Blood Pressure & BMI

Blood pressure is the force of blood against the walls of your arteries. Blood pressure is normally measured on your arm at the brachial artery. High blood pressure readings indicate that your heart could be working harder than it should.

The systolic number is the pressure when the heart pumps or contracts. The diastolic number is the pressure when the heart is relaxing between beats.

It is of utmost importance to realize that high blood pressure can go unrecognized for years, causing no symptoms but causing progressive damage to the heart, kidneys or brain. Initial signs and symptoms of elevated blood pressures are usually mild and nonspecific, symptoms of elevated blood pressure may include headache, dizziness or blurred vision. People who have high blood pressure typically do not have symptoms and often unaware of the problem until they have their blood pressure measured.

Health Risk	SYSTOLIC	DIASTOLIC
Normal	119 or BELOW	79 or BELOW
Prehypertensive	120-139	80-89
High	140 or ABOVE	90 or ABOVE

Source: National Institutes of Health Classifications

Your blood pressure reading is:

BP _____ / _____

Systolic   Diastolic

Body Mass Index (BMI)
Body Mass Index: A key index for relating a person's body weight to their height. The Body Mass Index (BMI) is a person's weight in kilograms (kg) divided by their height in meters (m) squared.

The National Institutes of Health (NIH) now defines normal weight, overweight, and obesity according to the BMI rather than the traditional ht/weight charts. BMI calculations are good indicators of healthy weights for adult men and women, regardless of frame size.

BMI	BMI (Designation by the WHO)
Less than 18.5	LOW
18.5 or more and less than 25	NORMAL
25 or more and less than 39	HIGH
30 or more	VERY HIGH

The above mentioned indices refer to the values for obesity judgment proposed by the WHO, the World Health Organization

Your BMI _____

Body Fat Percentage/ Body Composition & Waist Hip Ratio

Body Composition
Some body fat is necessary for overall health because it plays an important role in protecting internal organs, provides energy and regulates the hormones that perform various functions in body regulation. Excess fat, however, has been linked to a number of health problems, such as increased risk for diseases like cancer, diabetes and heart disease.

Body fat can be measured in many ways. One of the more common screening methods is called Bioelectrical Impedance. Using the bioelectrical impedance method allows for minimally invasive, painless and quick assessments. Bioelectrical Impedance is a test method which is based on the idea that lean tissue allows electrical current to pass through it more easily than fat tissue because the lean tissue has a larger amount of water content than fat tissue does.

	Age	Low	Normal	High	Very High
MALE 20-39	20-39	<8.0	8.0-19.9	20.0-24.9	≥25.0
	40-59	<11.0	11.0-21.9	22.0-27.9	≥28.0
	60-79	<13.0	13.0-24.9	25.0-29.9	≥30.0
FEMALE	20-39	<21.0	21.0-32.9	33.0-38.9	≥39.0
	40-59	<23.0	23.0-33.9	34.0-39.9	≥40.0
	60-79	<24.0	24.0-35.9	36.0-41.9	≥42.0

Recommended Body Fat/Composition Range

Source: Based on Gallagher et al., American Journal of Clinical Nutrition. Vol. 72, Sept. 2000

Your Body Composition _____

Waist Hip Ratio
Having excess abdominal fat will put you at higher risk for diseases like diabetes, high cholesterol, hypertension, and heart disease. Abdominal fat is generally carried above the waist giving one an "apple" shaped appearance. Fat that is carried around the hips and thighs, giving one a "pear shaped" appearance, does not carry the same risks for disease as does abdominal fat. The Waist to Hip Ratio is a way to assess the risk for disease using the following calculation:

Health Risk	Waist circumference	Hip Circumference
Low Risk	0.95 or BELOW	0.80 or BELOW
Moderate Risk	0.96 to 1.00	0.81 to 0.85
High Risk	1.0+	0.85+

Source: The National Institute of Diabetes, Digestive and Kidney Diseases (NIDDK)

Your Waist/Hip Ratio _____

Tips for prevention:

- Most importantly, KNOW YOUR NUMBERS.
- Check your blood pressure regularly.
- Take your blood pressure medications as directed, even if you're feeling fine.
- Maintain a healthy weight and monitor your body fat percentage and Body Mass Index (BMI).
- Limit your sodium (salt) intake: Read food labels before you buy a product.
- Increase your fiber intake with whole grains, nuts and beans.
- Decrease white bread, pasta, rice, sweets and soft drinks.
- Limit your dietary saturated fats and cholesterol.
- Eat some protein and healthy fat with each meal. (Slows sugar absorption)
- Consult your personal health care provider.
- Exercise regularly.
- Reduce stress and practice relaxation.
- Stop smoking.

Recommendations to lower your risk for heart disease.

- Monitor your blood pressure and share your results with your physician at an annual medical checkup. Contact your physician sooner if you have two or more readings in the high range – 140/90 or higher, or immediately if you have a reading higher than 180/110.
- Keep your blood cholesterol low by eating foods low in total fat, saturated fat and cholesterol.
- If you are overweight, reduce your weight to a desirable level.
- Start/maintain an exercise program.
- Stop smoking if you are a current smoker.

Biometric Screenings Tip Sheet

UnitedHealthcare®

Understanding Your LIPID Profile

At any given time, a combination of factors affect your blood cholesterol values: your diet, your weight, whether you smoke, how much alcohol you drink, how much exercise you get, your general health, and medications you may be taking. This is why your doctor may take the "average" of several tests to arrive at an accurate picture of your cholesterol (total, HDL "good" and LDL "bad") and triglyceride levels. When determining your treatment to lower a high cholesterol level, your doctor will evaluate several factors.

Check if you have any of the following risk factors and discuss with your doctor:

- Family history of premature coronary heart disease (before age 55)
- Low HDL (less than 40 mg/dL)
- High blood pressure (greater than or equal to 140/90 mmHg)
- Diabetes Mellitus (high blood sugar)
- Obesity (BMI 30 or greater)
- Current cigarette smoking
- Male (45 years or older) or female (over 55)
- Inactivity (lack of exercise)

Total Cholesterol

The first step in evaluating your risk of coronary heart disease due to high cholesterol is to measure your total cholesterol (TC). Cholesterol is a fatty substance found throughout the body that helps build cell walls. The body produces all the cholesterol it needs for normal functioning, but too much dietary cholesterol can be harmful. A total cholesterol level between 100-199 mg/dL is normal. Although a cholesterol level below 100mg/dl is usually not significant, in rare circumstances it may be an indicator of a health problem. A total cholesterol level between 200-240 mg/dL is considered a borderline elevation and possibly represents an increased risk for heart disease. Levels above 240 mg/dL indicate a definite risk for heart disease. Please discuss any result outside of the normal range with your physician.

CHOL - Total Cholesterol	
Normal	100-199 mg/dL
Borderline Risk	200-239 mg/dL
Increased Risk	Greater than 240 mg/dL

Source: National Cholesterol Education Program

Your Total Cholesterol _____mg/dL

TOTAL Cholesterol/HDL Ratio

TC/HDL ratio is a good way to assess your heart disease risk. This ratio compares the amount of beneficial HDL (good) cholesterol to your total cholesterol level. The lower the risk ratio, the lower the risk for developing heart disease. Conversely the higher the risk ratio, the higher the risk for developing heart disease.

TC/HDL - Total Cholesterol/HDL Ratio		
Health Risk	**Male**	**Female**
1/2 Average Risk	3.4	3.3
Average Risk	5.0	4.4
2X Average Risk	9.6	7.1
3X Average Risk	23.4	11.0

Source: National Cholesterol Education Program

Your TC/HDL Ratio _____

HDL Cholesterol *(High Density Lipoprotein)*

HDL is considered "good" cholesterol because it removes cholesterol from the arteries and therefore helps protect you against developing coronary heart disease. This combination of cholesterol and protein is called a lipoprotein. Generally the higher the HDL level, the more cholesterol is removed from the blood stream and the lower the risk of heart attack. Recent evidence indicates that even those with a total cholesterol level between 100-199 mg/dL have an increased heart disease risk if HDL is less than 40.

HDL CHOL - HDL Cholesterol	
Normal	Greater than 50 mg/dL for females; Greater than 40 mg/dL for males

Source: National Cholesterol Education Program

Your HDL _____mg/dL

Triglycerides

Triglycerides are a form of fat that circulates in your bloodstream. They are found in your diet and produced by your liver. When you eat, your triglyceride (and glucose) level increases significantly but gradually; if your body processes the fat efficiently, the level of triglycerides will decrease. Factors contributing to high levels include obesity and overweight, physical inactivity, smoking, excess alcohol intake, high carbohydrate diets and some diseases, for example diabetes.

TRIG - Triglycerides	
Normal	35-150 mg/dL
Increased Risk	Greater than 150 mg/dL

Source: National Cholesterol Education Program

Your Triglycerides _____mg/dL

LDL Cholesterol *(Low Density Lipoprotein)*

LDL is carried through the blood stream by protein. Low density lipoprotein (LDL) carries a low proportion of protein to cholesterol. High levels of LDL have been associated with increased risk of coronary artery disease. For this reason, LDL has been called "The Bad Cholesterol." The chart indicates the risk for heart disease with each LDL cholesterol range.

CALC LDL - LDL Cholesterol	
Optimal	Less than 100 mg/dL
Near Optimal	101-129 mg/dL
Borderline High	130-159 mg/dL
High	160-189 mg/dL
Very High	Greater than 189 mg/dL

Source: National Cholesterol Education Program

Your LDL _____mg/dL

Glucose – Blood Sugar

It is important to measure glucose as an indication of the presence of diabetes. Type II diabetes is the most common type. If your fasting glucose level is higher than 99 mg/dL, we suggest a visit to a physician for further review. Left untreated, diabetes can increase the risk of heart disease, as well as cause nerve, kidney and eye damage.

Factors that cause changes in blood cholesterol and glucose

- Excess fat in your diet, particularly **saturated fat**, may increase your blood cholesterol.
- Dietary cholesterol (the cholesterol in food) raises your blood cholesterol.
- Excess weight gain tends to lower HDL cholesterol and raise LDL cholesterol.
- Smoking lowers HDL cholesterol levels.
- Regular exercise may help increase HDL cholesterol levels.

Glu - Fasting Glucose	
Normal	Less than 100 mg/dL
Borderline Risk	101-125 mg/dL
Increased Risk	126 mg/dL

Source: American Diabetes Association

Glu - Non-Fasting Glucose	
Normal	Less than 140 mg/dl

Source: American Diabetes Association

Your Glucose _____mg/dL

Additional Test	
Test:	Result: