

Participant Materials

# Preventive Care Campaign

Week Three: Know Your Numbers

# Know Your Numbers



## Watch The Webinar

[Click here](#) to watch *Know Your Numbers* by GBS Health & Wellness Education Lead, Elise Garrick.

## Take The Quiz

- Which of the following is a non-modifiable risk factor for developing a chronic condition?
  - High blood pressure
  - Diet
  - Family History
  - Exercise
- T/F: If I feel fine, I don't need to see a doctor for preventive care.
  - True
  - False
- \_\_\_\_\_ Cholesterol is classified as the healthy cholesterol because it helps remove cholesterol from your arteries.
  - HDL
  - Total
  - LDL
  - Triglycerides
- T / F: Knowing your non-modifiable risk factors, eating well, and exercising regularly will only help lower your risk for type 2 diabetes.
  - True
  - False
- Please share something you learned from this recording:

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Hyperlink: <https://vimeo.com/986015634/e3c17186cc?share=copy>

Answer Key: 1) c; 2) b; 3) a; 4) b





GBS HEALTH & WELLNESS

# UNDERSTANDING YOUR BIOMETRICS

Biometric Measurement	Your Numbers	Ranges
<p><u>Waist Circumference:</u> An increased waist circumference is an indicator of excess fat in the abdominal region. A large waist circumference can indicate increased risk of heart disease, diabetes, some types of cancers, and other life-threatening conditions.</p>		<p>Optimal: Male ≤ 40 inches Female ≤ 35 inches</p>
<p><u>Total Cholesterol (mg/dL):</u> Cholesterol is a waxy, fat-like substance that is found in all cells of the body. Manufactured by the liver, cholesterol is an essential component of cell membranes and nerve fiber insulation. Excess cholesterol in your blood can build up in the walls of your arteries, forming a plaque. Over time, plaque can cause narrowing of the arteries which could result in a blood clot, heart attack, or stroke.</p>		<p>Optimal: 120-200 Elevated: 200-239 High: ≥240</p>
<p><u>HDL (High-Density Lipoprotein) (mg/dL):</u> High-density lipoprotein (HDL) cholesterol is known as "healthy" cholesterol because it carries LDL cholesterol from other parts of your body back to your liver, where the LDL cholesterol is removed from your body. HDL helps prevent arteries from becoming clogged, thus higher HDL levels are associated with a lower risk of heart disease.</p>		<p>Optimal: ≥60 Near Optimal: Male 40-59 · Female 50-59 Poor: Male &lt;40 · Female &lt;50</p>
<p><u>LDL (Low-Density Lipoprotein) (mg/dL):</u> LDL is referred to as "lousy cholesterol." Elevated levels of LDL cholesterol can lead to a build-up of plaque in arteries (atherosclerosis), contributing to artery blockages that can lead to heart attacks. Having high LDL levels increase the chance of getting heart disease.</p>		<p>Optimal: &lt;100 Elevated: 100-159 High: ≥160</p>
<p><u>TC/HDL Ratio (mg/dL):</u> The Total Cholesterol to HDL Cholesterol Ratio is helpful in predicting the risk of developing atherosclerosis. A high ratio means you have low HDL in relation to your total cholesterol. High ratios indicate an increased risk of heart disease.</p>		<p>Optimal: Male &lt;3.5 · Female &lt;3.0 Elevated: Male 3.5-5.0 · Female 3.0-4.4 High: Male &gt;5.0 · Female &gt;4.4</p>
<p><u>Triglycerides (mg/dL):</u> "Triglyceride" is a technical term for fat made in the body. Triglycerides are the main carriers of fatty acids from fat cells to other parts of the body. Elevated triglyceride levels are associated with increased cardiovascular risk. Elevated levels of triglycerides can be a result of overweight/obesity, physical inactivity, cigarette smoking, excess alcohol consumption and a diet high in carbohydrates (60 % of total calories or more).</p>		<p>Optimal: 45-149 Elevated: 150-199 High: ≥200</p>

# UNDERSTANDING YOUR BIOMETRICS

Biometric Measurement	Your Numbers	Ranges
<p><u>Glucose (mg/dL):</u> Blood glucose tests measure the amount of a sugar, called glucose, in a sample of your blood. Glucose is a major source of energy for most cells of the body, including brain cells. Please note that elevated glucose levels can be an indicator of diabetes.</p>		Optimal Fasting: 70-99 Optimal Non-Fasting: 70-125 Elevated Fasting: 100-125 Elevated Non-Fasting: 126-199 High Fasting: $\geq 126$ High Non-Fasting: $\geq 200$
<p><u>A1C:</u> A1C measures the average level of glucose (blood sugar) in the blood over a 3- month period. Specifically, the A1C test measures the percentage of hemoglobin that is coated with sugar. This test is used to check how well blood sugar levels are being controlled in a person with diabetes and can also be used in the initial diagnosis of diabetes.</p>		Optimal: $<5.7\%$ Prediabetes: $5.7\%-6.4\%$ Diabetes: $\geq 6.5\%$
<p><u>Blood Pressure (mm/Hg):</u> Blood pressure is the pressure of blood against the walls of the arterial vessels (blood vessels that carry blood from the heart to other parts of the body). High blood pressure is a common condition in which the long-term force of the blood against your artery walls is great enough that it may eventually cause health problems, such as heart disease. The top number, or systolic pressure, is the peak pressure on the blood vessel. The lower number, or diastolic pressure, occurs when the heart relaxes between beats.</p>		Optimal blood pressure: $<120/<80$ Elevated: $120-129/<80$ High Blood Pressure (Hypertension) Stage 1: $130-139/80-89$ High Blood Pressure (Hypertension) Stage 2: $\geq 140 / \geq 90$ Hypertensive Crisis: $>180/> 120$

## Metabolic Syndrome

Metabolic Syndrome is a combination of medical disorders that increase your risk of developing chronic medical conditions, such as heart attack, stroke, and diabetes. Metabolic syndrome diagnosis is based on having 3 out of 5 of the following risk factors:

*Please note, if you only have 2 risk factors, you may be at increased risk.*

### 1. Waist Circumference:

- Greater than or equal to 40 inches for males
- Greater than or equal to 35 inches for females

### 2. Triglyceride levels:

- Fasting triglyceride levels greater than or equal to 150mg/dl

### 3. HDL levels:

- Below 40 mg/dl for males
- Below 50 mg/dl for females

### 4. Blood pressure:

- Blood pressure greater than or equal to 130/85

### 5. Glucose

- Fasting blood glucose levels greater than or equal to 100 mg/dl

# UNDERSTANDING YOUR BIOMETRICS

## Know your Numbers: Recommendations

*\*Please consult with a physician if you are at risk for any of the listed measurements and to determine if the tips below are right for you.*

<u>Waist Circumference</u>	<p>Excessive abdominal fat often results in an increased waist circumference. It is important to decrease abdominal fat because of the impact that it may have on your quality of life.</p> <p>Tips:</p> <ul style="list-style-type: none"> <li>• Avoid or limit: processed/packaged foods, fried foods, and high saturated fat foods. This includes red meats and high-fat dairy, such as butter and certain cheeses.</li> <li>• Include: monounsaturated and polyunsaturated fats from foods such as avocado, olive oil, nuts, and seeds.</li> <li>• Emphasize: fruits and vegetables, whole grains, and plant-based protein sources along with lean meats, such as chicken and fish.</li> <li>• Exercise at least 150 minutes each week. This can be broken down to be 5 times a week for 30 minutes. Participate in sustainable exercise that you enjoy.</li> </ul>
<u>Total Cholesterol</u> <u>HDL</u> <u>LDL</u> <u>TC/HDL Ratio</u>  <u>Triglycerides</u>	<p>Lowering your cholesterol and triglyceride level may slow down, reduce, or even prevent plaque build-up. It's important to remember that Total Cholesterol is a useful but an incomplete gauge of risk for heart disease. Therefore, pay attention to both LDL and HDL levels. The tips below promote lowering LDL Cholesterol, while increasing HDL Cholesterol.</p> <p>Tips:</p> <ul style="list-style-type: none"> <li>• Eat "healthy" (unsaturated) fats in place of "unhealthy" (saturated) fats. Sources of healthy fats include fish, avocados, nuts, and olive oil to name a few. Fiber, particularly soluble fiber from foods such as oatmeal, can lower LDL by binding and removing it from the body.</li> <li>• Exercise regularly. Moderate physical activity can help raise HDL cholesterol levels.</li> <li>• Quit smoking</li> <li>• Maintain a healthy weight.</li> </ul>
<u>Glucose</u>	<p>Carbohydrates (found in fruit, cereal, bread, pasta, and rice) are quickly turned into glucose in your body. This raises your blood glucose level. Insulin, a hormone released by your pancreas allows glucose to enter your cells, giving them the energy they need and decreasing your blood glucose level. In individuals who have type 2 diabetes, their body is not able to properly use the insulin so it compensates by producing more until it eventually can't keep up with the increased production. This leads to the body not being able to produce enough insulin which can result in high blood glucose levels. If you have been diagnosed with diabetes, controlling blood glucose levels likely involve the use of an insulin shot. However, if blood glucose levels are elevated, the tips below will aid your body in naturally lowering these levels and maintaining homeostasis.</p> <p>Tips:</p> <ul style="list-style-type: none"> <li>• Exercise: even just getting up to walk around for a few minutes can help! Aim to get regular, moderate exercise in daily.</li> <li>• Stay hydrated, avoid simple sugars, eat whole grains, and plant-based foods.</li> </ul>
<u>A1C</u>	<p>Maintaining healthy A1C levels reduces the risk of diabetes and complications that come from diabetes, such as nerve damage and eye problems.</p> <p>Tips:</p> <ul style="list-style-type: none"> <li>• Aim to get at least 150 minutes of exercise each week.</li> <li>• Follow a treatment plan recommended/prescribed by a physician or other health professional.</li> <li>• Eat a well-balanced diet that includes produce, whole grains, and healthy fats.</li> </ul>
<u>Blood Pressure</u>	<p>Uncontrolled high blood pressure increases your risk of serious health problems, including heart attack and stroke.</p> <p>Tips:</p> <ul style="list-style-type: none"> <li>• Eat a heart-healthy diet (full of fruits, vegetables, and whole grains - limiting unhealthy fats and less salt).</li> <li>• Participate in regular physical activity - aim for 150 minutes of exercise each week.</li> <li>• Maintain a healthy weight or lose weight if you're overweight or obese.</li> <li>• If you choose to consume alcohol do so in moderation, i.e. no more than 1 drink per day for women and 2 drinks per day for men.</li> </ul>

### Citations:

Office of Wellness and Integrative Health. (n.d.). *University of Utah Health Biometric Screening Results*[Brochure]. Author.  
<https://www.medicalnewstoday.com/articles/265443.php>  
[http://www.mprisk.org/UserFiles/Servers/Server\\_84508/File/Wellness%20Docs/Biometrics/Understanding%20Your%20Results%20Handout.pdf](http://www.mprisk.org/UserFiles/Servers/Server_84508/File/Wellness%20Docs/Biometrics/Understanding%20Your%20Results%20Handout.pdf)  
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