup 1% milk

<table>
<thead>
<tr>
<th>Calories</th>
<th>3,026</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fat (% of calories)</td>
<td>30</td>
</tr>
<tr>
<td>Saturated fat (% of calories)</td>
<td>9</td>
</tr>
<tr>
<td>Cholesterol (milligrams)</td>
<td>224</td>
</tr>
</tbody>
</table>

less than 10% from SATURATED FAT and less than 300 milligrams of cholesterol a day.

age 46

BEST COPY AVAILABLE
GET PHYSICAL!

Want more energy? Want less stress? Want to fall asleep easily? Firmer muscles sound good?

One—count it. one—there's one way to do it all.

What's the secret? Getting physical, of course.

Turn off your TV and turn on to physical activity! You don't have to groan for hours every day. A few minutes of some type of activity, even walking, every day will help improve your health. And, more vigorous activity such as swimming, running or jumping rope will help condition your heart and lungs if you do them for at least 30 minutes, three to four times a week.

These kinds of activities are often called “aerobic”—which means the body used oxygen to produce the energy needed for the activity. These exercises are brisk enough to raise your heart and breathing rates. They expand your lung capacity and help to strengthen your heart muscle, warding off heart disease.

Physical activity also can help lower high blood cholesterol and control weight. First, it can decrease “bad” LDL-cholesterol, while increasing “good” HDL-cholesterol. Second, combined with a low-calorie diet, it helps you shed extra weight. You'll find it decreases your hunger and fine-tunes the metabolism. See the box on page 49 to see how many calories can be burned up doing different activities.

Sold?

Good, because being physically active is no fad. It's a lifelong good habit. Try out various activities. Find ones that you enjoy. And don't hesitate to mix them up—don't get into a rut. The box on page 49 gives you some ideas. Try one or all!
"One of the advantages of having high blood cholesterol is that it motivates you to workout. Working out makes you feel and look better. It's also a good way to meet new people."

Suzanne, 18

**KEY TO HEALTH**

You hold the key to health and fitness—regular physical activity. Starting can be tough, though. So here are some how-to's to rev your motor:

1. Start your exercise session by preparing. Stretch and warm your muscles.

2. Don't do too much too soon. Begin slowly and intensify carefully.

3. Try an outdoor and an indoor activity. Switch back and forth to prevent boredom. You won't have to reschedule because of bad weather, either.

4. Ask someone to join you.

5. Make regular physical activity part of your life. Make time for your workout, whether before, during, or after school. It doesn't matter when you do it—but set a schedule and stick to it.

6. If you're not sure about an activity, ask your gym teacher or coach for advice.
Here are a few activities that just may get you hooked on being physically active. Listed next to each one is the number of calories a 150-pound person would burn up doing these activities for an hour. Remember: Any activity that gets you moving around is better than nothing at all. To help condition your heart and lungs, move it at least three times a week, for about 30 minutes each time. Do it on your own or with friends. And don’t forget to have fun.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>CALORIES BURNED UP PER HOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running</td>
<td>650-1280</td>
</tr>
<tr>
<td>Jogging</td>
<td>740-920</td>
</tr>
<tr>
<td>Jumping rope</td>
<td>750</td>
</tr>
<tr>
<td>Racquetball</td>
<td>750</td>
</tr>
<tr>
<td>Cross-country skiing</td>
<td>700</td>
</tr>
<tr>
<td>Basketball</td>
<td>564</td>
</tr>
<tr>
<td>Ice and field hockey</td>
<td>546</td>
</tr>
<tr>
<td>Football</td>
<td>540</td>
</tr>
<tr>
<td>Soccer</td>
<td>540</td>
</tr>
<tr>
<td>Swimming</td>
<td>275-500</td>
</tr>
<tr>
<td>Brisk walking</td>
<td>440</td>
</tr>
<tr>
<td>Dancing</td>
<td>420</td>
</tr>
<tr>
<td>Bicycling</td>
<td>240-410</td>
</tr>
<tr>
<td>Hiking and backpacking</td>
<td>408</td>
</tr>
<tr>
<td>Tennis</td>
<td>400</td>
</tr>
<tr>
<td>Skating</td>
<td>300</td>
</tr>
<tr>
<td>Baseball and softball</td>
<td>282</td>
</tr>
<tr>
<td>Gymnastics</td>
<td>270</td>
</tr>
</tbody>
</table>

Note: These numbers are for someone who weighs 150 pounds. The amount of calories you burn up depends on how much you weigh. The more you weigh, the more calories you burn.
To find the number of calories you would burn up in any of the activities noted on the previous chart:

**EXAMPLE**

125 lbs.

<table>
<thead>
<tr>
<th>(Your weight)</th>
<th>125 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \div )</td>
<td>( \div )</td>
</tr>
<tr>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>=</td>
<td>=</td>
</tr>
<tr>
<td>=</td>
<td>0.83</td>
</tr>
<tr>
<td>( \times )</td>
<td>( \times )</td>
</tr>
<tr>
<td>(# of calories)</td>
<td>(basketball)</td>
</tr>
<tr>
<td>=</td>
<td>=</td>
</tr>
<tr>
<td>=</td>
<td>564 calories</td>
</tr>
<tr>
<td>=</td>
<td>468 calories</td>
</tr>
</tbody>
</table>

**Note:** In this example, a 125-pound person burns only 0.83 times the calories of a 150-pound person, and when playing basketball, only 468 calories are burned compared to 564 calories.
Forget “no pain, no gain.” Pain is the body’s alarm system. It’s telling you something’s wrong. If you feel pain, STOP. Seek help. Don’t grimace and bear it.
Even when you rest, your heart is at work. It never stops beating.

The less fit you are, the more your heart works to pump blood through your body. Listen to these facts: In 1 minute, the heart of a fit person beats 45 to 50 times. But, to pump the same amount of blood, the heart of someone not fit must beat 70 to 75 times in 1 minute.

Compared to a fit heart, the average heart pumps up to 36,000 times MORE per day—which comes to 13.1 million times MORE per year.

Phew! No wonder exercise helps.
YOU'RE NOT ALONE!

You're not the only one trying to change habits. Americans everywhere now recognize that their well-being depends on a healthy diet and physical activity. Consequently, a lot of products and services are now geared to this new lifestyle. Groceries and restaurants, as noted, now offer healthy foods and meals. But other services also exist.

- Dietitians can suggest food choices and menus. If you're on a Step-One or Step-Two Diet, you may want to consult a dietitian. Your doctor can help you find one.

- Help also means support. It's hard to go it alone. Seek support from your family and friends. If you get them into the act, you'll be helping them as much as they'll be helping you: Everyone benefits by adopting healthy habits.

- Finally, information about the topics discussed in this booklet are available from the National Cholesterol Education Program. The program has cholesterol booklets for all ages. Write to:

  National Cholesterol Education Program
  Information Center
  Post Office Box 30105
  Bethesda, Maryland 20824-0105
WHERE DO YOU STAND?

You've read through the booklet. Now it's time to begin. The best way to start is by finding out where you stand now. Do you know what your eating and activity habits are? Take this test and find out.

Over the next three days, keep a diary of:

1. Everything you eat and drink. This means how much, not just what. If you need to, estimate quantities.

2. Record your physical activity. by type and duration.

To be sure you don't miss anything, carry the diary with you and make your entries as close in time to when you eat, drink, or are active. The longer you wait to write things down, the more likely you are to leave things out.

Done? Compare your habits to the Step-One Diet. Fill out the worksheet on page 55:

- Find your diary's food entries on pages 24-32. Mark whether items were in the "Choose" or "Decrease" column by writing a "C" or "D" after each item. Note how much over the recommended serving(s) you were.

- What about your physical activity? Note whether you were active, what type of activity and for how long?

Surprised at yourself? Take your worksheet and:

1. See what low-fat foods you could have eaten instead of those that fell into the "Decrease" column.

2. Think of activities for any days you missed. Find some that fit your schedule.

Diaries are great workbooks and you may find it helpful to keep one as you start your habit makeover. You also can show your three-day record to your doctor or to a dietitian. Seeing your current habits will help them advise you on how to make changes.
WHERE DO YOU STAND—
FOOD AND ACTIVITY WORKSHEET

(photocopy for days 2 and 3)

<table>
<thead>
<tr>
<th>FOOD GROUPS</th>
<th>BREAKFAST</th>
<th>DECREASE</th>
<th>LUNCH</th>
<th>DECREASE</th>
<th>DINNER</th>
<th>DECREASE</th>
<th>SNACKS</th>
<th>DECREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat, Poultry, Fish, and Shellfish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Dairy Products</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breads, Cereals, Pasta, Rice, Dry Peas and Beans</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Vegetables</td>
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<tr>
<td>Fruits</td>
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<tr>
<td>Other</td>
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<thead>
<tr>
<th>PHYSICAL ACTIVITY</th>
<th>TYPE:</th>
<th>HOW LONG:</th>
</tr>
</thead>
</table>

12
Reduce your high blood cholesterol and you take a big step toward reducing your risk of heart disease.

Here’s a chart to help you keep track of your blood cholesterol level. Get your doctor to write down your total cholesterol, LDL-cholesterol and HDL-cholesterol levels or to tell you the numbers.

**Example**

<table>
<thead>
<tr>
<th>Date</th>
<th>November 19, 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cholesterol</td>
<td>210</td>
</tr>
<tr>
<td>LDL</td>
<td>140</td>
</tr>
<tr>
<td>HDL</td>
<td>30</td>
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</table>

**START YOUR RECORDS HERE:**

<table>
<thead>
<tr>
<th>Name</th>
<th></th>
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<tbody>
<tr>
<td>Age</td>
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</table>

**FIRST READING:**

<table>
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<tbody>
<tr>
<td>Total Cholesterol</td>
<td></td>
</tr>
<tr>
<td>LDL</td>
<td></td>
</tr>
<tr>
<td>HDL</td>
<td></td>
</tr>
</tbody>
</table>

**GOAL READING:**

<table>
<thead>
<tr>
<th>Goal Date</th>
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<tbody>
<tr>
<td>Total Cholesterol</td>
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<tr>
<td>LDL</td>
<td></td>
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<tr>
<td>HDL</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Total Cholesterol</td>
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<td>------------------</td>
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Acknowledgment:

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National Institutes of Health
National Heart, Lung, and Blood Institute
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