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## Understanding your wellness screening results

Thank you for taking part in our wellness screening. We have included these results for your review. Below you will find information to help better understand these laboratory results.

Please take all results to your primary care provider for review. Don't have a primary care provider? Call Prisma Health's Find a Doctor at 1-844-447-3627 (toll free) to be connected with doctors accepting new patients in your area. You can also visit: [PrismaHealth.org/find-a-doctor](https://PrismaHealth.org/find-a-doctor).

### Lipid panel

Lipids are fats and fat-like substances that are important parts of cells and sources of energy. A lipid panel measures the level of specific lipids in blood to help assess the risk of cardiovascular disease (CVD). The parts of a lipid panel are shown below:

- **Total cholesterol:** Cholesterol is a waxy substance in the blood. It comes from two sources: your liver and the food you eat. Although your body needs some cholesterol to stay healthy, many people have high cholesterol because they eat a diet high in fat, which can lead to heart attack or stroke. Knowing your cholesterol level is important in determining your risk for diseases and stroke. Recommendations on cholesterol levels vary by age, but you should keep it below 200mg/dl. Your total cholesterol score is calculated using this equation: HDL + LDL + 20% of your triglyceride level (see below).
- **Triglycerides:** Triglyceride is the most common type of fat in the body. Triglyceride levels vary by age and gender. Carbohydrates (or sugars) that are not burnt off in the body's normal processes are stored as triglycerides; thus, nutrition and genetics can affect triglyceride levels. A high triglyceride level combined with low HDL cholesterol or high LDL cholesterol is linked to atherosclerosis, a buildup of fatty deposits in artery walls that increases the risk for heart attack and stroke. An optimal triglyceride value is less than 150 mg/dL.
- **HDL (high-density lipoprotein) cholesterol:** Also known as "healthy" cholesterol, HDL helps prevent

the buildup of harmful fat on artery walls. With HDL cholesterol, higher levels are better. Low HDL cholesterol puts you at greater risk for heart disease. People with high triglycerides often have low HDL cholesterol. Genetic factors, type 2 diabetes and certain medications (such as beta blockers and anabolic steroids) can lower HDL cholesterol levels. HDL can be improved by not using tobacco, limiting alcohol, losing weight, exercising regularly and eating foods high in healthy fats (such as nuts, avocados and fish). An HDL value greater than 60 mg/dL helps protect against heart disease.

- **LDL (low-density lipoprotein) cholesterol:** Also known as "bad" cholesterol. LDL easily sticks to the inside of artery walls, which may narrow the flow of oxygen rich blood to your heart over time. A low LDL cholesterol level is good for your heart health. A diet low in saturated and trans fats and high in fiber can help decrease LDL cholesterol. An optimal LDL value is less than 100 mg/dL.
- **VLDL (very low-density lipoprotein) cholesterol:** VLDL carries cholesterol, protein and triglycerides from the liver to other parts of the body to be used for energy or stored as fat. An optimal VLDL level is less than 30 mg/dL.
- **Cholesterol/HDL ratio:** Your cholesterol ratio is calculated by dividing your total cholesterol by your HDL number. Because two people with the same total cholesterol number can have different cholesterol ratios, the ratios indicate different levels of heart disease risk. An optimal ratio is less than or equal to 3.5.
- **Non-HDL cholesterol:** It is helpful to know your non-HDL cholesterol because your level of non-HDL may predict your risk of cardiovascular disease even better than your LDL (bad) cholesterol. That's because your non-HDL number tells you all the bad cholesterol circulating in your blood. It is calculated by subtracting your HDL cholesterol number from your total cholesterol number.

## Hemoglobin A1c

Hemoglobin A1c is a 3-month average of your blood sugars. A1c is reported as a percentage – the higher your percentage, the higher your blood sugars have averaged over 3 months. Sugars normally enter your bloodstream and attach to hemoglobin. The higher your blood sugars, the more they will attach to hemoglobin, which is shown in the A1c value. That means the higher your A1c levels, the poorer your average blood sugar control is and the higher your risk of diabetes. An optimal A1c is less than 5.7%.

## Cotinine

This test detects nicotine in your body. Typical cotinine levels in a non-smoker are less than 10ng/ml.

## Understanding your biometric results

### Blood pressure

Blood pressure is the force of blood against the walls of your arteries as your heart beats. The top number (systolic) shows the pressure while your heart is beating (contracting). The bottom number (diastolic) shows the pressure when your heart is resting between beats (relaxing). High blood pressure readings indicate that your heart could be working harder than it should. High blood pressure can go unrecognized for years. Sometimes, there are no symptoms. If your blood pressure is consistently high, it can damage your heart, kidneys and brain. A normal blood pressure is 120 mmHg or less/80mmHg or less.

## Waist circumference

Increased abdominal fat is a risk factor for heart disease and type 2 diabetes. Waist circumference is the distance around your waist just above the bellybutton. Note: This distance is not necessarily the same as listed on your pants.

## Relative fat mass

Relative fat mass, or RFM, uses your height and waist circumference to calculate the best estimation of your body fat percentage. Knowing your body fat percentage can give you a better understanding of your risk of developing chronic diseases such as diabetes, high blood pressure, heart disease and stroke. Improving your RFM by adopting healthy eating and activity habits can reduce your risk of these conditions.

The acceptable range for males is 18–24% and 25–31% for females. RFM is a simple equation that measures height-to-waist ratio (equations for men and women appear below):

**Males:  $64 - (20 \times \text{height/waist circumference}) = \text{RFM}$**

**Females:  $76 - (20 \times \text{height/waist circumference}) = \text{RFM}$**