

Patient Name: John Doe
Age: 62 **Date of Birth:** 2/13/1953
Gender: Male **Date of Visit:** 8/5/2015

Color Legend

- Black is normal range for this test
- Green is borderline/intermediate range for this test
- Red is high/abnormal for this test
- Dark Red is extreme high risk for this test

Major Risk Factors:

Controllable

- Elevated Cholesterol
- Elevated Blood Pressure
- Elevated Sugar Levels
- Physical Activity
- Smoking
- BMI Elevation

Not Controllable

- Age
- Gender
- Race
- Family History

Contributing Risk Factors:

Controllable

- Alcohol Overuse
- Diet and Nutrition
- Stress

Vitals	Your Results	Normal Range
Weight	219 lbs	136 - 184 lbs
Height	72"	
BMI	29.7	18.5 - 24.9 kg/m2
Waist Circumference	40"	Male: less than 40"; Female: less than 35"
Waist-Hip Ratio (WHR)	0.95	Male: less than 0.95; Female: less than 0.80

Comments Your BMI (body mass index) is in the overweight range, indicating you are at increased risk for cardiovascular disease, diabetes, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems, certain forms of cancer (endometrial, breast, and colon) and depression. You should target a BMI closer to 25. In addition to analyzing BMI, we analyzed waist circumference and waist-hip ratio (WHR). WHR is a better indicator for weight-related diseases than BMI. Your waist circumference of 40" is Abnormal and your WHR of 0.95 is Borderline. We recommend a weight reduction plan with a target weight below 184 lbs. For men, 2-3 lbs/month and for women, 1-2 lbs/month of weight loss is recommended with an initial goal of 10% of your body weight per year. Gradual weight loss will increase the chances that you will maintain your weight over time. We're confident that a weight management program can provide the support and encouragement you need to help you achieve and maintain a better weight. If you would like to learn more about these options, we would be happy to provide you with additional information.

Diagnostic Testing	Your Results	Normal Range
CV Profiler (Arterial Stiffness)	Borderline	
Your C1: Large Artery	9.9	Normal C1 for 62 year old Male: >10.0
Your C2: Small Artery	4.2	Normal C2 for 62 year old Male: >6.0

Comments Your arterial elasticity is slightly below normal levels, meaning that your arteries have stiffened. Your results may be an early indication of the development of vascular disease. Repetition of this and other tests will allow us to target any existing conditions with the goal of reversing their progression, as well as monitor factors that may lead to other ancillary diseases.

Resting Blood Pressure	Abnormal	
Baseline BP	180 / 74 mmHg	Less than 130/85
Your Lying BP	168 / 86 mmHg	Less than 130/85
Your Standing BP	150 / 86 mmHg	Less than 130/85

Comments Your resting blood pressure is elevated. A blood pressure of less than 120/80 is optimal. Further, you experienced symptoms of orthostatic hypotension which may be caused by an imbalance of the autonomic nervous system. If you feel lightheadedness or weakness when standing, discuss this with your medical provider. We would like to schedule a follow-up visit to review your current medications so we can create a treatment plan which will be uniquely tailored to you. We also recommend that you start treatment by changing your diet (i.e. lowering sodium intake), increasing physical activity, limiting alcohol consumption and avoiding smoking.

BP Activity Response	Abnormal	
Your Exercise BP at 3 minutes	200 / 80 mmHg	Systolic BP less than 169; diastolic BP less than 90
Your Rise in BP	50 / -6	Rise of systolic BP less than 30; No rise in diastolic BP

Comments During exercise, some increase in systolic blood pressure is the body's response to the extra requirement of the muscles and organs for oxygen-rich blood, and is normal. However, you experienced an Abnormal rise in blood pressure during 3 minutes of exercise. This may be related to reduced blood vessel function, which is linked to the presence or risk of development of artery disease (arteriosclerosis).

Vasculature Eye Photo	Abnormal	Greater than 2/3; No structural variations
Comments	Review of your retinal artery photo indicated structural variations in the artery. For some body types this may be normal, however, in many cases it is associated with the development of cerebrovascular, cardiovascular, and metabolic diseases.	
Carotid Intimal Medial Thickness	Abnormal	calculated by age & gender
Comments	Your Carotid IMT is thickened, indicating an increased risk of atherosclerosis of the cardiac and vascular system. However, in the limited area we visualized, no plaque (fatty deposits) was identified. For this condition, preventive treatment is critical for reducing your risk of a stroke or heart attack. Please discuss with your medical provider if a full carotid ultrasound is appropriate for you as well as possible medication options and a long-term preventive treatment plan. Finally, repeating this test after treatment options have had a chance to take effect will help us monitor your condition.	
Abdominal Aortic Ultrasound	Normal	Less than 2.5 cm; No other abnormalities detected
Comments		
Left Ventricular Ultrasound	Normal	calculated by gender & body surface mass
Comments		
Electrocardiogram	Normal	interpreted by medical provider
Comments		
Pulmonary Function	Borderline	calculated by age, height, & gender
Comments	Your results indicate slightly reduced pulmonary function. This could be caused by a variety of conditions such as certain types of lung disease (particularly asthma, bronchitis, and emphysema), obesity, allergies and lack of physical activity. No further evaluation is required at this time unless you develop additional symptoms such as shortness of breath or chronic cough.	
Pulse Oximetry		
Resting	Normal	Greater than 96%
Exercise	Normal	Greater than 96%
Comments		

Lab Testing	Your Results	Normal Range
<i>Note : Normal ranges on labs below are based on evidence-based medical protocols and are prevention oriented. They may appear different from what is in your lab report.</i>		
Microalbumin / Creatinine	0.77 mg/mmol	Less than .61
<i>Microalbumin: 0.8 mg/dL</i> <i>Creatinine: 117 mg/dL</i>	Comments Your microalbumin/creatinine levels are slightly elevated. This may be an early indicator of reduced kidney or small blood vessel (microvascular) function. However, false positives are sometimes reflected in microalbumin/creatinine lab tests. We would like to repeat this test before taking further action.	
Brain Natriuretic Peptide (BNP)	8.9 pg/mL	Less than 50
Comments		
TSH	0.80 uIU/mL	5 - 4.0
Comments		

Cholesterol	Normal	
Total Cholesterol	183 mg/dL	Less than 200
Your HDL	57 mg/dL	40 mg/dl or higher
Your LDL	45 mg/dL	Less than 100
Comments	Your HDL (good cholesterol) levels are Normal. However, considering your other tests and risk factors, including diabetes and possible reduced kidney function, a target HDL of 60 or greater is recommended. An HDL of 60 or greater will be protective against cardiovascular risk. Lifestyle modifications such as exercise, diet and weight management can significantly improve your cholesterol levels. Plant sterols can also help increase HDL and are now available in some products (i.e. Minute Maid Heart Wise orange juice, Benecol and Take Control margarines). Please discuss with your medical provider if Niacin or other treatment options such as a Fenofibrate are appropriate for you.	
Triglycerides	225 mg/dL	Less than 150
Comments	Your triglycerides levels are elevated, indicating increased risk of cardiovascular diseases. Elevated triglycerides may be the result of other diseases such as diabetes. We recommend eating a high fiber diet and substituting fish, which is high in omega-3 fatty acids (i.e. salmon, mackerel, sardines, albacore tuna), in place of meats which are high in saturated fats. We also recommend reducing alcohol intake, increasing physical activity, implementing a weight management plan, and eliminating low fiber carbohydrates from your diet (i.e. baked goods, sweets, pop, potatoes, chips, white bread, pasta, rice).	
Fasting Blood Glucose	111 mg/dL	Less than 100
Comments	Your levels of glucose (blood sugar) are elevated to the impaired fasting glucose range (pre-diabetes), indicating that you are at significant risk of developing diabetes, or that better management of current diabetes may be needed. We recommend further evaluation with a 2-hour glucose tolerance test and/or monitoring your fasting glucose regularly. In addition, proper management of weight and diet may enable you to delay the development of diabetes, avoid it entirely or better manage your current condition.	
C-Reactive Protein (hsCRP)	1.8 mg/L	Less than .31
Comments	You have an elevated level of C-reactive protein, signifying the occurrence of inflammation somewhere in the body. Inflammation plays a central role in the process of atherosclerosis, in which fatty deposits clog your arteries. CRP tests cannot pinpoint the location of inflammation or definitely indicate whether you have heart disease; however, when considered with other tests, the CRP test contributes to an overall picture of your health. We recommend repeating this test in 6-12 months to verify that your CRP levels have returned to normal. Please discuss with your medical provider if cholesterol-lowering statin medications are appropriate for you.	
Ferritin	205 ng/mL	24 - 270 (men)
Comments		
Testosterone	419 ng/dL	348 - 1052 (men)
Comments		
Vitamin D	12.3 ng/mL	Greater than 30
Comments	Your test results indicate vitamin D deficiency. Vitamin D deficiency is associated with various diseases such as bone loss, osteoarthritis, cognitive issues, kidney disease, respiratory concerns, diabetes, gastrointestinal issues, cardiovascular diseases, etc. People who do not get enough sunlight, suffer from milk allergies or adhere to a vegetarian diet are at particular risk for vitamin D deficiency. Research suggests vitamin D could play a role in the prevention and treatment of various conditions including diabetes, high blood pressure, and multiple sclerosis. Please discuss vitamin D supplementation with your medical provider.	

Medical Screening	Your Results
Stress Assessment	Inconclusive - need to review questionnaire
Vision	Not Assessed
Nutrition	Suggest Dietary Modifications
Sleep Disorders	Suggest Follow Up with Sleep Specialist

Low Risk	0 - 8.9
Moderate Risk	9 - 18
High Risk	18.1 - 30
Extremely High Risk	30+

Heart Attack-Stroke Risk Assessment

Primary Prevention

Your 6 Year Risk Assessment:

30 pts

Risk vs. a 62 year old Male with optimal levels of modifiable risk factors (10 year):

400%

(1) This risk score is based on a 6 year risk assessment for having a heart attack or stroke and does not evaluate modifiable and non-modifiable risk factors (i.e. family history, smoking, cholesterol, etc)

(2) This risk score is designed to predict your risk of having a heart attack, stroke or other major heart disease in the next 10 years; Score reflects your relative risk vs a 62 year old Male with optimal levels of modifiable risk factors.

Note: Risk scores were developed and validated using data from large groups of people who were monitored over years. Your situation may be different.

Additional Recommendations:

Maintaining a healthy diet and losing weight (especially around the waistline) are among the most significant things you can do to improve your health. Focus on developing a diet with less red meat and high-fat foods and fewer sweets, as well as increasing your intake of vegetables, fruits, whole grains and fish (not fried). For fruits and vegetables, try to get as wide a range of colors in your diet as possible, and buy fresh fruit and vegetables, which will always contain more nutrients than canned or frozen ones. Good sources of whole grains include whole wheat and multigrain breads and cereals, whole wheat pasta and brown rice. For fish, the American Heart Association lists salmon, mackerel, herring, lake trout, sardines and albacore tuna as having the greatest benefit in reducing heart disease. Finally, check your labels—you may be surprised to find that you're getting half a day's worth of cholesterol in your bowl of ice cream, almost your full daily quota of fat in a single serving of Caesar salad dressing, or more than a fifth of your daily quota of sodium (salt) in one muffin!

Recent research indicates that when it comes to eating healthy foods, exercising regularly and losing weight, people are more successful when they don't have to go it alone. Having a cooking or exercise buddy, or even just a friend who is committed to providing moral support on a regular basis can make all the difference in whether we stick to our new plans or not. If you feel that having an accountability partner could be the right thing for you, we encourage you to think about the kind of support that will be most effective for you. Will you need someone who will come to your house and drag you to the gym, someone who can be available as a listening ear when you feel discouraged, or someone who will be firm when you are tempted by that second piece of cake or full country breakfast? Try to choose someone with similar goals who can partner with you and help compensate for your weaknesses. If we can help in any way with guiding you to the right partner, please do not hesitate to contact us.

We recommend that you reduce your sodium (salt) intake and monitor your blood pressure at your physicians office or with a home blood pressure monitor, which is available at most drug stores. It is recommended that home monitors be checked with a separate manual blood pressure cuff to make sure the monitor is accurate. Alternatively, we will be happy to do this for you in the clinic free of charge. If possible, alternate measurements should be taken in the morning, afternoon, and evening to see whether your blood pressure fluctuates at different times of the day. Weight reduction and exercise are also helpful in reducing blood pressure.

While any of the following conditions (obesity, low HDL, and elevated blood pressure, glucose, CRP, or triglycerides) increases your risk of heart disease, stroke and diabetes, having three or more of these conditions at the same time is classified as Metabolic Syndrome (see enclosed materials), and increases your risk significantly. You currently have Metabolic Syndrome, so it is important that you initiate lifestyle changes focused on weight reduction, increased exercise (especially aerobic), and healthy eating. To find out whether additional medications are appropriate for you, please speak with your medical provider.

Regular exercise even without weight reduction can help lower cholesterol and improve the health of your heart and blood vessels. If you begin an exercise program, start slow with a low intensity exercise (i.e. walking) and gradually increase up to 30 minutes 3-4 times per week. Be sure to choose fun activities that you enjoy doing and that will benefit your health now and as you age. Always exercise within your comfort zone (no chest pain, able to talk comfortably).

We recommend that you quit using any form of tobacco and avoid second-hand smoke as well to reduce your risk. The good news is that in the year after you quit smoking, your risk of future heart problems drops by 50%. After 15 years, your risk is as low as someone who has never smoked. If you need any assistance in your smoking cessation effort, please call us or consult with your primary care provider. We will be happy to assist you in any way we can.

Many people like to have a few drinks (especially around football season!), and that is okay! However, red wine may be a smarter choice than other forms of alcohol since it contains antioxidants which may improve heart health. Also, keep in mind that increased amounts of any kind of alcohol can increase the risk for many health-related diseases. Limitation of alcohol to 2 beverages per day is recommended for men and 1 per day for women.

Sleep is often a reflection of your overall health, since in many cases, sleeping problems indicate an underlying medical or mental health problem. It's not normal to feel sleepy during the day or to wake up feeling tired. Sleeping problems, and particularly sleep apnea, can contribute to or significantly increase your risk of heart-related illnesses. Symptoms of sleep apnea include loud snoring, waking abruptly during sleep and feeling short of breath, waking up in the morning with a dry mouth or a sore throat, or sleepiness and fatigue during the day. The good news is that treatment options are available. Please discuss your problems sleeping with your medical provider to see if a sleep study referral is appropriate for you.

Please discuss the following with your medical provider: recent weight change, **fatigue**, recent changes in mood, **pain or stiffness in neck**, bleeding/bruising tendencies, **hearing loss**, ringing in ears, chest pain, feet/ankle swelling, **sexual dysfunction**, frequent urination, wheezing, **difficulty swallowing**, night sweats, **depression**.

HEARTWISE

ACTION PLAN - Manage Cholesterol Levels

Name: John Doe
Date of Birth: 2/13/1953

Date: 8/5/2015

Summary - Cholesterol Levels

My total cholesterol level:	Current: 183 mg/dl	Goal: Less than 200 mg/dL
My LDL (bad) cholesterol:	Current: 45 mg/dl	Goal: Less than 100 mg/dL*
My HDL (good) cholesterol:	Current: 57 mg/dl	Goal: 40 mg/dL or higher for men* 50 mg/dL or higher for women*
My triglycerides:	Current: 225 mg/dL	Goal: Less than 150 mg/dL

***If you have diabetes or reduced kidney function your target LDL level is under 70 mg/dL and target HDL is 60 mg/dL or higher**

Actions To Manage My Cholesterol

High blood cholesterol occurs if your body makes too much cholesterol or if you eat too much saturated fat. High total cholesterol, high LDL cholesterol and/or high triglycerides increase your heart attack risk. They cause fatty deposits (plaque) to build up in your arteries and narrow them. If your doctor decides that you are at especially high risk, he or she may recommend lowering your blood cholesterol (and especially your LDL cholesterol) through medication. Lowering your cholesterol usually means changing your eating habits, losing weight and taking medicines.

HDL (good) cholesterol protects you against heart disease. It helps to prevent fatty deposits (plaque) from building up in your arteries. The higher your HDL cholesterol, the better. An HDL higher than 60 provides protective elements against heart disease.

My Personal Action Plan

Put a check next to each item that you want to commit to do.

Select those that will work best for you, or write down some of your own.

- Meet with a dietitian (food expert). Ask about ways to change ingredients in my favorite recipes so they will still taste good but have less fat.
- Ask my doctor about medicines to help me reach my cholesterol goal levels.
- Eat a diet rich in fruits and vegetables.
- Eat whole-grain, high fiber foods.
- Prepare meals that are low in saturated fat, trans fat and cholesterol.
- Eat fish at least twice a week (**not fried!**). Examples include salmon, mackerel, herring, lake trout, sardines and albacore tuna.
- Include sources of ALA in your diet. Examples include sunflower seeds, almonds, flax seed oil, tofu and other soy products.
- Select fat-free, 1-percent fat, and low-fat dairy products.
- Learn how to read food labels to help me choose healthy foods.
- Ask my family and friends for support.
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Color Legend:
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HEARTWISE

ACTION PLAN - Reduce Blood Pressure

Name: John Doe
Date of Birth: 2/13/1953

Date: 8/5/2015

Summary - Blood Pressure

My blood pressure is: Current: **180** / **86 mmHg** Goal: Optimal is less than 120/80* mm Hg

*If you have diabetes or kidney disease, your goal blood pressure should be lower

Actions To Reduce My Blood Pressure

Normal blood pressure is below 120/80 mm Hg. Blood pressure of 120-139/80-89 is considered "prehypertension." If you blood pressure is 140/90 mm Hg or higher, you have high blood pressure.

High blood pressure puts an extra strain on your body - especially your heart, blood vessels and kidneys. It increases your risk of stroke, heart attack, kidney failure and heart failure.

When high blood pressure exists with obesity, smoking, high blood cholesterol levels or diabetes, the risk of heart attack or stroke increases several times.

You can help lower your blood pressure by:

- Losing weight
- Increasing physical activity
- Limiting your salt intake
- Limiting the amount of alcohol you drink
- Not smoking
- Taking medication, if prescribed by your doctor

My Personal Action Plan

Put a check next to each item that you want to commit to do.

Select those that will work best for you, or write down some of your own.

- Ask my doctor about medicines to help me lower my blood pressure.
- Take my blood pressure medicine as my doctor says. Tell my doctor about any side effects or problems with my blood pressure medicine.
- Start a weight-loss program and talk to my doctor about a realistic goal for me.
- Make a list of activities I like and talk to my doctor about a physical activity plan that's best for me. Start slowly, building up to at least 30 minutes a day on all or most days of the week.
- Learn how to read food labels to help me choose foods with less added salt (sodium).
- Remove the salt shaker from the diner table.
- If I drink alcohol, limit the amount I drink to no more than 1 drink per day (if a woman) or 2 drinks per day (if a man).
- Ask my family and friends for support.
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HEARTWISE

ACTION PLAN - Lose Weight

Name: John Doe
Date of Birth: 2/13/1953

Date: 8/5/2015

Summary - Weight Status

Range for normal weight (based on your height of 72"): 136 - 184 pounds

My current weight: **219 pounds**

A realistic goal weight for me is: _____ pounds
(consult with your healthcare provider to set your target weight.)

My waist-hip ratio: **0.95** Goal: Less than 0.95 for Male

My waist circumference: **40"** Goal: Male: less than 40"; Female: less than 35"

Actions To Lose Weight

Being overweight increases your risk for heart disease, stroke, diabetes, high blood pressure, high blood cholesterol, certain types of cancer and many other health problems. If you have too much body fat, especially around your waist, you are at higher risk for heart problems. To lose weight, you must take in fewer calories than you use up through normal body functions and physical activity.

The best approach to losing weight is the right combination of healthy eating and physical activity. Consider starting with an initial goal of losing about 10 percent of your body weight. The key is developing healthy habits that will help you keep the weight off throughout your life.

My Personal Action Plan

Put a check next to each item that you want to commit to do.

Select those that will work best for you, or write down some of your own.

- Set a realistic target weight with my healthcare provider & plan regular follow-up visits to track my progress.
- Start a weight-loss journal keeping track of what I eat and my physical activity.
- Substitute lower-calorie foods for some of my high-calorie favorites.
- Create menu plans that will help me count calories.
- Cut back beverages and foods high in calories and low in nutrition, such as soft drinks and foods with added sugar.
- Prepare meals that are low in saturated fat, trans fat and cholesterol.
- Eat smaller portions than what I currently eat.
- For meat, chicken and fish, keep portions the size of a deck of cards.
- Don't eat when I'm not hungry.
- Join a weight-loss program that's been shown to be safe and successful.
- Increase my physical activity. Make a list of aerobic activities that I like.
- Ask my family and friends for support.

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HEARTWISE

ACTION PLAN - Stop Smoking

Name: John Doe
Date of Birth: 2/13/1953

Date: 8/5/2015

Summary - Smoking Status

Goal: Quit Smoking

My smoking status: **Currently uses tobacco products**

I will plan to quit smoking within: _____ days / months

Actions To Stop Smoking

Giving up smoking isn't easy, but others have done it, and you can too. Quitting will benefit your health, your life and your loved ones. Within 12 hours of your last cigarette, your body starts to heal. The levels of carbon monoxide and nicotine in your system rapidly decline, and your heart and lungs start to repair damage caused by cigarette smoke.

Smokers risk of developing heart disease is 2 to 4 times that of non-smokers. The good news is that in the year after you quit smoking, your risk of future heart problems drops by 50 percent. After 15 years, your risk is as low as someone who has never smoked.

You've made the right decision! The key to quitting smoking is being motivated and getting the support you need.

My Personal Action Plan

Put a check next to each item that you want to commit to do.

Select those that will work best for you, or write down some of your own.

- Set a quit date and stick to it.
- Choose a method for quitting smoking.
- Take deep breaths, drink a glass of water or have a low-fat, low-calorie snack when I want to smoke. See if it helps with my cravings.
- Keep a diary of my smoking habits. Write down the time of day, what I was doing and how I felt each time I smoked.
- Decide if I need to use some type of nicotine replacement therapy, such as a nicotine patch or gum, to help me deal with my withdrawals while I'm quitting.
- Talk to my doctor about prescription medicines to help me stop smoking.
- Find out about local support groups or programs that help people stop smoking.
- Talk to my doctor about prescription medicines to help me stop smoking.
- Find other things that give me pleasure that can take the place of smoking.
- If I slip, don't give up, but get back on track.
- Ask my family and friends for support.
- List the things or situations that usually cause me to smoke and plan ways to deal with my urges.



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HEARTWISE

ACTION PLAN - Increase Physical Activity

Name: John Doe
Date of Birth: 2/13/1953

Date: 8/5/2015

Summary - Exercise Levels

Ideal physical activity level: At least 30 minutes a day on most or all days

My current physical activity level: _____ times per week for _____ minutes

A realistic goal for me is to be active: _____ times per week for _____ minutes

Actions To Increase My Physical Activity

People who do not get much physical activity have an increased risk for heart disease. Regular physical activity has many benefits such as helping people to quit smoking, lose weight, reduce stress, lower blood pressure and increase HDL (good) cholesterol.

During aerobic physical activity - activities that use the large muscles of the legs and arms - on most days of the week for 30 to 60 minutes helps your heart work more efficiently.

It's important to talk to your doctor before beginning or changing an exercise program.

My Personal Action Plan

Put a check next to each item that you want to commit to do.

Select those that will work best for you, or write down some of your own.

- Make a list of physical activities I like and talk to my doctor about a physical activity plan that's best for me.
- Start slowly, building up to at least 30 minutes a day on all or most days of the week.
- Start a regular walking program with a goal of working up to 10,000 or more steps a day.
- To reduce boredom, switch between different types of activities.
- Keep a physical activity log.
- Join an exercise group or find a "workout buddy" to help keep me motivated.
- Take the stairs instead of riding the elevator.
- Work out with an exercise video.
- Take a dance class with a friend or spouse.
- Ask my family and friends for support.

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