KNOW YOUR NUMBERS

Cholesterol, Glucose, & Blood Pressure Screenings
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IS YOUR HEALTH AT RISK?
*Find out with early detection through health screenings.*

**Cholesterol, Glucose, & Blood Pressure**
Health screenings are a fast and easy way to know your numbers and promote your overall health and well being!

**Heart Disease, Diabetes, & High Blood Pressure**
These can be prevented and controlled through diet, exercise, and other healthy lifestyle adjustments!

**Know Your Numbers**
Knowing your numbers and understanding what they mean is the first step in creating an even healthier you!

**Improve Your Numbers**
To improve your numbers and overall health, make lifestyle adjustments and work towards accomplishing the health and wellness goals suggested in this book!

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**Know Your Risk Factors & Symptoms of Disease**
Certain facts of life such as *age, gender, ethnic background* and *family history* could put you at a higher risk for health complications. Early recognition of disease symptoms is important.
Cholesterol is a waxy, fat-like substance in our blood. Too much “bad” cholesterol in our diet can clog arteries and lead to heart disease. In the United States, heart disease is the leading cause of death for both women and men. It is important to know what your cholesterol levels are and what the numbers mean – It can save your life!

Where Does Cholesterol Come From?

Our Body
Our body needs cholesterol to function properly and build new cells. Our body produces enough of this needed cholesterol on its own.

Our Diet
Cholesterol is found in animal based foods such as meat, dairy and high-fat foods. Too much cholesterol, saturated fat and trans fat in the diet leads to high cholesterol.

High Cholesterol Leads to Heart Disease
As cholesterol levels rise in our blood stream, plaque deposits form in the artery walls. Plaque build-up causes arteries to narrow, harden and clog, leading to reduced blood flow to the heart and heart disease. Heart disease may eventually lead to heart attack, cardiac arrest, stroke, or sudden death.

The higher your cholesterol levels, or the longer you allow them to remain elevated, the higher your risk for heart disease.
Visit Your Doctor & Have Regular Check-Ups & Health Screenings
If you are in serious danger of heart disease, doctors may prescribe medications to get your cholesterol under control. Medications along with a healthy diet and lifestyle can reduce your risk for heart disease. It is important to work with your doctor and have routine health screenings.

Determine Your Risk for High Cholesterol/Heart Disease
These risk factors increase your chances of developing high cholesterol and heart disease:

- Smoking
- Men - age 45 or older
- Women - age 55 or older
- Family history of heart disease
- Being overweight or obese
- Poor eating habits
- Lack of exercise
- Diabetes
- High blood pressure

Recognize the Symptoms of High Cholesterol & Heart Disease
High cholesterol can be silent and difficult to detect. Heart disease is easier to treat when detected early. Symptoms of heart disease can include:

- Shortness of breath
- Dizziness/lightheadedness
- Nausea
- Abnormal heart beat
- Chest pain
- Swelling
- Fatigue
- Fainting
CHOLESTEROL NUMBERS

<table>
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<tr>
<th>Screening</th>
<th>Target</th>
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| Total Cholesterol| Below 200 - Desirable  
200–239 - Borderline  
240 or above - High Risk |
| HDL              | 60 or above - Low Risk of Heart Disease  
40–59 - Near Optimal  
Below 40 - High Risk of Heart Disease |
| LDL              | 100 or below - Low Risk of Heart Disease                              |
| Triglycerides    | 150 or below - Low Risk of Heart Disease                              |

Most adults should try to reduce their cholesterol to below 200mg/dl. The average American has borderline high cholesterol, while millions have high cholesterol over 240mg/dl.

Cholesterol: Know Your Numbers

Total Cholesterol Having your total cholesterol checked is an easy way to know your numbers & determine your risk.

HDL/High Density Lipoproteins or “Good Cholesterol” carries bad cholesterol away from the linings of your arteries to your liver so that it may be removed. The higher your HDL, the better.

LDL/Low Density Lipoproteins or “Bad Cholesterol” causes cholesterol to build up and cling to veins and arteries. The lower your LDL, the better.

Triglycerides are another form of fat in the blood stream similar to cholesterol. The lower your triglycerides, the better.

Cholesterol will vary from reading to reading depending on your diet and exercise. If your cholesterol is elevated, you should talk with your doctor and understand what your cholesterol levels mean for you. By lowering your cholesterol, you will reduce your risk for heart disease.
Diabetes is a serious disease characterized by problems with insulin, a hormone made by the pancreas. Insulin is needed for our body to get the energy from the glucose/sugar in our diet. Diabetes occurs when the body cannot make or use insulin. It causes glucose/sugar levels to remain high in the blood, leading to damage of the kidneys, heart, nerves, eyes, and other organs.

Different Types of Diabetes

*Type I – Juvenile Onset* occurs when the body cannot make insulin. It often begins in childhood and results in insulin dependency.

*Type II – Adult Onset* is the most common form of diabetes and occurs when the body cannot use insulin. It is correlated with obesity, poor diet and lack of exercise, and is becoming more common in children.

*Gestational Diabetes – Pregnancy* Glucose is an important screening for expectant mothers. Women who experience gestational diabetes are at a higher risk for developing diabetes later in life.

Elevated Glucose/Sugar Could be an Indication of Diabetes

Diabetics are often dependent upon medications, and must constantly monitor their blood glucose levels and structure their diet in order to keep their diabetes under control. Serious complications of diabetes can be avoided with early detection. According to the American Diabetes Association, having your blood sugar checked regularly is the most effective way to screen for diabetes. If untreated, diabetes will damage arteries, nerves and organs. Glucose levels can be controlled for non-diabetics through healthy diet and lifestyle.
Determine Your Risk for Diabetes
The likelihood of developing diabetes is based on many factors. If you possess any of the following risk factors, the likelihood you will develop diabetes is greater.

- Age 45 or older
- High LDL/Low HDL cholesterol
- Being overweight or obese
- Family history of diabetes
- Lack of exercise
- High blood pressure

Recognize the Symptoms of High Glucose/Diabetes
Diabetes is a serious disease with severe complications. If you exhibit any of the following symptoms, have your blood glucose checked immediately.

- Frequent urination
- Constant thirst
- Unexplained weight loss
- Sudden visual changes
- Wounds that heal slowly
- Tingling in hands or feet
- Recurrent infections
- Extreme fatigue

GLUCOSE/SUGAR NUMBERS

<table>
<thead>
<tr>
<th>Glucose Level</th>
<th>Non-Fasting</th>
<th>Fasting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Than 70</td>
<td>Low for Non-Fasting</td>
<td>Low for Fasting</td>
</tr>
<tr>
<td>70–110</td>
<td>Normal for Non-Fasting</td>
<td>Normal for Fasting</td>
</tr>
<tr>
<td>111–139</td>
<td>Normal for Non-Fasting</td>
<td>Elevated for Fasting</td>
</tr>
<tr>
<td>140–179</td>
<td>Elevated for Non-Fasting</td>
<td>Elevated for Fasting</td>
</tr>
<tr>
<td>180 and Higher</td>
<td>Extremely Elevated for Non-Fasting</td>
<td>Extremely Elevated for Fasting</td>
</tr>
</tbody>
</table>
Glucose/Sugar: Know Your Numbers
The glucose level in your blood is going to fluctuate depending upon what you have eaten and the rate of your metabolism.

After eating, your glucose level can rise up to 140. As time passes after eating, your glucose levels gradually return to the normal, fasting range of 70-110. Foods that are high in sugar will raise your glucose level more than non-sugary foods.

Fasting Glucose Test
Measures blood glucose after 8 hours without food or drink. Persons with fasting glucose levels higher than 110 will be advised to call their doctor.

Non-Fasting Glucose Test
Measures blood glucose without regard to the time of your last meal. Persons with non-fasting glucose levels 140 or above will be advised to call their doctor.
Blood pressure (BP) is the force or pressure of blood against the artery walls as it circulates to all parts of the body. A blood pressure reading gives crucial information about the health of your cardiovascular system. The top (systolic) number is the peak blood pressure when the heart beats. The bottom (diastolic) number is the pressure when your heart is resting between beats.

**High Blood Pressure/Hypertension**

Hypertension, also referred to as high blood pressure, is when your heart is overworked.

Prolonged hypertension decreases your life expectancy and increases your risk for other serious health problems.

If untreated, hypertension damages your arteries and can lead to blindness, heart disease, stroke, and kidney failure. Regular blood pressure screenings are the most effective way to protect against serious complications.

**Determine Your Risk for High Blood Pressure/Hypertension**

The following risk factors may contribute or lead to high blood pressure:

- Age 45 or older
- Family history of hypertension
- Being overweight or obese
- Lack of exercise
- Diabetes
- High LDL/Low HDL cholesterol
- Unhealthy diet
Recognize the Symptoms of High Blood Pressure/Hypertension

Symptoms of hypertension may include:

• Headache
• Nose Bleeds
• Dizziness

However, hypertension is known as the “silent killer” because people do not usually have symptoms or may not recognize symptoms until they have serious complications.

**BLOOD PRESSURE NUMBERS**

<table>
<thead>
<tr>
<th>Blood Pressure Category</th>
<th>Top Number (Systolic)</th>
<th>Bottom Number (Diastolic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimal</td>
<td>119 or lower</td>
<td>79 or lower</td>
</tr>
<tr>
<td>Pre-hypertension</td>
<td>120 – 139</td>
<td>80 – 89</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage 1 (mild)</td>
<td>140 – 159</td>
<td>90 – 99</td>
</tr>
<tr>
<td>Stage 2 (moderate)</td>
<td>160 – 179</td>
<td>100 – 109</td>
</tr>
<tr>
<td>Stage 3 (severe)</td>
<td>180 or higher</td>
<td>110 or higher</td>
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</table>

**Blood Pressure: Know Your Numbers**

It is important to have your blood pressure checked often. This is because your blood pressure is fluctuating all the time. It is important to know your normal blood pressure range. If you do this, you will then be more aware when you have a higher reading. Check your blood pressure after resting for 5 minutes.
Lower Your Blood Pressure
Losing excess weight, eating a diet rich in whole grain foods, including five servings of fruits or vegetables per day, reducing sodium intake and exercising regularly can help you lower your blood pressure.

Factors That Can Temporarily Raise Your Blood Pressure
- Foods high in sodium
- Stress
- Illness
- Certain medicines
- Caffeine
- Pain
- Smoking
- Pregnancy

Remember: A family history of high blood pressure puts you at higher risk for developing hypertension yourself.
Make Your Diet HEALTHY

Imagine your diet by eating healthier, more nutritious food. An unhealthy diet may raise your cholesterol, glucose, and blood pressure.

Bad Fats

**Saturated Fat** – Limit in your diet.
- Snack foods
- Fast food
- Baked goods

Cholesterol is found in the same foods that contain saturated and trans fats. Look for it on your food labels.

**Trans Fat** – Avoid completely.
- Worst type of fat
- Made with hydrogenated oils

Trans fats are used in many restaurant fryers, especially fast food chains. They are also found in many processed foods.

Substitute good fats for bad fats and avoid trans fats altogether.

Good Fats

**Monounsaturated Fats (Good Fat)**
- Canola, Peanut, Olive Oils, Avocados, Nuts (Almonds, Hazelnuts, Pecans), Pumpkin Seeds, Sesame Seeds

**Polyunsaturated Fats (Good Fat)**
- Sunflower, Soybean, Flaxseed, Flaxseed Oil, Walnuts, Fish
• Replace a diet high in carbohydrates with unsaturated fats. This can lower your blood pressure and cholesterol and lower your risk for heart disease.

• Add more fruits, vegetables and other foods high in fiber to your diet.

• Instead of using solid fats like butter when cooking, use healthy oils.

• Use whole wheat bread instead of white bread.

• Eat oatmeal for breakfast.

• Drink plenty of fluids, especially water.
To Improve Your Diet & Lower Your Risk for Disease

Eat More

• Grains and cereals
• Whole Wheat Pastas (with low-fat sauces)
• Vegetables
• Fruits
• Beans and Peas
• Salads (with low-fat dressing)
• Fiber
• Oat bran
• Baked and Broiled Dishes
• Popcorn / Rice Cakes
• Poultry (avoid the skin)
• Fish (salmon, mackerel, trout, & herring are good)

• Skim/Low Fat/2% Milk
• Skim Milk Dairy Products
• Avocado
• Herbs and Spices
• Vegetable Oils:
  - Safflower Oil
  - Corn Oil
  - Soybean Oil
  - Cottonseed Oil
  - Olive Oil
• Walnuts & Almonds
• Flaxseed
• Oatmeal

Eat Less

• Fat
• Solid Shortenings:
  - Palm Oil
  - Coconut Oil
• Non-dairy Creamers
• Whole Milk
• Egg Yolks
• Fried Foods
• Processed Foods
• Chips and Snacks
• Processed Meats:
  - Luncheon Meats
  - Sausages & Hot Dogs

• Gravy
• Dressing and Sauces
• Canned Foods
• Cheese
• Ice Cream
• Red Meat
• Liver
• Bacon
• Butter
• Salt
• Baked Goods
**EXERCISE REGULARLY**

**Cholesterol** – Exercise will raise your HDL. As HDL goes up, LDL will go down. This will improve your cholesterol numbers and lower your risk for heart disease.

**Glucose** – Exercise and maintaining a healthy weight will help prevent diabetes or keep diabetes from worsening.

**Blood Pressure** – Exercise strengthens your heart muscle and helps keep blood flowing through your system efficiently. Strong heart muscles lead to lower blood pressure and better health.

**Summary** – Exercise has been shown to improve cholesterol, glucose and blood pressure numbers. Exercise is good for your heart and your whole body, and can be a fun activity to share with friends and family. Exercising at a moderate intensity for just 30 minutes, 3-5 times per week can help you in many ways:

- Increase the fitness of your heart & lungs
- Lose excess weight or maintain a healthy weight
- Decrease body fat and waist circumference
- Make other healthy lifestyle adjustments
- Look & feel better
- Gain confidence & energy
- Prevent disease & live longer

*Improve your health by exercising regularly: 30 minutes a day, 3-5 times per week*
Maintain a Healthy Weight

You may lower your risk for developing high cholesterol, heart disease, diabetes and hypertension by maintaining a healthy weight and being physically active. Losing 5–7% of body weight and exercising regularly can help prevent disease and other health complications. Losing weight and exercising may allow you to reduce the amount of medications you take.

Learn CPR

Heart attack, cardiac arrest and stroke are three life-threatening situations that can result from heart disease or other health problems. Choking can also become a life-threatening situation if the person becomes unconscious. By starting CPR and initiating the emergency response system immediately, chance of survival increases. Learning CPR enables you to assist and possibly save the life of someone during a life threatening situation such as heart attack, cardiac arrest, and stroke. Register for an American Heart Association (AHA) CPR course, so that you may be prepared to save the life of someone you love.

AT-RISK WEIGHT CHART

<table>
<thead>
<tr>
<th>Height</th>
<th>Weight</th>
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<tbody>
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<td>4'10</td>
<td>119</td>
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<td>4'11</td>
<td>124</td>
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<td>5'0</td>
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<td>5'1</td>
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<td>6'4</td>
<td>205</td>
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Tracking Your Progress
Use this chart to track your numbers. Refer to this booklet frequently to help maintain a healthy lifestyle.

<table>
<thead>
<tr>
<th>Date</th>
<th>Chol</th>
<th>Glu</th>
<th>BP</th>
<th>Wt</th>
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For More Information On:
Cholesterol & Heart Disease, Glucose & Diabetes, and Blood Pressure & Hypertension, visit the following web sites:
Centers for Disease Control - [www.CDC.gov](http://www.CDC.gov)
Independent Nursing Care - [www.INCnursing.com](http://www.INCnursing.com)
American Heart Association - [www.AmericanHeart.org](http://www.AmericanHeart.org)
Other Ways You Can Become Healthier

Quit Smoking – Quitting smoking reduces your risk for heart disease & improves your circulation. Smoking damages your blood vessels and causes them to harden faster, leading to heart disease. If you stop smoking, you can reverse these effects and become healthier.

Avoid Alcohol – Alcohol raises your blood pressure and triglyceride levels. It is also high in calories and can damage your heart and liver. Limit your intake and avoid binge drinking.

Reduce Stress – Too much stress can weaken the heart muscle and cause life-threatening illness. Control your daily stress with deep breathing, relaxing muscles, or meditation and yoga.

Stay Hydrated – The CDC recommends that the average adult should drink 6 to 8 cups of water each day.

Goals For a Healthier You

• Make healthy lifestyle adjustments
• Know your numbers
• Make your diet healthy
• Exercise regularly
• Maintain a healthy weight
• Learn CPR