Managing Your Heart Disease

A Guide for Patients and Families

St Luke's

A Guide for Patients and Families
# Table of Contents

Coronary Artery Disease and Risk Factors ........................................... 2
Heart Attack Warning Signs ................................................................. 3
Heart Attack Questions and Answers ..................................................... 5
Coronary Angioplasty and Stent Placement ............................................. 7
Going Home After Cardiac Catheterization ............................................ 8
Medications ......................................................................................... 9
Metabolic Syndrome .......................................................................... 10
Heart-Healthy Eating .......................................................................... 11
Excessive Belly Fat and Weight Management ........................................ 12
Tobacco Cessation ................................................................................ 13
Sleep Apnea ...................................................................................... 15
Cardiovascular Rehabilitation ............................................................... 16
Guidelines for Cardiovascular Exercise ............................................... 18
Sex and Your Heart ........................................................................... 19
Stress and Your Heart ......................................................................... 20
Build Stress Resilience: Managing the Stress in Your Life ................... 21
Your Future ........................................................................................ 22
Your Care Team/Resources ................................................................ 23
St. Luke’s Cardiovascular Rehabilitation and Cardiology Clinic Locations ......................................................... 24
What is Coronary Artery Disease?

The heart is a muscle, and like all other muscles in your body, it needs oxygen-rich blood to function. The major blood vessels that supply your heart with blood are called **coronary arteries**.

Coronary artery disease is a chronic condition that occurs when the arteries in your body become irritated, inflamed, and less flexible, allowing cholesterol to build up inside them (also called **atherosclerosis**).

As the plaque builds inside the artery, the blood flow through the artery is decreased. The reduced blood flow to the heart muscle can cause chest pain (**angina**), shortness of breath, or other symptoms.
Our current understanding is that chronic inflammation is the cause not only of cardiovascular disease, but diabetes, dementia, and certain cancers. The good news is that healthy lifestyle habits can reduce inflammation and help you live a better quality of life—as well as a longer life—by decreasing the severity of cardiovascular disease and preventing other conditions.

Chronic inflammation is the common thread in all the risk factors listed on the next page, both reversible and irreversible.

Note: “Anti-inflammatory” medications DO NOT help; in fact, they can cause worse disease.

About Angina
Angina is the chest pain or discomfort you feel when your heart muscle is not getting enough oxygen-rich blood. Most commonly, you experience angina when you are doing something active, such as walking or mowing the lawn. This occurs because your heart muscle demands more oxygen-rich blood when you are being active. When demand for oxygen-rich blood decreases (usually with rest), angina symptoms usually go away, too. However, as coronary artery disease progresses, angina can start occurring at rest as well.

Angina is not a disease, but a symptom of coronary artery disease. Angina is a warning sign that you are at an increased risk for a heart attack!

Treating Angina
- The goal of angina treatment is to reduce discomfort and treat the underlying heart problem, thereby reducing the risk of heart attack or death.
- Symptoms can be controlled through medications, lifestyle changes, and a medically supervised exercise program developed for you at Cardiac Rehabilitation.
- Angioplasty can be performed to open a narrowed artery. Sometimes it is necessary to have coronary bypass surgery (open heart surgery) to bypass a narrowed artery.
- Call 911 if angina symptoms last longer than five minutes, are new or different from previous angina, or are not relieved by nitroglycerin as prescribed.

Heart Attack Warning Signs!

5 to Stay Alive: H.E.A.R.T.

Heavy chest pressure, squeezing, crushing, or burning in your chest.

Extreme discomfort or symptoms such as light-headedness, nausea, heartburn, abdominal pain, sweating or a cold sweat, or unusual fatigue. Feelings of anxiety or an impending sense of doom.

Arm pain. Feeling pain in one or both arms, back, neck, or jaw.

Respiratory difficulty such as shortness of breath with or without chest pain.

Time to call 911 now! Do not drive—people die driving themselves to the emergency department. Call an ambulance.
Reversible Risk Factors: You CAN control these risks!

**High blood pressure:** Systolic of 140 or above and/or diastolic of 90 or above

- **Ideal:** 120/80 or less

- **My blood pressure:** ________

**High cholesterol:** Any of these:
- Total 200 or higher
- Triglycerides 150 or higher
- Low HDL (“good” cholesterol) 40 or lower for men and 50 or lower for women
- High LDL (“bad” cholesterol) 130 or higher

- **HDL goal:** 60 or higher for men and women

- **My cholesterol:** ________
  - My triglycerides: ________
  - My HDL: ________
  - My LDL: ________

**Being overweight:** BMI of 25 or higher and/or having excessive belly fat (waist circumference 35 inches or more for women and 40 inches or more for men)

- **My BMI:** ________
- **My waist circumference:** ________

**Diabetes (HbA1c 6.5 or higher), pre-diabetes (HbA1c 5.7-6.4), or a history of gestational diabetes:**
- Yes
- No

- **My HbA1c:** ________

**Tobacco use in any form:**
- Yes
- No
- Former

**Physical inactivity:** Excessive sitting, exercising less than 150 minutes a week

- **Time per week I spend exercising:** ________

**My activity level:**
- Sedentary
- Moderately Active
- Very Active

**Obstructive sleep apnea:**
- Yes
- No

**Excessive emotional stress:**
- Yes
- No

**Depression or anxiety:**
- Yes
- No

**Long-term (5 years), post-menopausal hormone replacement therapy:**
- Yes
- No

Non-reversible Risk Factors: You can’t control these but they do increase your chance for a future cardiac event.

**Family history of heart disease in a primary relative (parent or sibling):**
- Yes
- No

**Race:** Certain ethnicities have a higher incidence of heart disease such as Asian, Native American, and African American

**Prior radiation treatments for cancer to your chest:**
- Yes
- No

**History of HIV infection, or HIV treatment:**
- Yes
- No

**Auto-immune disease like Lupus, scleroderma, rheumatoid arthritis, and others:**
- Yes
- No

**Age:** men > 55 years old and women > 65 years old

These risk factors should be discussed with and managed by your primary care provider (PCP). If you don’t have a primary care provider, it’s vital that you establish care. St. Luke’s can help you find a primary care provider. Call (208) 381-9000 in the Treasure Valley or (208) 814-0065 in the Magic Valley, or visit stlukesonline.org.
Q. What is a heart attack (myocardial infarction)?

A. Your heart is surrounded by arteries (called coronary arteries) which deliver oxygen-rich blood to your heart muscle. A heart attack occurs when the blood flow through an artery is blocked and oxygen-rich blood cannot pass through. If the heart muscle is deprived of oxygen long enough, damage or even death to the heart muscle occurs.

Q. What causes a heart attack?

A. Plaque (a sticky substance caused by cholesterol in the blood) can build up over time causing narrowing or blockage of a coronary artery (also known as atherosclerosis).

Plaque that forms within the coronary arteries can sometimes rupture and spill out cholesterol. A blood clot then develops at the site of the rupture. If this clot is large enough, it can block the flow of blood (and the delivery of oxygen to your heart muscle) through the coronary artery. This complete blockage of your artery causes a heart attack.

Q. What happens after a heart attack?

A. The area of heart muscle that receives its blood supply from the blocked artery may become damaged. Some of the heart muscle may be stunned by the heart attack. This can affect your heart’s pumping ability. This stunned area of the heart muscle may improve over time, while the damaged tissue will not recover.
Q. What are the signs and symptoms of a heart attack?
A. The classic symptoms are pressure, tightness, pain, or a squeezing or aching sensation in your chest or arms that may spread to your neck, jaw, or back. However, you may experience other, less obvious symptoms, especially if you are a woman or have diabetes. These include:
- Nausea, vomiting, heartburn, or abdominal pain
- Shortness of breath
- Sweating or a cold sweat
- Feeling anxious or a sense of impending doom
- Fatigue
- Lightheadedness or dizziness

Q. What should I do in the case of a heart attack?
A. Act quickly! If you or someone you are with is having symptoms of a heart attack, call 911 immediately! When it comes to a heart attack, “time is muscle.” Every minute that treatment is delayed, more damage to the heart muscle is taking place.

DO NOT drive yourself to the hospital. You are putting yourself or someone else’s life at risk!

Q. What can be done for a heart attack?
A. If you have a heart attack:
- Your doctor will prescribe medications to help your heart function better.
- A heart catheterization may be done to find out how much blockage is in the coronary arteries.
- A procedure such as angioplasty or coronary bypass surgery may be needed to improve the blood supply to the heart.
- Lifestyle changes and medications may be prescribed to control your risk factors for heart disease and decrease the risk of future events.
- You’ll be referred to cardiac rehabilitation for a prescribed exercise and lifestyle program.

Coronary Angioplasty

[Diagram of a human heart with a catheter inserted through the heart with balloons and words: Catheter with balloon, Alternative site, Catheter insertion site, Inflated balloon compresses the plaque]
Coronary angioplasty and stent placement is a non-surgical treatment to open narrowed coronary arteries to improve blood flow to the heart. It’s usually done the same time a blockage is found during cardiac catheterization.

This procedure involves temporarily inserting and opening a tiny balloon where your artery is clogged to help widen the artery. It’s often combined with the permanent placement of a small wire mesh tube called a stent to prop the artery open and decrease its chance of narrowing again.

Why is this procedure done?
- To restore oxygen-rich blood flow to your heart muscle.
- To treat coronary artery disease when medications or lifestyle changes are not enough to improve your heart health.
- If you have a heart attack or worsening angina (chest pain).

Your Left Ventricular Ejection Fraction (LVEF) is _________.
Your LVEF is a measurement of how much blood your left ventricle pumps out.
Normal LVEF usually is 55% to 65%.

Where are my blockages? ______________________
Where are my stents placed? ______________________

Author: Patrick J. Lynch, medical illustrator, derivative work: Fred the Oyster (talk), adaption and further labeling: Mikael Häggström
Going Home after Cardiac Catheterization

Your Recovery
This care sheet gives you a general idea about how long it will take for you to recover. But keep in mind that each person recovers at a different pace. Follow the steps below to get better as quickly as possible.

Caring for Yourself at Home

Activity

- No strenuous exercise for five days after your procedure. We do encourage you to participate in light activities such as walking over the first several days while you recover.

- If the catheter was placed in your wrist, reduce the movement of your hand and wrist for 24-48 hours. Do not strain the affected arm (avoid pushing or pulling). No lifting over 5 pounds on the affected arm for 5 days.

- If the catheter was placed in your groin: minimize bending the leg for the first 24 hours. If you need to cough, support the area where the catheter was inserted with your hands. Minimize walking up stairs for the first few days. Avoid sexual activity for the first five days after your procedure. Do not lift over 10 pounds for 5 days.

- Start Cardiac Rehab. You will be referred by your physician at discharge.

Call your doctor now or seek immediate medical attention if:

- You are bleeding from the area where the catheter was placed in your artery. *Immediately lie down and apply direct pressure to the site for 5-10 minutes. If the bleeding does not stop after 5-10 minutes, CALL 911.*

- You have signs of infection, such as:
  - Increased pain, swelling, warmth, drainage, or redness
  - Fever or chills
  - Your leg or arm looks blue or feels cold, numb, or tingly

Care of the Catheter Site

- Normal changes to expect after the procedure include bruising, mild discomfort, and a small lump under the site. You may also notice the bruise slowly moving down to your hand (if the catheter was in your wrist) or down your thigh (if the catheter was in your groin).

- Remove your dressing the day after your procedure. You may shower at any time beginning the day after your procedure. Keep the catheter site clean and dry. *No* pool, bathtub, or hot tub for one week.
Coronary artery disease is treated using diet, lifestyle changes, risk factor reduction, exercise, and medications.

**Taking Your Medications**
Be sure to review the medication teaching sheet you’re given at discharge, along with your medication list, to help you know which types of medications are being prescribed for you.

- Bring your pill bottles or a current list of your medications with you to ALL of your doctor appointments.
- Take your medications the way your doctor advises.
- Do not stop your medications, even if you are feeling better, without talking to your doctor first.
- Make sure you have enough of your medications at home. Plan ahead for travel.
- If you cannot afford your medications, please let your doctor know.
- Learn ways to help you manage your medications. You may want to try:
  - A pill organizer or med-set.
  - Alarms to help remind you when to take your medications.
  - Involving family members/caregivers to help organize your medications.
  - Having a list of medications, important names, and phone numbers easily accessible, and telling your loved ones where this information is located.

**Medications Often Used to Treat Coronary Artery Disease**

- **ACE inhibitors and angiotensin receptor blockers (ARBs)** help lower the pressure the heart has to pump against. Examples: lisinopril, losartan, and enalapril.
- **Beta blockers** decrease heart rate and strengthen the heart’s pumping ability. Examples: Metoprolol, Atenolol, and Carvedilol.
- **Diuretics** ("water pills") are used to help remove extra fluid from the body, making it easier for the heart to pump. Examples: furosemide, spironolactone, and bumetanide.
- **Nitrates** (such as nitroglycerin or isosorbide) relax the blood vessels within the heart. They are used to treat angina, and are also used as treatment during a heart attack. Be sure to alert your doctor if you are using any medications for erectile dysfunction (ED), as the combination with nitrates can cause a life-threatening drop in blood pressure.
- **Statin** (cholesterol) medications are used to reduce or block the amount of cholesterol, or fat, in your bloodstream. This helps decrease plaque build-up in your arteries. In patients with a heart attack, cholesterol medications have been proven to reduce the risk of repeat heart attack, stroke, and even heart-related death. Examples: atorvastatin, simvastatin, and rosuvastatin.
- **Blood thinners** are used to prevent blood clot formation. They include anticoagulation and antiplatelet medications that are sometimes used together, depending on your specific medical condition. These medications can increase your risk of bleeding and bruising. Examples: aspirin, warfarin, clopidogrel, rivaroxaban, and prasugrel.
- If your doctor has prescribed **clopidogrel (Plavix)**, **do not** stop taking this medication until you are directed to do so by your doctor. If you miss a dose, take it as soon as possible. Do not take a double-dose.
- If you are taking **aspirin or a blood thinner** medication, alert your doctor if you have dark, tarry bowel movements, “coffee ground” appearing vomit, or any unusual bleeding such as frequent nosebleeds.
- Do not take over-the-counter medications or supplements without discussing with your physician first. Avoid nonsteroidal anti-inflammatory drugs (NSAIDs), as they increase your risk for bleeding and heart attack. These include ibuprofen and naproxen, which also have other brand names.
- If you’re a post-menopausal woman on hormone replacement therapy medications such as estrogen and progesterone, these may be discontinued because they increase your risk for a heart attack. However, vaginal topical estrogen used for post-menopausal vaginal problems is considered safe in patients with heart disease. Other medications may help manage hot flashes, including a class of drug called SSRIs and gabapentin. Talk to your primary care doctor.
What it is and why it matters
Metabolic syndrome is a cluster of risk factors that are associated with twice the risk of developing cardiovascular disease and five times the life-long risk of developing diabetes. Taken alone, these risk factors might even be considered borderline, but together they add up to an increased risk. These factors include high blood pressure, certain cholesterol problems, high blood sugar, and excessive belly fat. Metabolic syndrome affects approximately 30% of the U.S. adult population, primarily due to increasing obesity rates in the U.S.

My Current Metabolic Syndrome Risk Factors

**Hypertension or borderline hypertension:**
130/85 or higher

**My blood pressure:**
_________________________

**Waist circumference:** 35 inches or more for women, 40 inches or more for men

**My waist circumference:**
_________________________

**Specific cholesterol issues**

- **HDL:** 40 or lower for men, 50 or lower for women
- **Triglycerides:** 150 or higher

**My HDL:**
_________________________

**My triglycerides:**
_________________________

**Diabetes or pre-diabetes**

- **Pre-diabetes:** Fasting glucose 100 or higher and/or A1c of 5.7-6.4
- **Diabetes:** Fasting glucose 126 or higher and/or A1c of 6.5 or higher

**My fasting glucose:**
_________________________

**My A1c:**
_________________________

If you’ve recently been diagnosed with diabetes, please ask about speaking with a diabetes educator, or call St. Luke’s Humphreys Diabetes Center in Boise at (208) 331-1155, or St. Luke’s Clinic – Diabetes Management and Education in Twin Falls at (208) 814-7271.

Remember, diabetes is defined as a fasting glucose of 126 or higher and an A1c of 6.5 or higher.

Adjusting your health habits and adopting an **anti-inflammatory lifestyle** can help reverse the components of metabolic syndrome and decrease your risk. Diabetes can be avoided 90% of the time and your cardiovascular risk can be reduced.

An **anti-inflammatory lifestyle** incorporates a consistent daily exercise habit, a primarily plant-based diet, such as the Mediterranean Diet, and decreasing your body weight: even a 5-10% reduction in your current body weight is effective in decreasing your risk for progressive heart disease and diabetes.
Heart-Healthy Eating

There are many ways to incorporate heart-healthy foods into your diet. One way is to adopt the “Mediterranean Diet,” which has been shown to prolong life expectancy, improve HDL “good” cholesterol, and decrease the risk of type 2 diabetes, stroke, heart attack, dementia, Alzheimer’s, and even depression.

The Mediterranean Diet includes a variety of fresh vegetables, fruits, nuts, healthy fats, and oils. It’s rich in whole grains and fish, and limits red meat, sodium (salt), and sugar. It also avoids all trans fats because they increase your levels of “bad” cholesterol and decrease your levels of “good” cholesterol.

What to Eat

- Make half of each meal vegetables and fruit.
- Eat a variety of fruits and vegetables such as broccoli, peppers, carrots, spinach, kale, eggplant, tomatoes, grapes, blueberries, oranges, and apples. To ensure you’re getting the most fiber from your fruit, be sure to eat the fruit itself rather than drinking fruit juice.
- Make one-quarter of each meal whole-grain foods and healthy starches such as oats, brown rice, whole grain bread or pasta, quinoa, or barley.
- Make one-quarter of each meal healthy proteins:
  - Fish (at least twice weekly).
  - Legumes (beans) such as pinto, kidney, garbanzo, lentils, split peas, and lima beans. (Consider eating 1/2 cup of these a day.)
  - Skinless poultry such as chicken and turkey.
  - Eggs (up to 5 a week is a reasonable limit; add extra egg whites to increase protein).
  - Lean meats with fat trimmed off. Avoid red meats or limit to 2 times a week.
  - Cheese (use 1% or fat-free whenever possible).
  - Avoid deep fried foods such as french fries, fish and chips, chicken strips, potato chips, and finger steaks.
  - Avoid processed foods such as bacon, sausage, pepperoni, bologna, and hot dogs.
- Choose healthy fats such as olive, canola, and sesame oils; avocados; unsalted nuts; and raw sunflower or pumpkin seeds.

- Limit butter, palm oil, coconut oil, and animal fats, which are high in saturated fat.
- Enjoy sweets at a celebration or as a rare treat. Snack on fruits and vegetables. Avoid ice cream, pastries, and cookies.

Tips for Heart-Healthy Eating

- Dip sliced raw vegetables in hummus for a delicious appetizer or snack.
- Instead of using butter on your bread, try dipping it in 2 parts olive oil to 1 part balsamic vinegar.
- Dip fresh sliced fruit in low-fat or non-fat vanilla yogurt instead of ice cream for dessert.
- Sauté chicken or fish in olive oil or canola oil.
- Switch whole milk to fat-free or 1%.
- Eliminate processed foods as much as possible from your diet. Processed foods are typically found in boxes or bags at the grocery store. Stick with whole, fresh foods which are mostly found on the outer perimeter of the grocery store.
- Instead of using salt, use herbs, spices, vinegars, and squeezes of citrus to accentuate the flavor of foods. Salt (sodium) goals are 1,500-2,000mg per day.
- Use moderation when drinking alcohol. The general guidelines are no more than two drinks per day for men and no more than one drink per day for women (1 drink=12 oz. beer, 5 oz. wine, 1.5 oz. liquor).
Small steps lead to big changes. Make small changes every day to build healthy habits that will reduce your belly fat and keep your weight and waist circumference within a healthy range. Here are 10 important ways to do it:

1. **Reduce portion size.**
   By eating off smaller plates (9 inches), you can significantly reduce the amount you consume at meals. Be aware of your portion sizes and be sure to read the labels.

2. **Limit added sugar.**
   Excessive sugar not only makes us fat, it can damage the heart and blood vessels. Sugar is primarily found in processed food items, and also includes natural sources like honey, agave, and cane sugar.

3. **Avoid all sugar-sweetened beverages.**
   The empty calories in these drinks can lead to weight gain, diabetes, and other chronic diseases. And to add insult to injury, your brain will still crave more food.

4. **Limit saturated fat.**
   A diet high in saturated fat leads to increased risk of heart disease. Examples include butter, cheese, whole fat milk, ice cream, and red meat.

5. **Limit sodium.**
   If you limit meals away from home and consume less processed food, you’ll significantly reduce the sodium in your diet.

6. **Adopt mindful eating practices.**
   Slow down, savor each bite, and chew your food thoroughly. Honor your food, and give it the attention and gratitude it deserves. Turn off all electronic devices, while you eat, and don’t skip meals.

7. **Monitor your weight weekly.**
   Writing down your weight every week can help you see a pattern of weight gain or loss so you can make changes when necessary.

8. **Keep a food diary**
   A food journal will help you monitor your intake, pace meals and snacks, and fine tune your eating strategy. You can create your own or use one of the many free online resources such as myfitnesspal.com. Weight Watchers is an excellent program both in person and online, but does have associated costs.

9. **Move your body daily.**
   Strong evidence shows that getting at least 30 minutes of daily activity can help prevent weight gain. Consider getting an activity device like a “Fitbit” or “Jawbone,” or a pedometer to make sure you’re getting at least 10,000 steps daily.

10. **Adopt the Mediterranean diet.**
    Eat primarily plant-based foods, such as fruits and vegetables, whole grains, legumes, and nuts. Replace butter with healthy fats, such as olive oil and avocado. Use herbs, spices, vinegars, and citrus instead of salt to flavor foods.

    The Mediterranean diet is more than a diet. A better name might be the Mediterranean lifestyle, because it’s not just about what you eat—it’s also about the joy of preparing and sharing food with family and friends. Make it fun, a celebration—part of family time together and part of the day.

Remember! Even a 5-10% reduction in your current weight will improve your health now and in the future.
Tobacco Cessation

ALL forms of tobacco cause cardiovascular disease, and tobacco use is the #1 preventable cause of cancer in the world. It’s linked to an innumerable number of diseases including diabetes, back pain, and even rheumatoid arthritis.

Tobacco is the toxin, but nicotine causes the ongoing addiction. When people stop using tobacco, they experience nicotine withdrawal symptoms that are often severe and difficult to overcome. Because of this, most people who quit “cold turkey” are back to using tobacco within 30 days.

Nicotine withdrawal symptoms include anxiety, depression, restlessness, irritability, “foggy” brain, insomnia, hunger, and headache. But the good news is that your nicotine withdrawal symptoms can be controlled with the help of both prescribed and over-the-counter medications. These medications are generally very safe and well tolerated. They include varenicline (Chantix), bupropion (Zyban), and nicotine patches.

Over-the-counter nicotine gum and lozenges can also be used in addition to these medications to curb urges and cravings, which will aid your success.

The use of medical nicotine to help with tobacco cessation does not contribute to ongoing addiction. It actually helps to break the addiction. Please talk to your physician about your desire to become tobacco-free, and ask for help.

Ask for a referral, or refer yourself, to a St. Luke’s Tobacco Cessation Clinic in the Treasure Valley by calling (208) 322-1680. In the Magic Valley, call (208) 814-3672 to find out about local tobacco cessation resources.

• Physician-supervised clinic with registered nurses and licensed clinical social workers trained as personal tobacco cessation counselors.
• Intensive support through behavioral counseling and medications, if needed, to help suppress your nicotine withdrawal symptoms.
• Working with you and your primary care provider, making medication recommendations, and providing frequent follow-up through both clinic visits and telephone calls.

If you would like to pursue quitting on your own, call 1-800-QUIT-NET for free nicotine products and additional help.
Other resources to help you quit

- **Quitnow.net/Idaho**: Project Filter’s web-based quit program. By signing up, you can receive a limited supply of FREE nicotine replacement therapy products (patches, gum, or lozenges). You’ll find:
  - Quitting Aids to help you decide what type, dose, and schedule of nicotine replacement or other medication is right for you. They’ll also teach you how to use nicotine replacement products.
  - Quit Guide, an easy-to-use workbook you can use in any situation to help you stick with your quitting plan.
  - Quit Coach for expert support and assistance whenever you need it, over the phone, from coaches who specialize in helping people quit tobacco.
  - Web Coach for access to a private, online community where you can complete activities, watch videos, track your progress, and join in discussions with others in the program. There are more than 25,000 active members.

- **QuitLine 1-800-Quit-Now (1-800-784-8669)**: You can talk with expert coaches and receive private counseling, support, and advice on creating your quit plan, developing skills to break your tobacco habits, and deciding which quitting products or medications will work for you.

- **smokefree.gov**: information about quitting smoking and an online Quit Guide

- **Clearing the Air: Quit Smoking Today**: Order this booklet at cancer.gov or call 1-800-4-CANCER (1-800-422-6237)

- **Quitting Smoking Timeline**: Video about how the body restores itself after quitting smoking, from quitsmoking.com on YouTube

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**E-cigarettes or vaping**

The harm from smoking is not from nicotine but from dangerous chemicals added to tobacco. The same is true of e-cigarettes, or vaping. The safety or danger of vaping is completely unknown at this time. More research is needed before experts can say for sure whether e-cigarettes are safer than real cigarettes, or even an effective option for tobacco cessation. The U.S. Food and Drug Administration (FDA) has not approved e-cigarettes for use in helping people quit smoking.

The real danger of e-cigarettes may be that they’re completely unregulated. They could contain any number of substances that could be toxic to a human being and could cause lung disease, cancer, and other problems. They’ve already been shown in studies to expose the user to high levels of formaldehyde—a human carcinogen.

Because the FDA does not regulate the production of e-cigarettes, there is no government oversight or standard for how much or what chemicals are put in nicotine cartridges. This means the contents printed on the cartridges may not even be true.

If you’re thinking about using e-cigarettes to help you quit smoking, talk to your doctor first.
Sleep Apnea

Sleep apnea, also called obstructive sleep apnea (OSA) is a condition in which the airway closes off during sleep, causing oxygen levels to fall to inadequate levels and disrupting your sleep. This is very stressful for your body, and is associated with chronic inflammation and associated illnesses such as worsening heart disease, congestive heart failure, high blood pressure, abnormal heart rhythms, stroke, sudden death, diabetes, and dementia. OSA can sometimes be an unrecognized cause of metabolic syndrome, and can run in families.

The main risk factors for OSA are obesity, a large neck size (greater than 17 inches in a man and 16 inches in a woman), middle to advanced age, abnormal airway, being a male, and sedation from alcohol or medications.

Sleep apnea is usually diagnosed by testing with specific equipment used at home for one night or more formally in a sleep lab. This equipment measures the breathing effort and airflow, blood oxygen level, heart rate and rhythm, duration of the various stages of sleep, body position, and movement of the arms and legs.

Effective treatment will eliminate the symptoms of sleep disturbance; long-term health consequences are also reduced. The most effective treatment for sleep apnea uses air pressure from a mechanical device called a CPAP (continuous positive airway pressure) to keep the upper airway open during sleep.

The main symptoms of OSA are loud snoring, fatigue, and daytime sleepiness. However, some people have no symptoms. Other symptoms may include:

- Restless sleep
- Awakening with choking, gasping, or smothering
- Morning headaches, dry mouth, or sore throat
- Waking frequently to urinate
- Awakening unrested, groggy
- Low energy, difficulty concentrating, memory impairment

Note: If a bed partner has observed the patient during episodes of stopped breathing (apnea), choking, or gasping during sleep, there is a strong possibility of sleep apnea.
Cardiovascular Rehabilitation

The goal of cardiovascular rehabilitation is to stabilize, slow, or even reverse the progression of cardiovascular disease. A program of cardiovascular rehabilitation, or cardiac rehab, is recommended by the American College of Cardiology for the following patients, unless their physician determines there’s a specific reason not to. These patients include:

• Those who’ve had a heart attack
• Those who’ve had a stent placement (even without heart attack)
• Those who’ve had open heart surgery (valves, heart transplant, coronary artery)
• Those who have persistent chest pain despite treatment (medication or intervention)
• Some patients who have congestive heart failure

Rehab is recommended because it decreases your risk of dying from heart disease, diabetes, cancer, stroke, and dementia, helps you improve your quality of life, and creates a sense of well-being and optimism about the future.

Decreases Risk of Dying and Disability

Studies show that heart patients participating in cardiac rehabilitation can decrease their risk of dying of all causes over the next 10 years up to 45%, compared to heart patients who don’t participate in cardiac rehab.

St. Luke’s medically supervised program is tailored to fit each client’s needs, and includes:

- Exercise
- Nutrition
- Weight Management
- Medication and Symptom Management
- ECG Monitoring
- Education
- Counseling and Emotional Support

Clients learn to modify risk factors including:

- High Blood Pressure
- Tobacco Use
- High Blood Cholesterol
- Physical Inactivity
- Obesity
- Diabetes

They are also counseled on topics such as:

- Appropriate use of prescribed medication
- Overcoming depression and building stress resilience
Physical Benefits

- Decrease weight, stored body fat, blood pressure, resting heart rate, triglycerides, LDL “bad” cholesterol, and blood glucose.
- Increase HDL “good” cholesterol, fitness, endurance, work tolerance, flexibility, and balance.
- Reduce risk factors for further heart problems.

Psychological Benefits

- Decrease tension, stress, fear, anxiety, depression, fatigue, sleep disturbances, and feelings of isolation.
- Increase self-confidence, sense of well-being, zest for life, overall quality of life, ease of re-entrance into work, and participation in social activities.

About Our Facilities

St. Luke’s has cardiovascular rehabilitation programs in Meridian and Twin Falls. Our Heart Health and Rehabilitation Center in Meridian is the first of its kind in Idaho. The 12,500 square-foot center features more than 80 pieces of heart-healthy exercise equipment, a full size walking track with joint-friendly surface, classrooms with audio-visual equipment for ongoing learning opportunities, and a kitchen for nutrition presentations and practice. At our Twin Falls Center, we’re outgrowing our space and will move to a custom-designed, state-of-the-art facility in the near future.

Rehabilitation Specialists

Our medical director is an internal medicine specialist whose sole practice is caring for rehabilitation patients. Nurses, nurse practitioners, tobacco cessation specialists, respiratory therapists, occupational therapists, exercise physiologists, and additional support staff are on-site to monitor each client’s condition and progress as he or she moves through the prescribed physical activities. Clients also have access to a registered dietitian and licensed clinical social worker. Updates regarding each client’s progress are sent to his or her physician.

Check out our video on YouTube to learn more about cardiac rehab at St. Luke’s. Search by St. Luke’s Cardiac Rehab and choose “The Patient Experience.”
Guidelines for Cardiovascular Exercise

- Do an easy 5-minute warm-up and easy 5-minute cool-down after the higher intensity portion of your workout.

- Work up to exercising for at least 30 minutes (not including warm-up and cool-down) four to six days per week, working up to 45-60 minutes per session. The recommended amount of exercise for good health is 150 to 300 minutes a week of modest activity, like walking. You should be “pleasantly fatigued” after exercise, not exhausted!

- For good health, your time can be cumulative (three 10-minute bouts or two 15-minute bouts to total 30 minutes); bouts must be at least 10 minutes in duration. For fitness or to help increase endurance, however, it’s best to do just one continuous bout of exercise.

- Don’t increase time or intensity by more than 10% per week.

- Vary format of exercise to avoid boredom. For example, alternate treadmill, elliptical trainer, walking, hiking, and cycling. All of these different cardiovascular exercises, performed at the same level of intensity, are equally beneficial for your heart.

Tricks for Staying Consistent in your Exercise Routine

- Exercising with a partner (spouse, dog, friend) makes it much more likely you’ll exercise on the days you don’t quite feel up to it.

- Remember the “5-minute Rule.” On days you don’t want to exercise, get dressed, warm-up, and do 5 minutes of your workout. If you still don’t feel good/right, stop and take the day off.

- Make exercise convenient. Exercise close to home or work so it’s not a chore.

- Exercise outside as much as possible—fresh air and sunshine are good for you!

- Remember that you can always walk! “Big Box” stores (Wal-Mart, Home Depot, etc.) and the Mall are good places when the weather’s bad.

- Plan on exercising 5-6 days a week. That way, if you miss one or two you’ll still have done enough.

- Log your activity. Keeping track of your exercise is a great way to follow your progress and stay consistent.

- Sitting is the new smoking – get up and move! Use a pedometer to track the number of steps you take every day; try to increase you steps until you’re taking at least 10,000 per day.

- Incorporate exercise into your daily routine. Park at the far end of the parking lot, take the stairs, walk around the block when you get home—it all adds up.

- Remember, anything is better than nothing!
Sex and Your Heart

Sex is part of a healthy life. It can be safe for people who have a heart problem. But some people may worry about having sex, or they may have problems having or enjoying it.

If you’re having sexual problems, talk with your doctor. Your doctor can help you get information, support, and advice so you can enjoy sexual activity again.

Should I avoid sex?
If you have a heart problem, you may worry about having sex. Maybe you’re afraid you’ll have symptoms, such as chest pain. Or maybe you think you won’t have enough energy. You may even worry that sexual activity can cause a heart attack.

But sex is actually safe for most heart patients. They don’t have any more sex-related heart attacks than other people do.

Some heart patients may have reasons to avoid sex for a while. If you have serious heart problems and have symptoms, like chest pain, when you do anything active, you probably should avoid sexual activity until you talk to your doctor. If you’ve just had heart surgery, make sure the cut (incision) has healed well before you start to have sex again.

Ask your doctor if or when it’s okay for you to have sex. If you need help dealing with feelings of worry or fear, you can also try professional counseling.

Is it safe for me to have sex?
As far as your heart is concerned, sexual activity is like doing any mild to moderate exercise. Mild exercise would be slow walking, and moderate activity would be brisk walking.

If you can do moderate exercise, you’re probably ready to start having sex again. Your doctor might tell you that if you can climb two flights of stairs without having symptoms, such as chest pain, it’s fine for you to have sex.

Being physically active—getting regular exercise—can help you build up stamina and become stronger so that sex is more enjoyable.

Can I take ED (erectile dysfunction) medications?
Medications prescribed for ED called phosphodiesterase inhibitors (or PDE-5 inhibitors for short) with names like sildenafil (Viagra), vardenafil (Levitra), and tadalafil (Cialis) can be used by most heart patients safely.

However, if you’re taking medications containing nitroglycerin, there can be a dangerous interaction with the ED medication that can cause death. These nitroglycerin medications include isosorbide, ismo, isordil, nitroglycerin patch, and the need to use nitroglycerin under the tongue for angina.

Note: If you develop heart symptoms like chest pain and are prescribed erectile dysfunction medications, you need to alert any medical personnel who are treating you as to when you last took the medication so they can avoid giving you nitroglycerin products for at least 24-48 hours after you ingested the Viagra, Levitra, or Cialis.
Stress and Your Heart

How does stress affect your health?

When you’re stressed, your body responds as though you’re in danger. It makes hormones that speed up your heart, make you breathe faster, and give you a burst of energy. This is called the “fight-or-flight” stress response. If the stress is over quickly, your body goes back to normal and no harm is done.

But if stress happens too often or lasts too long, it can have bad effects. Long-term stress can make you more likely to get sick, and it can make symptoms of some diseases worse. If you tense up when you’re stressed, you may develop neck, shoulder, or low back pain. Stress is linked to high blood pressure and heart disease.

Stress also harms your emotional health. It can make you moody, tense, or depressed. Your relationships may suffer, and you may not do well at work or school.

What is stress?

Stress is what you feel when you have to handle more than you’re used to. Stress is a fact of life for most people, and it affects everyone differently. What causes stress for you may not be stressful for someone else.

A lot of things can cause stress. You may feel stress when you go on a job interview, take a test, or run a race. This kind of short-term stress is normal and even useful. It can help you if you need to work hard or react quickly. For example, stress can help you finish an important job on time.

Stress also can last a long time. Long-term stress is caused by stressful situations or events. Examples of long-term stress include long-term health problems, ongoing problems at work, or conflicts in your family. Long-term stress can harm your health.
Managing the Stress in Your Life

Mindfulness

- Stay focused on the present moment instead of past events or future worries to foster increased stress resilience. This is a tool to help you focus your mind and deal with negative thoughts.
- Slow down! Focus on the details of NOW through your senses. Smell the fresh air, listen to your favorite music, notice the soft feeling of the fur on your pet, taste the crispness of a sweet apple, or look at nature around you.
- For more information on ways to start a mindfulness practice of your own, refer to “A Mindfulness-Based Stress Reduction Workbook” by Bob Stahl, PhD and Elisha Goldstein, PhD.
- For a more comprehensive and in-depth look at mindfulness, refer to “Full Catastrophe Living” by Jon Kabat-Zinn.

Gratitude

- Develop a gratitude practice. Every day, identify something that gives you joy or that you are simply thankful for. Some days are harder than others. It can range from “I’m so glad I have legs that walk” to “I am thankful I have a job to go to each day and support my family.” A gratitude practice increases personal happiness and resilience to life stressors. It has also been shown to keep you healthy!
- For more information about incorporating gratitude into your daily life, refer to “Living in Gratitude: A Journey That Will Change Your Life” by Angeles Arrian.
- Check out happify.com for daily gratitude exercises.

Relax Your Mind

- Write. It may help to write about things that are bothering you. This helps you find out how much stress you feel and what’s causing it. When you know this, you can find better ways to cope.
- Let your feelings out. Talk, laugh, cry, and express anger when you need to. Talking with friends, family, a counselor, or a member of the clergy about your feelings is a healthy way to relieve stress.
- Do something you enjoy. Listen to music, go to a movie, read a book. Practice your hobby or do volunteer work.
- Meditate. This helps you relax, because you aren’t worrying about what happened before or what may happen in the future. A daily practice increases inner calmness, builds happiness, and helps you live longer.
- Try guided imagery. Imagine yourself in any setting that helps you feel calm. You can use audiotapes, books, or a teacher to guide you.

Relax Your Body

- Do something active. Exercise or activity can help reduce stress. Walking is a great way to get started. Even everyday activities such as housecleaning or yard work can help.
- Do breathing exercises. For example:
  1. Take in a deep breath using your diaphragm.
  2. Hold your breath for four seconds.
  3. Exhale as though you are blowing out a candle.
  4. Repeat as many times as needed.
- Try gentle yoga or tai chi. These techniques combine exercise and meditation. You may need some training at first to learn them.

Preventing Stress

- Manage your time. This helps you find time to do the things you want and need to do.
- Get enough sleep. Your body recovers from the stresses of the day while you’re sleeping.
- Get support. Your family, friends, and community can make a difference in how you experience stress.
It’s natural to have concerns about the future when you’ve been diagnosed with heart disease. You may worry that you’ll have a shortened or disabled life, or wonder what your life will look like now that you know you have heart disease. Truly, the key to your future is learning how to manage your heart disease and all of the risks contributing to it in order to avoid disability or a shortened life.

It’s important to understand that heart disease is a chronic illness. There is no cure. If you had a stent placed or bypass surgery, you have heart disease. Stents, angioplasty, and coronary bypass surgery are treatments for this disease; they are not a cure.

**Be aware of your personal risk factors:**

<table>
<thead>
<tr>
<th>Reversible Risk Factors: You CAN control these risks!</th>
<th>Non-Reversible Risk Factors: You cannot control these, but they do increase your risk for a future cardiac event!</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Smoking</td>
<td>• Age: Men age 55 years and older, women age 65 years and older</td>
</tr>
<tr>
<td>• High blood pressure</td>
<td>• Family history of premature heart disease: a parent or sibling with a heart attack or death from heart disease younger than age 55 years old (men), or 65 years old (women)</td>
</tr>
<tr>
<td>• High cholesterol</td>
<td>• Race: Certain ethnicities have a higher incidence of heart disease such as Asian, Native American, and African American</td>
</tr>
<tr>
<td>• Being overweight</td>
<td>• Prior radiation treatments for cancer to your chest</td>
</tr>
<tr>
<td>• Diabetes</td>
<td>• History of HIV infection</td>
</tr>
<tr>
<td>• Physical inactivity</td>
<td>• Autoimmune diseases such as lupus, rheumatoid arthritis, and others</td>
</tr>
<tr>
<td>• Depression, anger, stress</td>
<td></td>
</tr>
<tr>
<td>• Metabolic syndrome (having three or more of the above risk factors combined significantly increases your risk for heart attack or death!)</td>
<td></td>
</tr>
</tbody>
</table>

Learning how to manage your heart disease is a process. Making a commitment to your future health and wellness is the key to slowing the progression of your heart disease. With the help of your primary care physician, your cardiologist, and the Cardiac Rehabilitation team, you will learn the tools necessary to implement these changes in your own life. By adopting a healthy lifestyle, you may also influence the health habits and overall health of your spouse and children. Your future can be healthy and vibrant, even if you’re living with heart disease!
St. Luke’s is dedicated to helping you achieve and maintain your best quality of life. From the hospital to the home, our cardiovascular teams will work with your primary care physician to provide expert medical care and compassionate support, help you learn about your disease and treatment, and connect you with the resources you need.

**Primary Care Providers:** These include physicians who practice family medicine and internal medicine. They’re considered generalists who care for your entire health and work with you to decrease your risk factors for disease throughout your lifetime. They should be your personal “quarterback” for your healthcare!

**Cardiologists:** These physicians specialize in treating diseases and disorders that affect the heart and its associated blood vessels. Cardiologists work in partnership with your primary care provider and your inpatient and outpatient care teams.

**Patient Educators:** While you’re in the hospital, patient educators will assess your education needs and provide you and your loved ones with education about the disease.

**Cardiac Rehabilitation Physician and Staff:** A vital part of your team! They help you take the necessary steps to optimize your lifestyle, reduce risk factors, and prolong and optimize your quality of life. To learn more, call or come by for a tour (directions on page 26 for both locations).

**Care Transition Nurses:** If needed, a care transition nurse will visit you at home to check on your health and provide services such as helping plan your care, answering your questions, offering tips for stocking your pantry and fridge with heart-healthy, low sodium food, and following up on the education you received at the hospital and clinic. After the home visit, the care transition nurse will follow up with you by phone.

**Dietitians:** Registered dietitians are available to provide education and support while you’re in the hospital, and are available by phone after you leave the hospital. They’re a valuable resource, especially if you’re following more than one diet. They can assist you with meal planning, tips, and resources.

**Social Workers:** Medical social workers can help you with your discharge planning and finding resources to help you manage your disease, such as social and financial services, support groups, and community programs.

**Mended Hearts:** Cardiac rehabilitation graduates and veteran “Phase 3” clients reach out to new cardiac patients while they are still in the hospital, with support and encouragement.

**Nutrition for Cardiac Patients:** This free class is offered every other Wednesday, from 4-5 p.m., at St. Luke’s Magic Valley.

**Friends in Action (Boise):** This nonprofit, volunteer-based program serves family caregivers and the elders they care for. Friends in Action offers classes in managing a long-term illness and being a caregiver for someone managing a long-term illness. Other services include caregiver respite and minor home safety repairs. Minimal fees apply for some services; scholarships are available. Learn more at fiaboise.org or call (208) 333-1363.

**WomenHeart of Boise:** The local chapter of the National Coalition for Women with Heart Disease meets regularly in Boise, with a mission to improve the health and quality of life of women living with or at risk of heart disease, and to advocate for their benefit. Go to womenheart.org and search by “Boise.”

**Resources**

Be careful about misinformation on the internet. Go only to reliable websites, such as:

- **American Heart Association:** americanheart.org
- **Healthwise:** Go to stlukesonline.org and click on “Health Library”
- **Mayo Clinic:** mayoclinic.org
- **“Old Ways” Mediterranean Foods Alliance** at oldwayspt.org. Learn about the Mediterranean Diet, including recipes.
- **cdc.gov:** Centers for Disease Control and Prevention
- **nhlbi.nih.gov:** National Heart, Lung, and Blood Institute
Treasure Valley

Boise

St. Luke’s Clinic – Idaho Cardiology Associates

Heart Rhythm Center
287 W. Jefferson Street
Boise, Idaho 83702
(208) 322-1680

St. Luke’s Clinic – Idaho Cardiology Associates
300 E. Jefferson Street
Boise, Idaho 83712
(208) 322-1680
St. Luke’s Cardiovascular Rehabilitation and Cardiology Clinic Locations

Caldwell
St. Luke’s Clinic – Idaho Cardiology Associates
315 E. Elm Street, Suite 350
(Family Medical Center Building)
Caldwell, Idaho 83605
(208) 322-1680

Eagle
St. Luke’s Clinic – Idaho Cardiology Associates
3101 E. State Street
Eagle, Idaho 83615 (208) 322-1680

Fruitland
St. Luke’s Fruitland
1210 NW 16th Street
Fruitland, Idaho 83619
(208) 322-1680
St. Luke’s Cardiovascular Rehabilitation and Cardiology Clinic Locations

**Meridian**

St. Luke’s Clinic – Idaho Cardiology Associates
3525 E. Louise Drive, Suite 400
(Meadowlake Building)
Meridian, Idaho 83642
(208) 322-1680

Cardiovascular Rehabilitation
St. Luke’s Heart Health and Rehabilitation Center
3525 E. Louise Drive, Suite 500
(Meadowlake Building)
Meridian, Idaho 83642
(208) 706-7050

**Magic Valley**

Twin Falls

St. Luke’s Clinic – Cardiology
775 Pole Line Road W., Suite 112
Twin Falls, Idaho 83301
(208) 814-8200

Cardiovascular Rehabilitation
775 Pole Line Road W., Suite 202
Twin Falls, Idaho 83301
(208) 814-2580