Heart disease is the #1 cause of death in the US today.

- 700,000 people will have strokes, and about 170,000 of them will die this year.
- 1,100,000 people will have heart attacks, and nearly half of them will die this year.

High blood pressure and high cholesterol are major risk factors for heart disease, yet many people don’t even know if they have them.

You can’t just tell by how you feel. Yet every day your heart and blood vessels may be suffering damage. High blood pressure is often called the silent killer—untreated, it can cut 10 to 20 years off a person’s life. As many as one-third of Americans have high blood pressure, but don’t even know it.

We know how to help prevent and treat high blood pressure and cholesterol. There are many treatment options available—ones you control at home and in your lifestyle, and ones your doctor can prescribe for you.

Cholesterol

<table>
<thead>
<tr>
<th>Cholesterol Category</th>
<th>Total Dietary Cholesterol Level</th>
<th>Health Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borderline high LDL cholesterol</td>
<td>130 to 159 mg/dL</td>
<td>Moderate risk for heart disease</td>
</tr>
<tr>
<td>High LDL cholesterol</td>
<td>160 to 189 mg/dL</td>
<td>Increased risk for heart disease</td>
</tr>
<tr>
<td>Very high LDL cholesterol</td>
<td>190 mg/dL or above</td>
<td>Very high risk for heart disease</td>
</tr>
</tbody>
</table>

For More Information
American Heart Association
www.americanheart.org
National Stroke Association
www.stroke.org

Blood Pressure & Cholesterol

Controlling the risk factors for heart disease can lead to a longer, healthier life.

BlueCross BlueShield of Nebraska
An Independent Licensee of the Blue Cross and Blue Shield Association
Under Pressure

You’ve got the power...

Turn The Pressure Down

The DASH Diet

The Dietary Approach to Stop Hypertension is an eating plan which lowers blood pressure effectively and quickly. It is recommended for everyone, whether or not they have high blood pressure. It’s based on 2000 calories; most women need only about 1600 calories, while men use about 2400 calories.

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Daily Servings</th>
<th>Serving Sizes</th>
<th>Examples</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grains and grain products</td>
<td>7-8</td>
<td>1 slice bread</td>
<td>Whole wheat bread, English muffin, grits, oatmeal</td>
<td></td>
</tr>
<tr>
<td>Vegetables</td>
<td>4-5</td>
<td>1 c cooked vegetable</td>
<td>Tomatoes, potatoes, carrots, peas, squash, broccoli, collards, kale, spinach, artichokes, beans, sweet potatoes, turnip greens</td>
<td></td>
</tr>
<tr>
<td>Fruits</td>
<td>4-5</td>
<td>6 oz. fruit juice</td>
<td>Apricots, bananas, dates, orange juice, mangos, melons, peaches, pineapples, prunes, raisins, strawberries, tangerines</td>
<td></td>
</tr>
<tr>
<td>Dairy</td>
<td>2-3</td>
<td>8 oz. milk</td>
<td>Skim or 1% milk, skm or low-fat butter milk, non-fat or low-fat yogurt, part-skim mozzarella cheese, non-fat cheese</td>
<td></td>
</tr>
<tr>
<td>Meats, poultry, and fish</td>
<td>2 or less</td>
<td>3 oz. cooked meat, poultry or fish</td>
<td>Select only lean, trim away visible fat, broil, roast, or bake, instead of frying; remove skin from poultry</td>
<td></td>
</tr>
<tr>
<td>Nuts, seeds, and legumes</td>
<td>4-5 per week</td>
<td>1.5 oz or 1/2 nuts</td>
<td>Almonds, filberts, mixed nuts, peanuts, walnuts, sunflower seeds, kidney beans, lentils</td>
<td></td>
</tr>
</tbody>
</table>

Source: National Heart, Lung, and Blood Institute

More Ways Than One

Reduce Your Cholesterol Levels

The main cause of high blood cholesterol and LDL levels is a diet high in saturated fats and cholesterol. But recent research indicates that to really control the problem, you’ve got to exercise as well as eat a low-fat, low-cholesterol diet. Doing just one isn’t nearly as effective.

Reduce Total Fat intake to no more than 30% of your total daily calories.

Reduce Saturated Fat to no more than one-third of the fat you eat. Major sources of saturated fat include butter, cheese, whole milk, cream, meat, poultry, chocolate, coconut, palm and palm kernel oil, lard, and solid shortenings. Most processed foods such as cookies, crackers, and other bakery goods contain trans fatty acids which increase cholesterol. Look for “hydrogenated” or “partially hydrogenated” oils on labels and avoid them.

Replace saturated fats with mono-ununsaturated “good” fats like olive oil, canola oil, and nuts, which can lower cholesterol. Poly-unsaturated fats like corn, sesame, safflower, soybean, and sunflower oils are good too. Use these oils for cooking and salads, and always bake or broil your food rather than frying. Instead of butter or stick margarine, use a non-fat margarine. Better yet, spread your bread with non-fat cream cheese or dip it in olive oil.

Reduce Dietary Cholesterol to 300 milligrams per day by avoiding dairy products made with whole milk and cream, egg yolks, and organ meats such as liver.

Eat More Fish. Research shows that certain fatty fish oils in the omega-3 group reduce blood cholesterol levels. Fish especially rich in omega-3 oils are salmon, tuna, mackerel, lake trout, bluefish, herring, and sardines.

Exercise. Aerobic exercise, along with improving your diet, can reduce your blood cholesterol levels by up to 15%. Exercise will also help you lose weight and keep it off. Talk to your doctor about starting an exercise program.

Medication. If your total cholesterol, especially your LDL level, remains high despite diet changes and exercise, your doctor may recommend medications. Generally, an LDL level over 190, or an LDL over 160 with two or more risk factors, requires medication.

Eat at Least Five Fruits and Vegetables a Day. They help lower LDL (bad) cholesterol according to a variety of studies. It appears that people who eat multiple servings of fruits and vegetables each day consume less saturated fat and have healthier diets. In addition, it also appears that these types of foods play an important role in lowering the risk of coronary artery disease.

Under Pressure

There is so much you can do to lower your blood pressure that past national guidelines have recommended that people with stage 1 hypertension (140/90-159/99), and no other risk factors, try lifestyle changes for a year before going on medication. By changing how they eat, drink, exercise, deal with stress, and by quitting smoking, many people have been able to reduce their risk for serious health complications.

**Examples**

3 oz. cooked meat, 4-5 other bakery goods contain trans fatty acids which increase cholesterol.

**Significance**

4-5 palm and palm kernel oil, lard and meat, poultry, chocolate, coconut, butter, cheese, whole milk, cream, egg yolks, and organ meats such as liver.

**Exercise.** A moderate program of aerobic exercise such as brisk walking, bicycling, swimming, or running for 30-45 minutes 3-4 days a week can produce a drop of about 10 points in elevated systolic and diastolic levels. It can also help you lose weight and handle stress. Consult your physician before starting a new exercise program.

Find Regular Ways to Relax. Research has shown that stress can cause temporary rises in blood pressure and, if experienced over a long term, may result in high blood pressure. There are many ways to reduce stress—exercising, meditation, deep breathing techniques, yoga, and prayer are classic methods. You may also find gardening, listening to music, hot baths, humor, books and movies, or being with friends just as relaxing.

**Limit Alcohol.** Moderate drinkers (no more than two drinks a day for men, and one drink a day for women) actually have lower risk for heart disease than nondrinkers. At higher levels, drinking aggravates hypertension, reduces your heart’s pumping ability, and interferes with the effectiveness of medications.

**Quit Smoking.** The effect of smoking won’t show up in the doctor’s office, because you can’t smoke there. But when a smoker lights up, their systolic pressure (the first number) goes up more than 20 points on average, then goes back down over the next half hour. So smokers with high-normal levels actually have intermittent high blood pressure every time they smoke. Quitting isn’t easy—get help. It takes even as few as 5-10 pounds reduces the workload on your heart.

Reduce Salt Intake. About 75% of African Americans and 35% of whites are salt-sensitive. A diet high in salt can cause retention of fluids, which in turn may raise blood pressure levels. We’d all do well to cut our salt intake to about a teaspoon a day (2,300 mg). The problem is 75% of the salt we eat is hidden in processed foods. To really get on top of salt intake, you’re better off eating whole and homemade foods, and swapping the saltshaker for spicy, no-salt herbs. Salt alternatives containing potassium, magnesium, and less sodium may also be helpful.

Eat a Diet High in Fruit, Vegetables, Whole Grains, and Lowfat Dairy Products. Our diet may be the main reason we have higher rates of heart disease and stroke than many other countries. We’ve replaced healthy whole foods with processed foods containing too much fat and salt. Research indicates that eating more foods containing potassium, calcium, magnesium, and fiber may help reduce blood pressure.

**Ask Your Doctor About Aspirin.** The American Heart Association recommends a daily dose for people with heart disease.

**Take Medications if You Need Them.** Finding the right medications requires patience and good communication between you and your doctor. Do not take any medications without first consulting your physician.

You’ve got the power...