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#### **Summary Of Your Results:**

Your Health Risk Index

0/3

BMI Category Healthy Weight Metabolic Syndrome Yes Diabetes Medium Risk

#### The Health Risk Index is a 2-number score comprised of two variables: Body Mass Index and Metabolic Syndrome.

The lowest risk, target score is 0 / 0. The highest risk score is 3 / 5. The chart to the right represents all possible risk scores.

#### Green: LOW RISK Yellow: MEDIUM RISK Red: HIGH RISK

Your goal is to lower your risk goals so you are in the green. Below is how we calculated your BMI and MetS score.



## Your Body Mass Index (BMI)

Your BMI of 21.6 places you in the "Healthy Weight" category. Congratulations! Your weight places you in the "Healthy Weight" category.

Weight Category	BMI	Health Risk Index	Weight Range	
Underweight	< 18.5	-1	< 124	
Healthy Weight	18.5 - 24.9	0	125 - 168	
Overweight	25.0 - 29.9	1	169 - 202	
Obese	30.0 - 39.9	2	203 - 270	
Morbidly Obese	> 40.0	3	> 270	



Your MetS:

Waist:

28"

## Your Metabolic Syndrome (MetS)

Metabolic Syndrome consists of 5 risk factors. Values in the GREEN below indicate that you do NOT have that risk factor. If you have any 3 of the risk factors, you have Metabolic Syndrome.



## **Your Health Interpretation**

- Your overall HRI Score is: 0/3
- Your BMI status: "Healthy Weight"
- Congratulations! Your weight places you in the "Healthy Weight" category.
- You do have Metabolic Syndrome.
- Metabolic Syndrome disease indicators:
  - Your Diabetes Status: Medium Risk
  - Your Hypertension Status: Low Risk
  - Your Lipid and Cholesterol Status: High Risk
- Other Cholesterol Levels:
  - Total Cholesterol: 210
  - LDL Cholesterol: 90

## **Your Lifestyle Medicine Prescription**

#### Health Screening Recommendations

- Men and Women 50 to 75:
  - Colorectal cancer screening tests save lives by finding precancerous polyps and colorectal cancer early, when treatment works best. Screening is recommended for men and women aged 50-75 years.
  - All women and men over age 50 with fractures should have a bone density test (DEXA scan).
- Women Ages 21 to 65:
  - Women aged 21-65 should have a Pap smear every 3 years. If you have both a Pap smear and human papilloma virus (HPV) test, you may be tested every 5 years.
  - Women who are sexually active and at high risk should be screened for chlamydia and gonorrhea. Your provider may talk with you about testing for other infections.
- Women Ages 40 to 74:
  - Mammography to screen for breast cancer has been shown to reduce mortality from the disease among women ages 40 to 74, especially those age 50 or older.
  - If you are under age 65 and have risk factors for osteoporosis, you should be screened.
- Men and Women:
  - The American Cancer Society recommends a skin exam as part of a periodic exam by your provider, if it is indicated.
  - Depending on your lifestyle and medical history, you may need to be screened for infections such as syphilis, chlamydia, and HIV, as well as other infections.
  - Go to the dentist once or twice a year for an exam and cleaning.
- Under 60 years of age:
  - Have an eye exam every 2 years and every year if you are over 60. Your provider may recommend more frequent eye exams if you have vision problems or glaucoma risk.

## **Recommended Vaccinations**

- Men and Women:
  - Everyone 6 months or older, with rare exceptions, should get a flu shot every year.
  - You should have a tetanus-diphtheria and acellular pertussis (Tap) vaccine once as part of your tetanus-diphtheria vaccines. You should have a tetanus-diphtheria booster every 10 years.
  - Your provider may recommend other immunizations if you are at high risk for certain conditions.

#### Triglycerides

- You have high triglycerides, defined as a value greater than 150 mg/dl. High triglycerides may contribute to hardening of the arteries or thickening of the artery walls (atherosclerosis) which increases the risk of stroke, heart attack and heart disease.
- Diet and lifestyle changes to help lower your triglycerides.
  - Lose weight and stay at a healthy weight.
  - Limit saturated fats, sugars, and simple carbohydrates in your diet. Simple carbohydrates are the "white" foods such as white rice, white bread, regular potatoes and pasta.
  - Replace simple carbohydrates with complex carbohydrates and fiber such as brown rice, whole grain bread, sweet potatoes, and whole wheat pasta.
  - Increasing your physical activity can lower your triglycerides. Benefits can be seen with as little as 60 minutes of moderate-intensity aerobic exercise a week.
  - Quit smoking.
  - Decrease or eliminate your consumption of alcohol.
- You may need medicine to help lower your triglycerides. Consult with your doctor.

#### HDL

- HDL (High Density Lipoprotein) is the 'good' cholesterol. High levels of HDL reduce your risk for heart disease. You have low HDL, defined as a value less than 40 mg/dl for men and 50 mg/dl for women. A low level of HDL is thought to accelerate the development of coronary heart disease, vascular disease and atherosclerosis. Genetic factors, type 2 diabetes, smoking, being overweight and being sedentary can result in lower HDL cholesterol.
- Diet and lifestyle changes can increase HDL levels.
  - Lose weight and stay at a healthy weight.
  - Quit smoking
  - Increasing your physical activity can increase your HDL levels. Benefits can be seen with as little as 60 minutes of moderate-intensity aerobic exercise a week.
  - Avoid trans fats, as they can increase LDL cholesterol and lower HDL cholesterol levels. Foods prepared with shortening, such as cakes and cookies, often contain trans fats, as do most fried foods and some margarines. Read the ingredients and avoid "partially hydrogenated" fats.
  - Moderate use of alcohol has been linked with higher levels of HDL cholesterol. For healthy
    adults, that means up to one drink a day for women of all ages and men older than age 65,
    and up to two drinks a day for men age 65 and younger. Too much alcohol can cause weight
    gain and may increase your blood pressure and triglyceride levels.
- Some medications, like steroids and progestin's, may decrease HDL and increase LDL.

• HDL levels are sometimes improved by drugs used to lower LDL and triglyceride levels.

## Prediabetes

- Because your fasting blood glucose is between 100 mg/dL and 125 mg/dL and your hemoglobin A1c is 5.7% to 6.4%, you meet the criteria for prediabetes.
- This means that your blood sugar is above normal but not high enough to be diabetes.
- Please take these results to your doctor and discuss how often you need to be tested.
- It is possible to prevent prediabetes from developing into Type 2 diabetes.
- You could develop Type 2 diabetes if you do not immediately make lifestyle changes.

## **Blood Glucose**

- Your fasting blood glucose level is between 100 to 125 mg/dL, which is over the 100 mg/dl upper limit for 'normal' fasting glucose. At this point, you have impaired fasting glucose and can be classified as pre-diabetic. Simply put, you are at high risk for developing Type 2 Diabetes if you don't make some changes in your diet and lifestyle.
- Consult with your physician or medical professional.
- The good news is that prediabetes may be reversible with lifestyle and diet modifications.
  - Lose 7% of your body weight, losing even 10-15 pounds can make a huge difference.
  - Learn about carbohydrate counting and portion size.
  - Make every meal well-balanced.
  - Avoid sugar sweetened beverages.
  - Hydrate. Water helps flush out your system and stabilize the glucose in the bloodstream.
  - Exercise moderately (such as brisk walking) 30 minutes a day, 7 days a week.
  - Eat a fat-packed snack. Fat acts as a blood sugar stabilizer and can slow the absorption rate of glucose.
  - We recommend that you get your vitamin D levels checked. If your levels are low, Vitamin D supplementation may help prevent the development of diabetes and may help maintain blood glucose control.

## HDL and Blood Glucose

- Because you have low HDL and high blood glucose, this combination can increase your risk of developing Type 2 Diabetes.
- Consult with your physician and health coach regarding your risk for lifestyle disease.
- High density lipoprotein cholesterol (HDL), the so-called "good" cholesterol improves blood glucose levels by enhancing skeletal muscle function and reducing adiposity.
- A low plasma level of HDL cholesterol is an atherosclerotic risk factor; however, emerging evidence suggests that low HDL levels might also contribute to the pathophysiology of type 2 diabetes through direct effects on plasma glucose.
- Pay careful attention to the points above on how to increase HDL!
- Incorporate the strategies above to help lower blood glucose.

# HDL and Triglycerides

- Because you have two Metabolic Syndrome factors, low HDL and high triglycerides, you have a blood lipid profile that increases your risk for heart disease.
- Consult with your physician and health coach regarding your risk for lifestyle disease.
- In addition to the information about HDL and triglycerides above, here is some additional information:
- High triglycerides and low HDL increase your risk for heart disease. Low levels of HDL and raised triglycerides, affecting millions, are strongly linked to significantly increased risk of coronary heart disease even in those who achieve or surpass current low density lipoprotein cholesterol (LDL-C) targets.
- Triglycerides and HDL appear to act synergistically with the impact of triglycerides increasing when HDL is low and the impact of HDL increasing when triglycerides levels are high.
- Increasing your physical activity can lower your triglycerides while increasing your HDL levels. Benefits can be seen with as little as 60 minutes of moderate-intensity aerobic exercise a week.

## Blood Glucose and Triglycerides

- Because you have two Metabolic Syndrome factors, high blood glucose and high triglycerides, here are some additional things to be aware of:
- High triglycerides don't cause diabetes. Instead, their levels indicate that your system for turning food into energy isn't working properly.
- A common cause of high triglycerides is insulin resistance. Insulin resistance is when your cells don't respond to insulin and have diminished ability to let glucose inside your cells. As a result, both glucose and triglycerides build up in your blood.
- Consult with your physician and health coach regarding your risk for lifestyle disease.

## HDL, Triglycerides and Blood Glucose

- You have low HDL, high triglycerides, and high blood glucose. Because you have three factors, you have Metabolic Syndrome.
- Your risk for heart disease, diabetes, and stroke increases with the number of metabolic risk factors you have.
- It is possible to prevent or delay metabolic syndrome, mainly with lifestyle changes. A healthy lifestyle is a lifelong commitment. Successfully controlling metabolic syndrome requires long-term effort and teamwork with your health care providers.
- The first line treatment is lifestyle change. However, if efforts at reversing risk factors don't work, then drug treatment may be required.
- Low HDL, high triglycerides, and high blood glucose are often seen together. People with chronic high blood glucose or Type 2 diabetes tend to exhibit lower HDL. When there is something wrong with insulin, it's likely that cholesterol and triglycerides will also be affected, not just glucose. Diabetes lowers the amount of "good cholesterol," or HDL that sweeps through the blood and vacuums up excess fat.
- When HDL levels are lowered, the "bad cholesterol", or LDL increases, as do the triglycerides. Low HDL levels paired with high triglycerides result in increased plaque buildup in artery walls, the blockages that lead to heart attacks and strokes. In fact, the American Diabetes Association reports that more than 65% diabetics die from either heart attacks or strokes.

## Metabolic Syndrome

• You have three positive Metabolic Syndrome factors, therefore you have Metabolic Syndrome.

- Your risk for heart disease, diabetes, and stroke increases with the number of metabolic risk factors you have.
- It is possible to prevent or delay metabolic syndrome, mainly with lifestyle changes. A healthy lifestyle is a lifelong commitment. Successfully controlling metabolic syndrome requires long-term effort and teamwork with your health care providers.
- The first line treatment is lifestyle change. However, if efforts at reversing risk factors don't work, then drug treatment may be required.
- Below are some important points that relate to the combination of factors you have:
  - Diet. It cannot be emphasized enough. Metabolic Syndrome is a chronic condition that can potentially be reversed by adhering to healthy diet guidelines. By changing your diet, you can lose weight, lower your blood pressure, lower your bad cholesterol and triglyceride levels.
  - Increase your magnesium intake. New studies now show that adequate magnesium intake can reduce diabetes risk by as much as 34 percent. Adequate magnesium intake can also help manage high blood pressure. Eat foods rich in magnesium, such as pumpkin seeds, spinach, chard, sunflower seeds, and navy beans.
  - Eat more low-glycemic fiber. People who have problems with blood sugar control and/or weight typically eat the foods that have very low fiber content. Fiber, found in whole grains and unprocessed foods, can be very effective in stabilizing blood sugar levels.
  - Increase the amount of nutrient-dense, low-glycemic foods in your diet, such as dark green, leafy vegetables, whole fruits, and sprouted nuts and seeds.
  - Increase your omega-3 intake.
  - Not all fats are bad, and in fact, some fats are essential for good nutrition. A healthy balance of good fats is more important than eliminating ALL fats.
  - Exercise. Like diet, exercise is an essential part of the treatment plan for Metabolic Syndrome. Exercise helps control weight, helps control blood sugar levels more effectively, helps reduce high blood pressure, and strengthens the heart muscle. These are all essential in reversing Metabolic Syndrome.
  - Sleep well. Chronic sleep deprivation can alter hormone levels and slow metabolism.
  - Avoid hydrogenated or partially hydrogenated oils found in many processed foods, deepfried foods, fast foods, and junk food.
  - Caffeine intake after a meal surges blood sugar levels, making blood sugar control more difficult.
  - Smoking. A recent study links smoking to increased diabetes risk.
  - Avoid all simple or refined carbohydrates (white flour, white rice, white bread, pasta, cookies, cakes, crackers, processed snack foods, starchy vegetables that grow underground such as potatoes, beets, peanuts.)
  - Avoid refined sugar or artificial sugar-substitutes.
  - Avoid alcoholic beverages, which can rapidly spike blood sugar levels.
- Consult with your physician, medical professional or health coach immediately regarding your risk for lifestyle disease.

#### **Additional Resources**

- Our Resources https://labtestingapi.com
- General Health https://cdc.gov/HealthyLiving
- Fitness App https://myfitnesspal.com
- Health Coaching wellnessdatasolutions.com

- Diabetes Info http://diabetes.org
- Heart Health https://heart.org

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