

Your **Health** is in **YOUR hands**



2019 Health Evaluation

Why participate?

Knowing your health status is the first step to a happy and healthy life. By participating in the Health Evaluation, you will discover any high risk areas to focus on during your health journey. There is no cost to you for the health evaluation. Your results are 100% confidential and will not be shared with your employer.

The Health Evaluation includes:

- total cholesterol
- HDL cholesterol
- total cholesterol/HDL ratio
- LDL cholesterol
- triglycerides
- fasting glucose
- blood pressure
- height & weight
- waist circumference
- Health Coaching – receive your results onsite!

These tests are not diagnostic and the information is for screening purposes only. Only your physician can diagnose or rule out the presence of disease. If you receive any abnormal results, please consult your doctor for follow-up.

Frequently Asked Questions

Can I eat prior to my health evaluation?

No. Fasting is required for accurate results. You should not eat or drink for 12 hours before the test.

Will my health information be held confidential?

Yes, by law Interactive Health must protect your privacy in these matters and will hold all information confidential. No individual information will be disclosed without your written permission. Interactive Health will prepare a company-wide group aggregate report illustrating the top health risk categories.

What standards are maintained so that my results are accurate?

Yes, Interactive Health adheres to the most stringent guidelines for quality control and assurance. The technology behind the testing performed is very accurate with a 3% margin of error. See page 6 for a listing of sources for our biometric risk ranges.

How long will the Health Evaluation take?

From sign in to health coaching the screening takes approximately 20-25 minutes. If you participate in A1C testing, your appointment will take approximately 10 minutes longer.

When will I get my results?

Immediately! Interactive Health staff will review your results and explain what your numbers mean. Results will also be available online at www.myinteractivehealth.com 10 business days after onsite testing. Please note that A1c results are not immediate. Those results will be loaded to myinteractivehealth.com 10 business days after onsite testing.

I don't like to have blood drawn.

That's Okay! Interactive Health utilizes finger prick technology so no needles are used. With a simple finger stick, we will analyze your blood in about 5 minutes. Please consult your physician for other testing opportunities if you feel the finger stick testing method isn't right for you.

Understanding Your Results

Total Cholesterol

Test	Value	Category
Total Cholesterol	Less than 200 mg/dl	Desirable
	200 – 239 mg/dl	Borderline
	240 mg/dl or higher	High Risk

Cholesterol is a waxy, fat-like substance produced by your body and found in many foods. Your body needs cholesterol to work properly and naturally produces all that your body needs. Too much cholesterol can accumulate depending on the kind of foods you eat and the rate at which your body breaks it down.

Extra cholesterol can build up in the arteries. Over time, cholesterol deposits, called plaque, can narrow the arteries and allow less blood to pass through. When plaque completely blocks an artery carrying blood to the heart, a heart attack occurs. It also can happen when a plaque deposit ruptures and causes a clot in a coronary artery. Chest pain, also called angina, is caused by plaque partially blocking a coronary artery, reducing blood flow to the heart.

High cholesterol prevention and treatment go hand-in-hand. The heart healthy lifestyle changes that can lower your cholesterol are able to help prevent you from having high cholesterol in the first place.

Though having a family history of heart disease or high cholesterol is a risk factor you can't change, there are several things you can do to reduce your risk of developing high cholesterol: lose, or maintain, a healthy weight, reduce your saturated fat intake, incorporate exercise regularly, drink alcohol in moderation, quit smoking, and eat a low-fat diet that is high in fiber.

Cholesterol Ratio

Total Cholesterol /HDL Ratio	< 3.5	Desirable
	≥ 3.5	Undesirable

Understanding your cholesterol ratio can provide useful information about the risk for heart disease, but it isn't useful for deciding what treatment should be used to control that risk. Total cholesterol and low-density lipoprotein (LDL) cholesterol levels are more useful in guiding treatment than is your cholesterol ratio. A higher ratio indicates a higher risk of heart disease; a lower indicates a lower risk.

For treatment purposes, it is important to know absolute numbers for all cholesterol levels. People with very low HDL levels or very high LDL levels may be at substantial risk. There are effective ways to lower LDL cholesterol that are proven to reduce risk.

HDL Cholesterol

Test	Value	Category
HDL Cholesterol	60 mg/dl or higher	Desirable
	Less than 40 – Men Less than 50 – Women	High Risk

High Density Lipoproteins, or HDL, are often referred to as "good" cholesterol. HDL scavenge for particles in the blood stream, picking up excess cholesterol and taking it back to the liver where it is broken down. The higher your HDL level, the less "bad" cholesterol will be in the blood stream.

Although higher levels of HDL can be helpful in reducing your risk of having a heart attack, researchers note that all risk factors for heart disease should be considered. It is possible that HDL may not be as helpful for some people as others based on genetics, the size of the HDL particles and other proteins in your blood.

Methods of increasing HDL include both dietary and exercise changes. Experts recommend aerobic exercise for a minimum of thirty minutes at least five days per week to aid changes in HDL. Dietary changes include monitoring fat consumption, eating soy products, and monitoring the glycemic load in your diet.

Understanding Your Results

LDL Cholesterol

Test	Value	Category
LDL Cholesterol	Less than 100 mg/dl	Optimal
	100 – 129 mg/dl	Near Optimal
	130 – 159 mg/dl	Borderline
	160 mg/dl or higher	High Risk

Cholesterol in our bodies is produced both by the liver and by food we digest. Cholesterol is unable to dissolve in the blood, so proteins must transport it where it needs to go. These proteins are called lipoproteins. Low-density lipoproteins are one of such.

An LDL particle is a microscopic particle consisting of an outer layer of lipoprotein that surrounds cholesterol center. LDL is called low-density lipoprotein because LDL particles tend to be less dense than other kinds of cholesterol particles. When too much LDL is present in the blood, it can slowly accumulate in the inner walls of arteries that feed the heart and brain. The build-up of LDL and other substances is known as plaque. A thick, hard deposit that, over time, causes atherosclerosis. A narrowing of the arteries. If a clot forms and blocks a narrowed artery, heart attack or stroke can occur.

The treatment plan for LDL will depend on current LDL blood levels, as well as, risk for heart disease and stroke. The risk for heart disease and stroke depends on other risk factors including high blood pressure, smoking status, age, HDL level, and family history of early heart disease. In addition, those with existing cardiovascular disease or diabetes are at high risk.

Triglycerides

Test	Value	Category
Triglycerides	Less than 150 mg/dl	Optimal
	150 – 199 mg/dl	Borderline
	200 mg/dl or higher	High Risk

Triglycerides are a type of fat found in blood that the body uses for energy. When food is consumed, the body converts any unneeded calorie into triglycerides. Triglycerides are in turn stored in fat cells, to be later released for energy between meals. If more calories are regularly consumed than burned, then high triglycerides may occur.

Triglycerides are a different type of lipid than cholesterol; however, both circulate in the blood stream and can increase the risk of stroke and heart disease if high enough. High triglycerides are often a sign of diseases including obesity and metabolic syndrome. Metabolic syndrome is a variety of conditions that includes too much fat around the waist, high blood pressure, high triglycerides, high blood sugar and abnormal cholesterol levels. Additionally, high triglycerides can often be a sign of uncontrolled type 2 diabetes, hypothyroidism, liver disease, or kidney disease.

According to the American Heart Association (AHA), the best way to maintain an optimal triglyceride level is through lifestyle modifications such as diet, weight loss, and physical activity.

Glucose

Test	Value	Category
Fasting Glucose <small>*Fasting Glucose is defined as no caloric intake for 12 hours</small>	70 – 99 mg/dl	Normal
	100 – 125 mg/dl	Borderline
	≥ 126 mg/dl	High Risk
Non-Fasting Glucose <small>*Non-Fasting Glucose: caloric intake (food or beverage) within the last 12 hours.</small>	70 - 120 mg/dl	Normal
	120 – 140 mg/dl	Borderline
	> 140 mg/dl	High Risk

Understanding Your Results

Uncontrolled type 2 diabetes cost the U.S. healthcare industry \$22.9 billion per year in direct medical costs. Medication contributes to lowering blood sugar, but to effectively manage diabetes individuals must maintain a healthy weight, avoid tobacco use, exercise and eat a healthy diet. Nearly 21 million Americans have diabetes. According to the CDC National Center for Health Statistics, 2006, diabetes was the sixth leading cause of death. 72,815 people in the U.S. died from diabetes.

Blood sugar is the measure used to indicate the presence of diabetes. Fasting blood sugars of 100+ are considered high. Elevated blood sugars are an indicator of pre-diabetes and diabetes. Pre-diabetes is now regarded as a condition that should be treated with lifestyle changes. Fasting blood sugars between 100 and 125 are considered pre-diabetes.

There are 54 million people in the U.S. who have pre-diabetes. It is possible to delay or even prevent this from developing into type 2 diabetes. Pre-diabetes can be treated by making lifestyle changes in diet and increasing physical activity. Those who are overweight, smoke, have high cholesterol, high blood sugar, high blood pressure and are sedentary are at high risk of developing diabetes. Women who have had gestational diabetes (diabetes during pregnancy) and those with a family history of diabetes are also at higher risk. Normal results include those whose blood sugars are controlled with medication.

A1C

The Hemoglobin A1C (A1C) test is an average of blood sugar over a 2-3 month period. It specifically looks at how much sugar is coating the hemoglobin cell. Blood glucose tests the amount of sugar in the blood at the exact time the blood was drawn, while A1C tests the average blood sugar over the past 2-3 months. Glucose testing is a snapshot in time, while A1C testing is more of a moving picture.

A1C does not require fasting. Recent food or beverage will not impact the test results. The convenience of testing any time regardless of food ingestion makes the A1C test a highly useful tool in management and diagnosis of diabetes. Interactive health does not diagnose.

The American Diabetes Association (ADA) recommends different ranges for a non-diabetic person than for someone with diabetes. The following ADA guidelines can be used to better understand the A1C results:

Desirable, for non-diabetic person	5.6 or below
Pre-Diabetes	5.7 – 6.4
Diabetes	6.5 or higher
Desirable, with history of diabetes	Less than 7.0

Body Mass Index

Test	Value	Category
BMI (Body Mass Index)	18.5 – 24.9	Normal Weight
	25 – 29.9	Overweight
	30 or greater	Obese

Body Mass Index (BMI) is a simple, inexpensive, and non-invasive assessment of body fat, which in turn can be correlated to overweight and obesity. BMI is a non-invasive unit of measure; it relies solely on height and weight. BMI is accessible, and individuals can routinely measure it for tracking purposes. Studies have shown that BMI correlates with body fat and risk for disease, such as heart disease and diabetes.

BMI is a good way for most people to tell if they are at risk for health problems because of their weight. But this method is not perfect. BMI does not work as well for people who are very muscular or those who have little muscle. Muscle weighs more than fat. Because of this:

- A muscular person may have a high BMI but still have a healthy level of body fat.
- A frail, older, or inactive person may have a low BMI but still have too much body fat.

Also, weight is only one measure of your health:

- If you are at a normal weight according to your BMI but do not exercise or eat nutritious foods, you may not be as healthy as you could be.
- If you are a little overweight according to your BMI, you may still be healthy if you eat right and exercise regularly.

BMI is just one way to tell if you are at a normal weight. Another way to find out if you are at a healthy weight is to measure the size of your waist, or your waist circumference.

Understanding Your Results

Waist Circumference

Test	Value	Category
Waist Circumference	< 40 inches – Men < 35 inches – Women	Desirable
	≥ 40 inches – Men ≥ 35 inches – Women	Undesirable

A high waist circumference is associated with an increased risk for type 2 diabetes, dyslipidemia, hypertension, and CVD in patients with a BMI in a range between 25 and 34.9 kg/m². Monitoring changes in waist circumference over time may be helpful since it can provide an estimate of increased abdominal fat. Furthermore, in obese patients with metabolic complications, changes in waist circumference are useful predictors of changes in CVD risk factors.

Ethnic and age-related differences in body fat distribution modify the predictive validity of waist circumference as a surrogate for abdominal fat. Variations due to ethnicity and age may explain the difficulty to predict disease risk in these groups based solely on waist circumference.

For those trying to lose weight, waist circumference should be measured on a regular basis to help monitor progress and risk for disease. Disease risk is decreased for women with a waist size less than 35 inches and 40 inches for men. To correctly measure the waist, stand and place tape measure around the midsection, just above the hipbones. Measure the waist just after breathing out.

Blood Pressure

Test	Value	Category
Systolic Blood Pressure	90 - 119	Normal
	120 – 139	Prehypertension
	140 – 159	High Blood Pressure Stage 1
	160 or higher	High Blood Pressure Stage 2
Diastolic Blood Pressure	60 - 79	Normal
	80 – 89	Prehypertension
	90 – 99	High Blood Pressure Stage 1
	100 or higher	High Blood Pressure Stage 2

High blood pressure, or hypertension, is a common condition in which the force of blood against your artery walls is too high and may eventually cause health problems such as heart disease or stroke. Blood pressure is determined by the amount of forced blood flow in your arterial walls. The hardening of your arteries, caused by fat, the more restriction of blood flow, and in turn, the higher your blood pressure.

There are modifiable and non-modifiable risk factors that can result in high blood pressure. These risk factors include: age, race, family history, weight, sedentary behavior, diet, and tobacco use. High blood pressure can also cause kidney failure, enlargement of the heart, and artery damage.

Hypertension can exist for years without causing symptoms. Uncontrolled high blood pressure increases the risk for serious health problems. High blood pressure can be easily detected, and once identified, can be easily controlled through lifestyle modifications.

Understanding Your Results

Normative and recommended ranges are based on national benchmarks – National Institutes of Health, Centers for Disease Control and Prevention, American Heart Association.

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[http://hyper.ahajournals.org/content/63/4/878.full \(April 2014\)](http://hyper.ahajournals.org/content/63/4/878.full)

[http://www.ash-us.org/documents/JCH-HTN_Guidelines_2013.pdf \(Dec. 2013\)](http://www.ash-us.org/documents/JCH-HTN_Guidelines_2013.pdf)

2015: ADA: Standards of Medical Care in Diabetes

<http://american-diabetes.com/normal-blood-glucose-level-for-people-with-diabetes>

<http://www.diabetes.org/diabetes-basics/diagnosis/>

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