



Your **HEART**  
is in your  
**HANDS**



**CHOOSE HEALTH. CHOOSE A LONGER LIFE.**  
**Choose the Lieutenant Governors' Challenge.**

[www.ltgovernorschallenge.us](http://www.ltgovernorschallenge.us)

**Heart disease** is the **#1 killer** of both men and women in America.

Heart disease risk is **lowered** by as much as **82%** simply by **adopting sensible health habits**.  
And, that change can never be too late.<sup>1</sup>



**CHOOSE HEALTH. CHOOSE A LONGER LIFE.  
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**Cardiovascular disease affects the heart or blood vessels. Cardiovascular disease includes heart failure, hypertension, coronary artery disease, arrhythmia, arteriosclerosis (narrowing of the arteries), heart disease, and more.**

More than 80-million Americans have cardiovascular disease, according to 2005 Centers for Disease Control (CDC) data. This means nearly 1 in every 3 people in the United States has cardiovascular disease. More people die each day of heart related disease than die of cancer, HIV/AIDS, and accidents combined.<sup>2</sup> **Yet many of the greatest cardiovascular risk factors can be controlled by your personal choices.**

Six major risk factors for cardiovascular disease include smoking, high blood cholesterol, high blood pressure, physical inactivity, obesity and diabetes – and you can help control each one.<sup>3</sup> Heart attack commonly results from fatty deposits, like cholesterol, building up in arteries (arteriosclerosis).<sup>4</sup> The plaque build up is likely to produce chest pain (angina pectoris), heart attack or both.<sup>5</sup> More than 65% of diabetics die of cardiovascular disease. A major type 2 diabetes risk factor is being overweight, especially having extra weight around the waist.<sup>1</sup>

Your cardiovascular health risk may **drop 25 percent to 82 percent** by choosing one or more **healthy habits.**

You can choose four healthy habits to help prevent cardiovascular disease: eat a healthy diet, get regular physical activity, maintain a healthy weight, and avoid smoking. You can see heart healthy results in 8 to 10 weeks.<sup>6</sup> Your cardiovascular health risk may drop 25 percent to 82 percent by choosing one or more healthy habits.<sup>1</sup> And, it's never too late to start. People from 70 to 90 years old leading healthy lifestyles reduce the chance of heart disease death by nearly two-thirds.<sup>1</sup> A healthy lifestyle includes a nutritious diet, regular physical activity, maintaining a healthy weight, and no smoking.

Great medical advances have been made in survival and recovery rates for heart disease. But heart disease is a lifelong condition. Damaged arteries persist and increase the likelihood of a heart attack. The best action for cardiovascular health is prevention. Do not wait until you have a risk factor. More than half the men and women who die suddenly of heart disease have no previous symptom.<sup>1</sup> The first symptom of heart disease is often a fatal heart attack.<sup>7</sup>

If a man turns 50 years old with one or no risk factors, his lifetime risk for developing cardiovascular disease is just 5 percent. The risk for a woman under the same conditions is just 8 percent, so there is benefit to choosing healthy habits at younger ages.<sup>8</sup> When it comes to heart health, what's good for you is generally good for your whole family, even its youngest members. Two-thirds of teenagers already have at least one risk factor of heart disease.<sup>1</sup> Make healthy habit choices a family affair! Set a good fitness example and cook healthy for yourself and the whole family.

Risk will remain since no person can affect genes or age, and all changes to nutrition, fitness, and health care regimens should be doctor reviewed and recommended to your specific health and the health of those in your family.<sup>4</sup> Research indicates physically active, non-smoking people eating five servings a day of fruit and vegetables with moderate daily alcohol intake may add 14 years to life expectancy compared to those who do not choose these behaviors.<sup>9</sup> But only 3 percent of U.S. adults currently practice all of the healthy habits.<sup>1</sup>

The good news is your heart is in your hands. Learn about your own risk factors and begin one or more daily healthy habits. Choose the Lieutenant Governors' Challenge to plan, track, and gain rewards from your new nutrition and fitness choices. Participants in the 12-week program earn points by doing everyday activities like walking or housework. Each person who meets the points goal receives a medal. Do you accept the Lieutenant Governors' Challenge? Log onto [www.ltgovernorschallenge.us](http://www.ltgovernorschallenge.us) now to begin!



## Rate your Cardiovascular Risk

The American Heart Association says all people over age 20 should know their risk for cardiovascular disease. Take this quiz to determine yours. Do you smoke? Has your doctor said your blood pressure or "bad" cholesterol level is too high? Do you have a body mass index score (BMI, measure of body fat) score of 25 or more? Do you get less than 30-minutes of physical activity most days? Do you have diabetes? Have you had a heart attack? Did your father or brother have a heart attack before age 55? Did your mother or sister have one before age 65? Are you a woman over age 55 or a man over age 45? If you answered 'yes' to any one question, you are at a higher risk of heart attack.<sup>1</sup>

### Web Site Resources:

#### American Heart Association, Heart Disease Risk Assessment Tool

[www.americanheart.org/print\\_presenter.jhtml?identifier=3003499](http://www.americanheart.org/print_presenter.jhtml?identifier=3003499) for Spanish version, click on "Spanish Learn Your Risk"

**National Heart Blood and Lung Institute, 10-year Risk for a Heart Attack Calculator** <http://hp2010.nhlbihin.net/atp/iii/calculator.asp> and BMI calculator [www.nhlbisupport.com/bmi/](http://www.nhlbisupport.com/bmi/) or [http://www.nhlbisupport.com/bmi/sp\\_bmicalc.htm](http://www.nhlbisupport.com/bmi/sp_bmicalc.htm) (Spanish version)

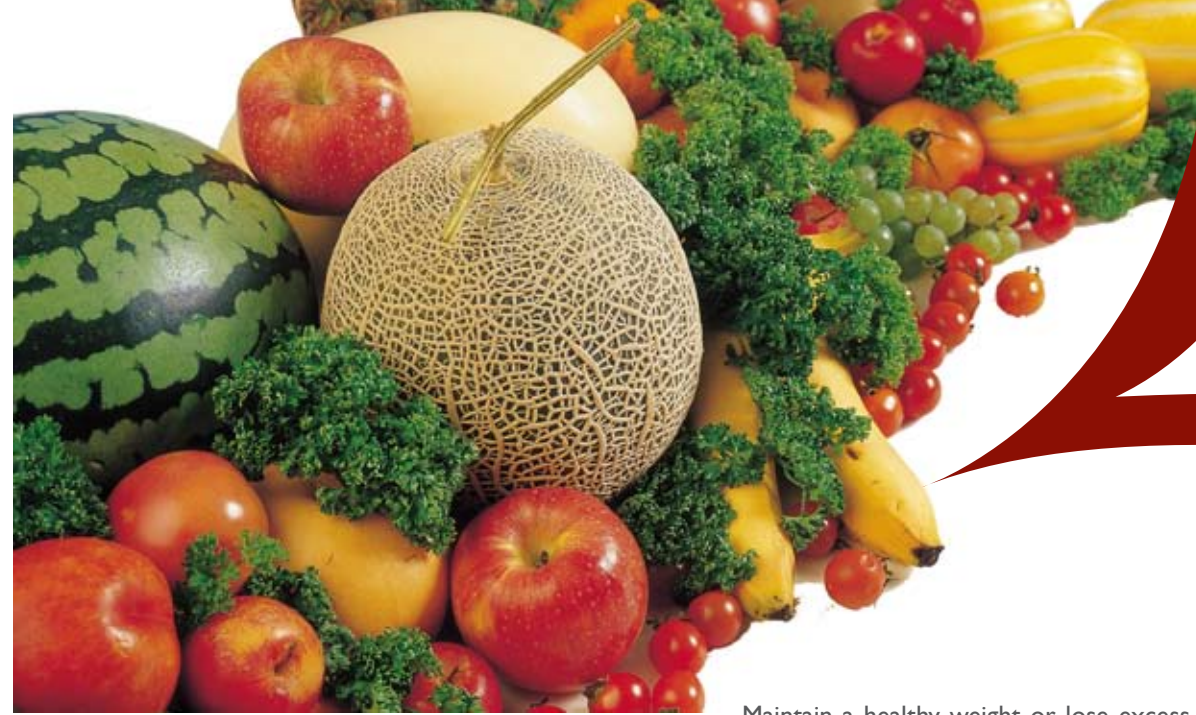
# NUTRITION

Two-thirds of adults are overweight or obese.<sup>10</sup> Taking off pounds directly reduces heart disease risk for overweight persons and it reduces other cardiovascular risk factors helping control diabetes, blood pressure, and blood cholesterol. Even a small weight loss will lower your risk. At the very least, do not gain more weight. Young adults who maintain their weight over time, even if they are overweight, have lower risk factors for heart disease in middle age than those whose weight increases.<sup>1</sup>

Lasting weight loss requires a change in lifestyle and new choices. Aim to lose ½ pound to 2 pounds per week, in consultation with your doctor.<sup>1</sup> Weight control is a question of balance. You take in calories from the food you eat. You burn off calories during physical activity. Cutting down calories and increasing physical activity leads to sustained, long term weight control.<sup>1</sup> To begin better nutrition, slowly begin making lower calorie food choices, drink water, increase your intake of fruits and vegetables, and pay attention to portion sizes.

To begin better nutrition, choose to skip one or two high calorie items you would have otherwise eaten. This may be a frosted donut, a snack bag of chips, or ice cream. Choose lower calorie food. This may be 100-calorie snack foods, sliced fruit in place of chips, drinking fat-free milk instead of whole milk, or replacing soda with water or diet drinks. Be aware of the calorie count in juices.<sup>11</sup> Drinking six to eight 8-ounce glasses of water per day may make you feel full and keep you hydrated if you increase physical activity. Choose grilled food, rather than fried or battered food.<sup>12</sup>

You may want to choose whole grains instead of refined grains. Whole grains include oatmeal, brown rice, popcorn, and whole-wheat bread, pasta, and crackers instead of white bread, white rice, enriched macaroni and spaghetti.<sup>12</sup> Five servings of fruit a day lowers heart disease risk by 60%, and three servings of vegetables a day lowers heart disease risk by 70%.<sup>11</sup> Eighty percent of children eat fewer than five servings of fruits and vegetables per day.<sup>1</sup> Choose “stealth” cooking for kids by adding shredded vegetables to pizza or spaghetti sauce, and by choosing whole wheat and bran in bread.



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Maintain a healthy weight or lose excess pounds by paying attention to portion sizes. “Portion distortion” has occurred over the past 20 years. A bagel 20 years ago was 3-inches in diameter and had 140 calories. Today’s bagel is 6-inches in diameter and has 350 calories. You need to rake leaves for 50 minutes to burn off the extra 210 calories (based on 130-pound person). Pay attention to food labels. If a cereal label says one serving is 110 calories, you should choose to eat one serving size. The label will indicate if a serving is 1 cup or another size.<sup>3</sup>

You may make more nutritious choices on portion sizes by keeping familiar objects in mind. The proper portion of one baked potato or one cup of cereal flakes is the size of your fist, one cup of pasta is the size of a tennis ball, and one teaspoon of margarine is equal to one dice.<sup>3</sup> You may choose to eat on smaller plates and bowls and to not go back for more servings to maintain proper portion sizes. For better nutrition, stop eating as soon as you feel full.<sup>11</sup> Get emotional support to make more nutritious choices and make nutrition a family affair!

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**Web Site Resources:**  
**Lieutenant Governors’ Challenge,**  
**Daily physical activity and dietary**  
**intake tracker**  
[www.ltgovernorschallenge.us](http://www.ltgovernorschallenge.us)

**U.S. Dept. of Agriculture,**  
**My Pyramid, Develop**  
**personalized eating plans**  
<http://www.mypyramid.gov/> or  
<http://www.mypyramid.gov/sp-index.html>  
(Spanish version)

**National Heart Lung and Blood**  
**Institute, Portion Guide**  
<http://hp2010.nhlbihin.net/portion/keep.htm>



Moderate physical activity three to five times a week will improve cardiovascular function in 8 to 10 weeks and improve your cardiovascular risk factors.<sup>6</sup>

# FITNESS

Someone who is inactive is at six times greater risk of heart disease than someone who is active. Moderate physical activity three to five times a week will improve cardiovascular function in 8 to 10 weeks and improve your cardiovascular risk factors.<sup>6</sup> As little as thirty minutes of moderate-intensity activity most days a week reduces your risk of heart disease and lowers your chance of stroke, high blood pressure, diabetes, cancer of the colon, uterine, and breast, and other health problems.<sup>1</sup> Regular participation in moderate-intensity activity can reduce the risk of a fatal heart attack by nearly 25%.<sup>13</sup>

An inactive person may choose to start slow by walking to the TV to change channels instead of using the remote, by taking stairs instead of elevators or escalators at work and the mall, or by walking to a colleague's office instead of calling. Keep moving while you watch television by stretching, using small hand weights, or pedaling a floor cycle.<sup>1</sup> Choose to walk, march in place, or do stomach crunches, jumping jacks, or push ups during commercial breaks or during breaks at work. Challenge your children or colleagues to do the same. Make fitness a family or friends affair! Do it together.

Moderate activity includes house cleaning, washing a car, a brisk walk, or raking leaves. Try to perform non-stop, vigorous housework, like vacuuming, mopping floors, or mowing for thirty minutes. If you prefer, break activity into three, 10-minute periods a day. Activities may be any form of dynamic occupational or recreational activity of similar intensity, such as cycling, shoveling snow, swimming, or skiing. The activity may be five to seven 30-minute sessions or accumulated minutes per week.<sup>14</sup> Fitness regimens should include stretching before and after the activity.

Regular activity keeps your body healthy and a healthy body wards off disease better than an unconditioned one. The heart is a muscle that pumps blood to the body. Physical activity exercises the heart and keeps it strong. A well conditioned heart pumps the same amount of blood in 50 beats as the heart of an inactive person pumps in 75 beats.<sup>15</sup>

Fitness and physical activity can lower cholesterol levels and blood pressure, reduce weight, decrease stress, and tone the heart muscle.

To choose better nutrition and better fitness, start by adding just 2,000 extra steps to your daily routine and choose nutritious ways to eat 100 fewer calories each day. Incremental changes and small goals are more manageable long-term.<sup>16</sup> Choose the Lieutenant Governors' Challenge to plan, track, and gain rewards from your new nutrition and fitness choices. Log onto [www.ltgovernorschallenge.us](http://www.ltgovernorschallenge.us) now to begin!

## Web Site Resources:

**Lieutenant Governors' Challenge, Daily physical activity and dietary intake tracker**

[www.ltgovernorschallenge.us](http://www.ltgovernorschallenge.us)

**University of Maryland Medical System, Calories Burned Calculator**

[http://www.healthcalculators.org/calculators/calories\\_burned.asp](http://www.healthcalculators.org/calculators/calories_burned.asp)



# HEALTH

You must also choose health to reduce your risk of cardiovascular disease. This includes making regular doctor's visits, no smoking, "knowing your numbers," lowering stress and compliance to doctor prescribed medical regimens which may include taking medications. Every person should consult with their health care team, including doctors, nurses, and pharmacists, to ensure individual nutrition and fitness choices are healthy.

High blood cholesterol, high blood pressure, and diabetes are three of the major risk factors for cardiovascular disease.<sup>1</sup> You should test the levels (numbers) of cholesterol and glucose in your blood and check your blood pressure to ensure you are within healthy ranges. Your glucose number can be an indicator of diabetes. More than 5-million people have diabetes and do not know it.<sup>17</sup> The National Lung Heart and Blood Institute says all healthy adults should check their blood cholesterol number at least once every five years and blood pressure at least every two years. A glucose test is recommended at least every three years beginning at age 45. More frequent testing may occur if you have any risk factor for any condition, have the condition, or if a doctor suggests it.<sup>1</sup>

The 4,800 chemicals in tobacco smoke may make blood vessels more vulnerable to atherosclerosis, the buildup of fatty substances in the arteries, a major cause of heart attack. Cigarette smoke makes your heart work harder by increasing your heart rate and blood pressure.<sup>13</sup> Smoking accelerates the onset of every diabetes complication.<sup>17</sup> However, if you quit smoking, the risk of heart disease is cut in half in just one year and, at the end of 15 years, the risk of heart disease is the same as someone who never smoked.<sup>5</sup> Likewise, stress can raise your heart rate, increase blood pressure and cholesterol, adversely affect blood glucose levels, and may increase abdominal fat.<sup>12</sup>

In addition to 'knowing your numbers' for major risk factors, you can make choices which reduce these risks. An individual who chooses regular physical activity can expect a 24 percent drop in blood levels of cholesterol.<sup>6</sup> Cholesterol levels and blood pressure may improve by shedding just 5 to 10 pounds or by taking 10,000 steps per day. A nutritious diet rich in whole grains, fruits and vegetables and lower on saturated and trans fats also aids risk factors.<sup>1</sup> You may reduce stress by identifying the cause of your stress and through deep breathing, meditation, more sleep, or by organizing your life, schedule, home or work space.



Some people may require medication for certain risk factors or in recovery from cardiovascular disease. Heart attack survivors are only 50 percent adherent to the prescription drug recommendations of the American Heart Association and the American College of Cardiology which are proven to reduce coronary heart disease death by 80 percent. The Partnership for Prescription Assistance may help qualifying individuals afford certain medications and can be accessed online (see below) or by calling 1-888-4PPA-NOW.

Your heart is in your hands. Cardiovascular risk factors you can control or treat include smoking, high blood pressure and cholesterol, physical inactivity, obesity and diabetes. Choose better nutrition, greater fitness, and attention to health. Know your numbers and choose the Lieutenant Governors' Challenge to plan, track, and gain rewards from your new nutrition and fitness choices. Log onto [www.ltgovernorschallenge.us](http://www.ltgovernorschallenge.us) now to put your heart health in your hands.



## Web Sites Resources:

**American Heart Association, "Know your Number" goals for cholesterol, glucose, blood pressure, BMI, and waist circumference for women**  
<http://www.americanheart.org/presenter.jhtml?identifier=3052872>

**University of Maryland Medical System, Stress Calculator**  
<http://www.healthcalculators.org/calculators/stress.asp>

**American Diabetes Association, Diabetes Risk Calculator**  
[http://www.diabetes.org/risk-test.jsp?WTLPromo=allaboutdiabetes\\_risktest&vms=273672323023](http://www.diabetes.org/risk-test.jsp?WTLPromo=allaboutdiabetes_risktest&vms=273672323023)

**Mayo Clinic, LDL cholesterol calculator**  
<http://www.mayoclinic.com/health/ldl-cholesterol/CL00034>

**Partnership for Prescription Assistance, single point of access to more than 475 public and private patient prescription access programs** <https://www.pparx.org/Intro.php>

## Endnotes

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13. Mayo Clinic, "Heart Disease Prevention: 5 Strategies to keep your heart healthy," January 15, 2007.
14. Circulation (2003), "Exercise and Cardiovascular Health," Dr. Jonathan Myers (Stanford University).
15. The Patient Education Institute, Inc., 1995- 2005, [www.X-Plain.com](http://www.X-Plain.com).
16. America on the Move, [www.americaonthemove.org](http://www.americaonthemove.org).
17. American Diabetes Association, Diabetes Care 31: 1040- 1045, 2008.
18. American Heart Association Journal, "Heart attack prescription drug coverage may save lives and reduce health care costs," Dr. Amanda Patrick, et. al., February 14, 2008.



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For more information, contact the  
National Lieutenant Governors Association  
75 Cavalier Blvd. Ste 226 Florence, KY 41042  
T: (859) 283-1400 • [www.nlga.us](http://www.nlga.us)

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