

Know Your Numbers

♥ Why should I know my numbers?

Your risk for heart disease and stroke can be assessed by knowing your numbers for body composition, cholesterol, triglycerides, blood pressure and blood sugar and by understanding what they mean.

♥ Body composition tests

Your body is made up of water, fat, protein, carbohydrates, and various vitamins and minerals. If you have too much fat -- especially in your waist area -- your risk for heart disease and stroke is higher.

Body mass index

Body mass index (BMI*) is a person's weight to height. BMI is commonly used to classify weight as "healthy" or "unhealthy."

$$\text{BMI} = 703 \times \text{Body weight} \div \left(\begin{array}{c} \text{Height} \times \text{Height} \\ \text{in inches} \quad \text{in inches} \end{array} \right)$$

(in pounds)

BMI less than 18.5	underweight
BMI 18.5 - 24.9	healthy
BMI 25.0 - 29.0	overweight
BMI 30.0 or more	obese

*BMI may not be the most appropriate indicator to determine health status for certain groups of people.

Waist circumference

The waist circumference is a simple measurement around a person's natural waist (just above the navel). A high-risk waistline is defined as more than 35 inches (88 cm) for women, and more than 40 inches (102 cm) for men.

♥ Cholesterol

Cholesterol is a waxy substance found in all parts of your body. It is coated with a layer of protein creating a "lipoprotein" that can travel through the blood. There are two types of cholesterol:

LDL (low-density lipoprotein) carries most of the cholesterol in the blood. When there is too much in the blood, it can lead to a cholesterol buildup in the arteries. This is why LDL cholesterol is called the "bad" cholesterol.

HDL (high-density lipoprotein) helps remove cholesterol from the blood and helps prevent the fatty buildup. HDL cholesterol is called the "good" cholesterol.

Total cholesterol

Less than 200 mg/dL	desirable
200 - 239 mg/dL	borderline high
240 mg/dL or greater	high

LDL cholesterol

Less than 100 mg/dL	optimal
100 - 129 mg/dL	near/above optimal
130 - 159 mg/dL	borderline high
160 - 189 mg/dL	high
190 mg/dL and above	very high

HDL cholesterol

<40	low
≥60	high

Legend: < means LESS THAN

≥ means GREATER THAN OR EQUAL TO

NOTE: These categories apply to adults age 20 and older.

♥ Triglycerides

Triglycerides are the chemical form in which most fat exists in food as well as in the body. They're also present in blood plasma and, in association with cholesterol, form the plasma lipids.

Triglycerides in plasma are derived from fats eaten in foods or made in the body from other energy sources such as carbohydrates. Calories ingested in a meal and not used immediately by tissues are converted to triglycerides and transported to fat cells to be stored.

Excess triglycerides in plasma are called hypertriglyceridemia. It's linked to the occurrence of coronary artery disease in some people. Elevated triglycerides may be a consequence of other diseases, such as untreated diabetes mellitus. As with cholesterol, increases in triglyceride levels can be detected by plasma measurements. These measurements should be made after an overnight food and alcohol fast.

Normal	Less than 150 mg/dL
Borderline high	150 - 199 mg/dL
High	200 - 499 mg/dL
Very high	500mg/dL and above

♥ **Blood pressure**

Blood pressure is the force of blood as it moves through the blood vessels. If blood cannot flow easily through the vessels, the force increases. If the force is too great, you have high blood pressure.

The higher (systolic) number represents the pressure while the heart is beating. The lower (diastolic) number represents the pressure when the heart is resting between beats. The systolic pressure is always stated first and the diastolic pressure second.

(Ages 18 Years and Older)

	Blood Pressure Level (mm Hg)	
Category	Systolic	Diastolic
Normal	<120 and	<80
Prehypertension	120-139	80-89
Stage 1 Hypertension	140-159	90-99
Stage 2 Hypertension,	≥160 or	≥100

From the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC7).

Legend

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> means GREATER THAN OR EQUAL TO

♥ **Blood sugar**

Diabetes is a metabolic disorder in which the level of glucose in the blood -- called blood sugar -- is too high. Normally, the body gets its energy from blood sugar, which comes from food.

According to the American Diabetes Association, a fasting blood sugar level in people who do not have diabetes should be between 60 - 99 mg/dL. If you have diabetes, your goal for blood sugar levels using a blood glucose meter should be-

	Old Monitor (It does not check plasma glucose levels.)	New Monitor (It checks plasma glucose levels.)
Before meals	80 – 120 mg/dL	90 – 130 mg/dL
At bedtime	100 – 140 mg/dL	110 – 150 mg/dL

Your blood sugar goals may be different from these ideal goals. Ask your health care provider what goals are best for you.

♥ **For a healthy heart, try to live by these numbers:**

Blood pressure	Less than 120/80
BMI	Less than 25
Total cholesterol	Less than 200 mg/dL
LDL	Less than 130 mg/dL
HDL	Above 40 mg/dL
Triglycerides	Less than 150 mg/dL
Normal blood sugar	60 - 99 mg/dL
Waist circumference	
Men	Less than 40 inches
Women	Less than 35 inches

♥ **Resources**

American Diabetes Association
800-342-2383
www.diabetes.org

American Heart Association
800-242-8721
www.americanheart.org.

American Stroke Association
888-478-7653
www.strokeassociation.org

National Diabetes Education Program
800-860-8747
www.ndep.nih.gov/

National Heart, Lung, and Blood Institute
301-592-8573 800-575-9355
www.nhlbi.nih.gov

National Stroke Association
800-787-6537
www.stroke.org

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