

# Understanding Biometrics

Measure	What it means	Normal level	Risk	Notes
<b>BMI</b>	Body Mass Index (BMI) is a measure of your weight in kilograms (kg) divided by your height in meters squared	<ul style="list-style-type: none"> <li>• <b>18.5-24.9 = healthy weight</b></li> <li>• 25-29.9= overweight</li> <li>• Over 30 = obese</li> </ul>	A BMI above normal associated with higher risk for chronic disease including diabetes, cancer, arthritis and heart disease.	BMI does not measure body composition (lean body mass VS fat mass). Athletes may have higher BMIs due to muscle mass
<b>Blood pressure</b>	The pressure of the blood against the walls of the blood vessels, especially the arteries	Top number (systolic) 90-120 Over bottom number (diastolic) 60-80 <ul style="list-style-type: none"> <li>• <b>120/80 mm/Hg = normal</b></li> <li>• 120-139/80-89 mm/Hg = <b>prehypertension</b></li> <li>• 140-159/90-99 mm/Hg = <b>hypertension</b></li> </ul>	As blood pressure rises, it damages arteries and blood vessels and increases risk for heart attack and stroke	Weight loss, regular exercise, low sodium, low fat diet with lots of fruits and vegetables lowers the risk of high blood pressure.
<b>Cholesterol</b>	A waxy, fat-like compound made in your liver. It is needed to make hormones and aid in fat digestion.	<ul style="list-style-type: none"> <li>• <b>&lt; 200 mg/dL= normal</b></li> <li>• 200-239 mg/dL= borderline high</li> <li>• Over 240 mg/dL= high</li> </ul>	An elevated cholesterol level is just one risk factor for heart disease. Having a family history and other risk factors (such as obesity, diabetes and high blood pressure) raises risk further.	Smoking cessation and regular exercise help to lower cholesterol and heart disease risk. A diet low in saturated and trans fat as well as low in added sugar helps to reduce cholesterol. Losing weight also reduces blood cholesterol.
<b>HDL</b>	High Density Lipoproteins. "Healthy" cholesterol that helps remove cholesterol from the bloodstream	<b>Over 50 mg/dL is desirable for women</b>  <b>Over 40 mg/dL is desirable for men</b>	The ratio of cholesterol to HDL is important to note. A ratio below 4.0 is desirable for lower risk of heart disease	HDL is affected by exercise. It goes up with regular aerobic activity. Alcohol in moderation also raises HDL. Your doctor may prescribe medication if risk for heart disease is high