



Heart Valve Procedure

PATIENT EDUCATION GUIDE



SHANNON REGIONAL HEART CENTER

Leading the Concho Valley in exceptional cardiac care.

Welcome!



Thank you for trusting us with your care.

Shannon would like to personally thank you for the opportunity to care for you and your heart. Our goal is to provide you with exceptional care, and we hope your stay with us has been as comfortable and stress-free as possible.

Our team of professionals has designed this book to assist you in your heart care journey at home. We also recommend sharing the information in this book with others who will be part of your care and recovery, including family members and caregivers.

You are welcome to use the “Notes” section of this book to write down any questions or concerns you would like to discuss with your care team before leaving Shannon Medical Center.

Again, thank you for letting Shannon care for you!

- Your Heart Team



Name _____ Date of Surgery _____

Surgical procedure _____

Heart valve

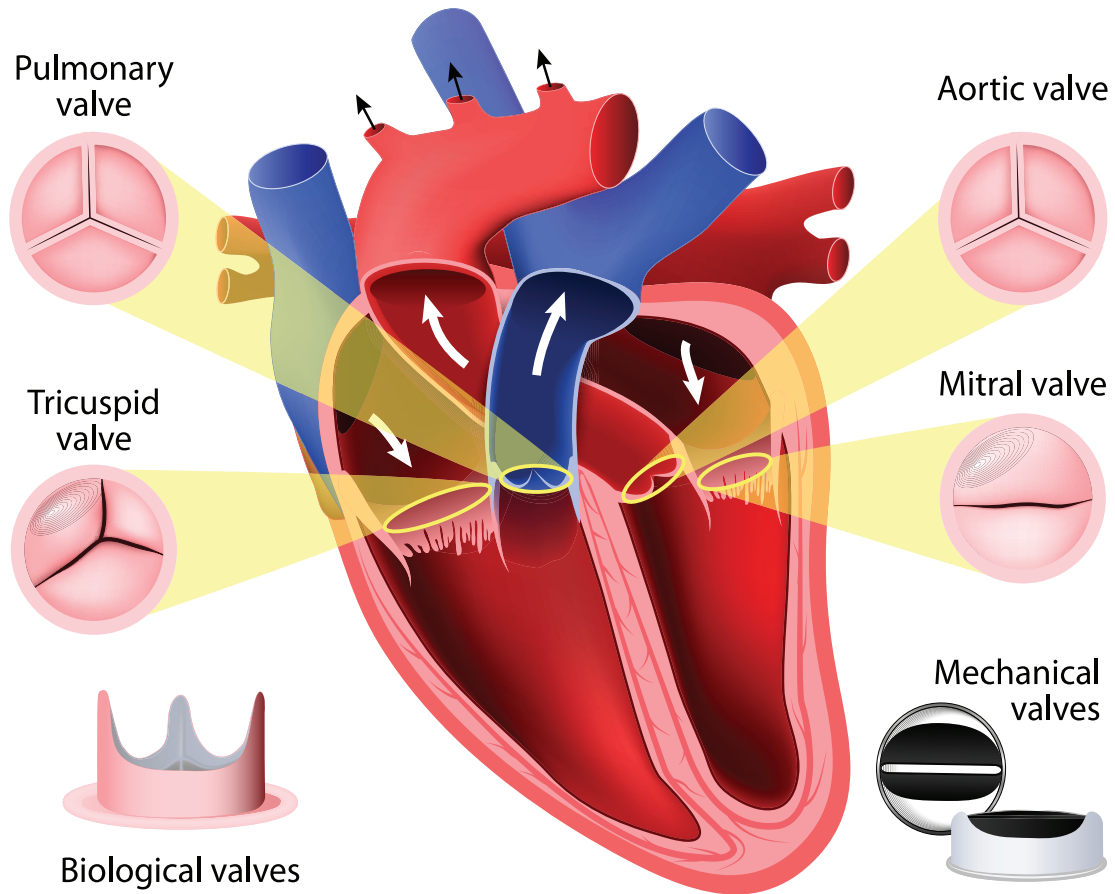


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When and How to Call the Doctor

Direct Physician Contact (direct office lines)

During office hours, Monday - Friday, 8 am - 5 pm:

Cardiologist: _____ Phone: _____

Primary Care Physician: _____ Phone: _____

Surgeon (if applicable): _____ Phone: _____

Shannon Regional Heart Center: 325-747-2281 or 800-530-4143

102 N. Magdalen, San Angelo, Tx 76903

Medical Exchange (contact MD on-call after hours and during weekends): 325-747-2002

Cardiovascular & Thoracic Surgeons: 325-747-2134

Conditions requiring a 911 call

- Severe chest pain
- Pain radiating into one or both arms, back or to the jaw
- Severe, sudden shortness of breath
- Severe mental confusion

Conditions requiring a call to your physician

- Progressive, worsening shortness of breath
- New onset of the inability to lie flat at night because of shortness of breath
- New onset of fatigue with walking
- Weight gain of 2-5 pounds over a 2-4 day period
- Swelling of the ankles or stomach
- Worsening or new onset dizziness
- Worsening, persistent cough (especially while lying down)
- New onset of nausea, vomiting or diarrhea

For your safety

Please help your healthcare providers maintain an accurate list of your home medications by bringing all of your medications with you to all hospital visits (ER, Surgery, etc.) and all outpatient visits (doctor's office, urgent care, etc.)

Cardiovascular and Thoracic Surgery Patient Expectations

We are pleased you have entrusted us with your care and/or your relative's care. The staff of the Thoracic and Cardiovascular Surgery department strive to provide comprehensive care during our involvement in your treatment. We will be seeing you or your relative during the hospitalization and after the operation, as well as in the clinic for follow-up as an outpatient. We hope to provide complete information on your status and provide optimal ways to obtain maximal benefit from your operation and care.

After treating many patients, the staff has identified many common characteristics that lead to a successful outcome after thoracic and cardiovascular surgery. Many things nurses and doctors provide while in the hospital, but many things also have to be done by the patient when they return home, with and without assistance from family and friends.

1) **Family assistance at home will be needed for the initial 7-10 days after discharge.**

The patient will not be discharged home until it is appropriate, but assistance for the patient's recovery at home needs to be addressed before discharge. Assistance with travel to clinic, lab and rehabilitation appointments will be needed until you or your relative is released to drive. If any assistance in transportation will be needed, please let us know while in the hospital. We can help arrange alternative transportation for these essential appointments.

2) **It is essential that the patient obtain and take the prescribed medicines after discharge.**

Some medicines may be the same and some different, but the patient will need to take the medicines on the discharge medication list. A blood pressure and heart rate log (provided in this book) will need to be kept for reference on follow-up visits. You can obtain a BP monitor at your pharmacy. If you will need assistance in obtaining or paying for medicines, please inform us prior to discharge so we can arrange for assistance.

3) **Mobility is essential for a complete recovery.**

Mobility improves lung function to prevent pneumonia and improves intestine function to return to normal appetite and bowel movements. Mobility also improves sleep patterns for nighttime sleeping. Patients will be asked to walk a continuous 10 minutes 4 times a day when at home. The amount of time should gradually increase by 5 minutes a walk per week.

4) **Lung expansion and deep breathing is essential after surgery.**

Doing your incentive spirometer, as you were instructed in the hospital, provides good exercise for your lungs. This exercise should be performed at least 2-3 times every half-hour or during every commercial while watching TV.

5) **Smoking after surgery is detrimental.**

The bypass grafts on the heart will fail if you continue to smoke or have people around you who smoke. The continued insult to the lungs after heart or lung surgery will increase your risk of pneumonia. You and others around you must stop smoking if you wish to have a complete recovery and long-lasting results from your operation.

6) **Diabetic (sugar) control is crucial for recovery.**

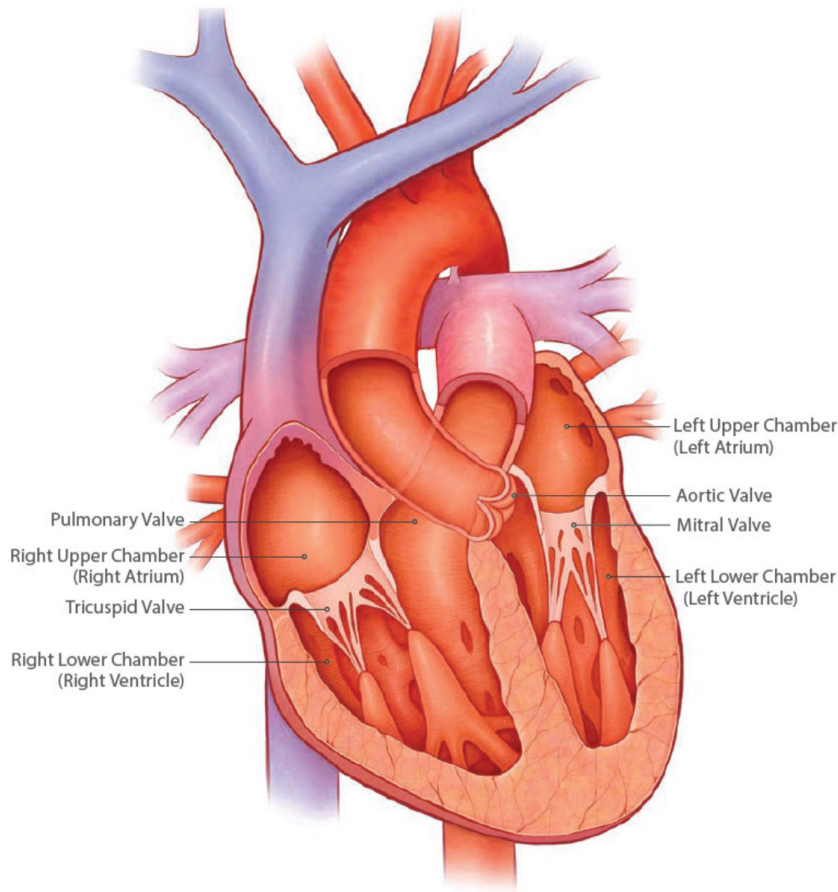
During your hospitalization, your blood sugar is tightly controlled with a strict medication regimen. You must follow this regimen, even if different from the regimen prior to surgery. Excellent sugar control diminishes the risk of wound infection and maximizes the recovery of the heart after surgery. You must monitor your sugars as instructed and keep a record. Diabetic teaching will be provided while in the hospital. Please let us know whether you have the tools to measure your blood sugars; and we can assist in getting the tools as well as educating you on monitoring.

7) **Many patients retain fluid after heart and lung surgery.**

Initially, most patients will go home on a diuretic (water pill). Most patients will be thirsty while on the diuretic, but they should limit fluid intake at home. We recommend only 2 liters of fluid per day until we see you in follow-up. You will be sent home with an 800mL jug with a Shannon label. Please use this jug as a measuring device for your daily fluid intake. A good measure of your fluid status is your weight. You should weigh yourself each day at the same time of day and keep a log of your weight, on page 60. If you notice a weight gain of 3-4 pounds in one day or a gradual increase over 2-3 days, contact the office. If you do not have a scale at home, please let us know.

Heart Valves

Heart valves open to allow blood to flow forward and close to prevent backward flow of blood.



Aortic Valve

Has three leaflets, these open to supply blood from the left ventricle to your body.

Mitral Valve

Controls blood flow from the left atrium (upper chamber) to the left ventricle (lower chamber).

Tricuspid Valve

Controls blood flow from the right atrium (upper chamber) to the right ventricle (lower chamber).

Pulmonic Valve

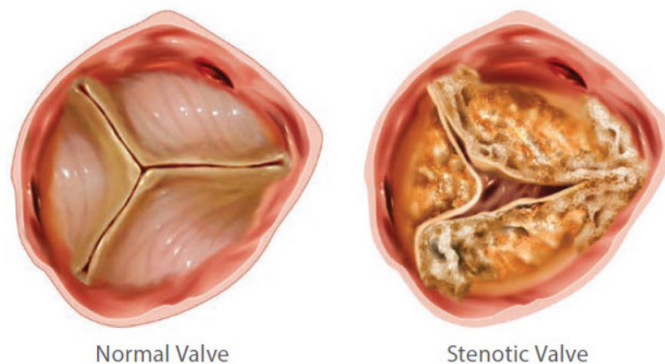
Controls the blood flow to the lungs, where oxygen is exchanged.

Insufficiency (Regurgitation)

Your valve (aortic, mitral, tricuspid, pulmonic) does not close properly. When the valve leaflets do not close properly blood flows backward (wrong direction). Symptoms of mitral valve regurgitation include shortness of breath, fatigue, coughing, lightheadedness, and swollen feet or ankles. Treatment includes medications and valve repair or replacement.

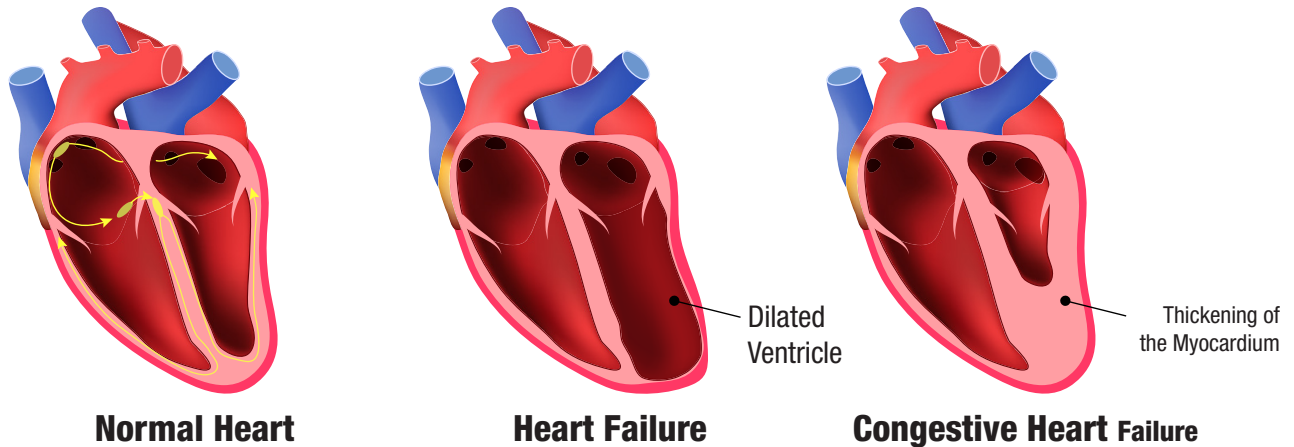
Stenosis

The hardening/narrowing of your valve (aortic or mitral). The leaflets do not completely open. Overtime this can weaken your heart and lead to heart failure. Causes include aging, birth defects (two leaflets instead of three), calcium buildup that narrows your valve, radiation therapy, or infections of the heart. Stenosis makes the valve harder to open, which places more work on your heart to pump blood to your body, and can limit your normal daily activities. Signs of stenosis include: chest pain, dizziness, fainting, fatigue, shortness of breath or out of breath feeling, and irregular heartbeats. Treatment includes medications and valve replacement.



Congestive Heart Failure

Your heart is too weak to pump enough blood to your organs and tissues. Heart failure is often the result of damage or injury to your heart caused by other heart problems and high blood pressure. Heart failure is a long-term condition that tends to get worse over time. Heart failure can be worsened by heavy alcohol use, smoking, diabetes, and obesity. Symptoms of heart failure include shortness of breath, fatigue or lack of energy (often worsened by physical activity), swelling in your ankles, legs, or abdomen, coughing or wheezing, recent weight gain or weight loss, and confusion or poor ability to concentrate.



Atrial Fibrillation

Is an irregular heartbeat in the atrium (upper chamber), that can feel like a pounding, racing, or fluttering heartbeat. It can cause weakness, fatigue (tiredness), lightheadedness, dizziness, or fainting, shortness of breath, and chest pain or pressure. This heartbeat reduces your heart's ability to pump blood through your body, which means you do not get enough oxygen. Atrial fibrillation may come and go, or it may be a long-term condition. It is important to treat and manage atrial fibrillation to help prevent a blood clot and stroke.

Balloon Valvuloplasty (BAV)

Is a procedure performed in the cardiac catheterization unit by a cardiologist. A catheter is placed through a groin puncture. The catheter has a collapsed balloon on the tip that is positioned across your aortic valve and then inflated. This may help your stenotic valve function better, however, this is a temporary fix. Without valve replacement your symptoms could reappear over time.

Valve Replacement

Is a surgical procedure utilized to remove a valve that is insufficient (leaking) or hardened (stenosis) and replaced with a properly functioning valve. Usually tissue valves are used.

Tissue valves are made from human valves (cadaver), or from animal tissue including cow (bovine) or pig (porcine).

Valve Repair

Is a surgical procedure that repairs an insufficient (leaking) valve.

Ready For Discharge Home

General Feeling

Feeling tired for the first few weeks after surgery is normal. By gradually increasing your activity, you will gain strength and stamina. Walking continuously for 10 minutes, 4 times a day and adding 5 minutes to each walk every week will build up your stamina. About 8 weeks after surgery, you may notice a significant improvement in your recovery, like increased strength, stamina, appetite, sleep pattern and decrease in your pain. During this 8-week period, you may feel tired and experience some shortness of breath, loss of appetite and aches and pains.

Incision Care

Upon discharge home, an Aquacel dressing will cover your chest incision. With the dressing in place, shower every day using Dial or Safeguard soap. NO TUB BATHS, swimming pools, or sitting in water to soak (this will increase your risk of developing an infection). Seven (7) days after discharge home, remove the Aquacel dressing. Continue to shower every day using a clean washcloth with Dial or Safeguard soap, and lightly clean all incisions. Always clean your chest incision first, then your leg incisions, and then the rest of your body. Avoiding really hot showers is advised. They can cause light-headedness and increase the risk of passing out. Do not use perfumes, lotions or ointments on your incision.

Please call the Cardiovascular & Thoracic Surgeon's office at 325-747-2134 anytime, for any questions or concerns.

Call Immediately for

- Temperature of 101 degrees
- Increased redness or heat to your incisions
- Increased drainage from your incisions that changes from clear yellow or pink to cloudy (pus)
- Weight gain of 2 pounds in 24 hours
- Questions or concerns about your condition or care

You will have numbness to your incisions, left side of your chest and ankles. This is to be expected. You will have some swelling to your operative leg. This can be kept to a minimum if you keep your leg elevated when sitting.

Medications

Possible home medications:

- **Prescription pain medication:** Please take as written. It is very important to control your pain initially at home. Adequate pain control allows you to take deep breaths, cough, walk and rest.
- **Antiplatelets:** Aspirin is the most common. Aspirin helps keep your bypass grafts open and prevents blood clots. Take as directed.
- **Blood pressure medication:** Helps lower or control your blood pressure.
- **Heart medication:** Helps strengthen and regulate your heartbeat.
- **Cholesterol medication:** Helps lower cholesterol/lipid levels to prolong the patency of bypass grafts.

- **Stool Softeners (Surfak):** Helps prevent constipation while on pain medication.
- **Diuretic:** Assists in wasting extra fluid (swelling in your hands and feet). Potassium is lost while on certain diuretics, so a potassium replacement will be given.
- **Take your medications as directed.** Call your physician (doctor) if you think your medicine is not helping or if you have side effects. Tell your physician if you are allergic to any medicine. Keep a list of the medicines, vitamins, herbal supplements or any over-the-counter medications you take. Include the amounts, when and why you take them. Bring the list and/or the pill bottles to every doctor's appointment. Carry your medicine list with you in case of an emergency.

Diet/Meals

It is important to eat a balanced diet. You need to eat foods that are low in salt, fat or cholesterol. Healthy foods include fruits, vegetables, whole-grain breads, low-fat dairy products, beans, lean meats and fish. For the first 2 weeks after surgery, it is **VERY IMPORTANT** that you eat. During these 2 weeks, we do not restrict your diet. Eating provides nutrients your body needs to heal itself.

Fluid Intake

Please limit your fluid intake for the first 3 weeks after surgery. **YOU WILL BE THIRSTY. DRINK NO MORE THAN 2000mL IN A 24 HOUR PERIOD.** The Shannon jug holds 800mL. Use this as a measuring cup. Do not fill it more than twice a day. Too much fluid intake places unnecessary stress (work) on your heart, and fluid will build up in your lungs causing shortness of breath and leg swelling.

Diabetics

Well-controlled diabetes decreases the risk of wound infection. Monitor your blood glucose twice a day and record the results (BP/glucose log is provided). Your blood glucose should be less than 180. Follow a diabetic diet. Lose weight. Attend a diabetic education class. Talk with your primary care provider about medication options to help control your diabetes.

Smoking: STOP!! Nicotine can damage your heart and cause your bypass grafts to close. Do not use e-cigarettes or smokeless tobacco. They still contain nicotine. If you smoke, we have information and medications to help you quit.

Maintain a Healthy Weight

Extra weight can increase stress on your heart. Walking is a good low-impact activity. Following a balanced diet and exercising 5 days a week for 30 minutes helps you lose weight or control your weight.

Activities

Reaching

Until your breastbone heals, avoid reaching above your shoulders or twisting to reach behind you. When you reach for something at waist level, follow these steps:

- Turn with your entire body so that you face the object.
- Step close to the object.
- Lean forward from the waist to pick up the object.

Bending and Lifting

Avoid heavy lifting as directed by your healthcare provider. To make this easier, keep the things you use most (such as clothing and dishes) at waist level. If you must bend down to lift something light, follow these steps:

- Stand close to the object. Put your feet shoulder-width apart, with one foot slightly in front of the other.
- Hold on to something sturdy with one hand.
- Bend at the knees. Keep your back and neck straight and your shoulders and hips in line.
- Pick up the object and hold it close to your body.
- Slowly push up with your legs.

Getting Up from Sitting

When you get up from a chair or couch, use your leg muscles – not your arms – to push your body up.

To Stand:

- Scoot to the front of the chair.
- Place one foot slightly in front of the other.
- Put your hands on your thighs.
- Bend forward from the hips and push your body up with your legs.

To Sit Down:

- Use your leg muscles to lower yourself onto the front of the chair.
- Then use your leg muscles, not your arms, to scoot back.

Getting Out of Bed

- When you get in and out of bed, keep your shoulders and hips in line.
- Lie on your back and slowly scoot to the edge of the bed.
- Bend your knees slightly and roll slowly onto your side.
- Carefully push your body up, using the elbow beneath you and the arm on the other side of your body. At the same time, gently swing both legs to the floor.
- Sit for a moment. This will help keep you from getting dizzy.
- Put your hands on your thighs. Bend forward from the hips, and push your body up with your legs.

To get into bed, do the reverse.

Activities You Can Do

It's okay to do light household chores or activities, including:

- Watering small plants
- Dusting
- Doing light repairs
- Setting the table
- Washing dishes
- Preparing simple meals
- Baking
- Doing crafts
- Playing cards
- Going to a movie

Household Chores or Activities to AVOID

Avoid household activities that involve reaching, lifting, pushing or pulling. That means **NO**:

- Vacuuming, sweeping or scrubbing
- Changing sheets on the bed
- Moving trash cans or heavy furniture
- Gardening & mowing the lawn
- Playing golf
- Shooting a gun/rifle
- Contact sports

Resuming Driving

For your own safety and the safety of others, don't drive until your healthcare provider says you can drive (usually 3 to 4 weeks after surgery). There are several reasons for not driving:

- Your reaction time is slower until you regain your strength.
- Pain medications can slow your reaction time or make you drowsy.
- Driving increases the risk of injury to your healing breastbone.

Returning to Work

Depending on the type of work you do, you may be able to return to work several weeks after surgery. If your job is very active or requires heavy lifting, you will need to wait longer to return to work. Be sure to check with your healthcare provider before returning to work. If possible, slowly ease back into your schedule. Work part-time (4 hours a day) at first and build up to working full-time.

Resuming Sex

Ask your healthcare provider when you can resume sex. In most cases, you can begin within 3 weeks of returning home. When you're able to climb 2 flights of stairs or take a brisk walk without chest pain, you're probably ready. If your breastbone is still healing (8 weeks after surgery), you may need to avoid positions that put stress on your chest or arms. Also, some medications may affect sexual arousal (beta blockers). If you have questions or concerns, talk with your healthcare provider.

Follow-Up Appointments

When you are discharged, you will be provided appointments with:

- Cardiologist
- Surgeon
- Primary Care Physician
- Cardiac Rehabilitation

It is important you keep these appointments. If an emergency arises, please notify your doctor's office so your appointment can be rescheduled.

Helpful Tips To Remember

Safety is Our Priority

- Help us help you get better. Always call for assistance if repositioning or getting up out of bed.
- Make position changes slowly. This allows your body to compensate for position changes and decreases the risk of you getting dizzy or falling.
- Having family or friends in the room is also helpful. If family members will be staying overnight, a cot and linen are available for them to use.

Pain Control

- Do not wait to take pain medication. Ask for pain medication when you first feel pain. It takes 20-30 minutes for your body to absorb the medication to provide pain control.
- Pain medication is very important to take on a routine basis BEFORE you start having severe and uncontrolled pain. Adequate pain control will also aid you in recovery.
- We cannot keep you pain-free. You will experience some pain, but you should be comfortable when you are moving or taking deep breaths.
- Talk to us! We will be assessing and evaluating how well your pain is controlled. Let us know if your pain is managed or uncontrolled.

Infection Prevention

- Hand washing is the #1 form of infection prevention. The staff will use an alcohol foam when they enter and exit your room.
- You should wash your hands after using the restroom or anytime they become soiled.
- Foley catheters will be discontinued as soon as possible to prevent infections.
- Remember not to touch any open wounds or your incision without washing your hands.

Blood Clot Prevention

You will be assisted out of bed the evening of surgery. The morning after surgery, you will sit up in a chair and walk in the halls. Activity helps prevent the development of blood clots and helps you heal. Please work with your nurse and cardiac rehabilitation personnel; they will ask you to get up out of bed to a chair, the shower and walk in the hall. You will be allowed to rest between activities. We will not ask you to do anything you cannot do, and we will be there to assist you in these activities.

Constipation

A common side effect of surgery and pain medication is constipation.

- You will be given a stool softener daily and we have medication that will help your bowels work.
- Activity, fiber and some fluids will help your bowels return to normal.
- Fiber adds bulk and softens while water keeps you hydrated and helps lubricate the GI tract which helps the passage of stool.
- GET MOVING! The more mobile you are, the more your bowels will wake up and get back to normal.

Customer Service

We are the guests in your care, so please let us know if there is anything we can do better or any question you may have. We strive for you to have an excellent experience at Shannon and a quick, pleasant recovery.

Cardiac Rehab and Home Exercise

Exercise improves the way your heart, lungs and muscles work. It is an important part of your recovery from heart surgery and a healthy life. Walking will begin as soon as the next day after your surgery to prevent a lung infection and blood clots. As you become stronger, the walks will happen more often and for longer distances.

Cardiac rehab starts in the hospital with monitored activity and a walking plan. You will be able to continue monitored activity in an outpatient cardiac rehabilitation program close to where you live. This program and appointment will be discussed before you leave the hospital. Programs usually consist of meeting 2-3 times a week for 3 months.

Shannon's Outpatient Cardiac Rehab program is located at Shannon Clinic South 3, 3350 Executive Dr., San Angelo, TX, 76904, and the phone number is 325-747-2845.

At home, it is important to continue with exercise, but follow these guidelines:

1. Limit to range of motion, stretching, walking and stationary cycling for 6 weeks. Jogging, swimming, tennis and golf should be discussed with your heart surgeon before beginning.
2. Monitor your heart rate and how tired you feel during exercise. You should feel a little tired during exercise, but not so tired that you cannot go any further. Your heart rate should go up with exercise, but not more than 30 beats per minute higher than the resting heart rate. This can be monitored by checking your pulse. Check your pulse by placing first and second finger (not your thumb) on the thumb side of your wrist or along the Adam's apple of your neck. Count the beats for one minute before, during and after exercise.
3. The total time of exercise can be broken up into shorter periods of time if you are feeling tired. Start by walking for 10 minutes, 4 times a day. The amount of time should gradually increase by 5 minutes a walk per week. As you recover, you will be able to walk for longer periods of time and less often, such as a 45-minute walk once a day.
4. It is important to warm up for 5 minutes before exercise and cool down for 5 minutes after exercise.

5. STOP EXERCISING IMMEDIATELY for these reasons:

- Chest discomfort with or without radiation to your arms, neck, jaw or stomach
- Light-headedness and dizziness
- Excessive shortness of breath
- Skipped heartbeats (if not normal for you)
- Loss of balance
- Breaking out in a cold sweat
- Nausea or vomiting
- Excessive muscular pain or weakness
- Excessive fatigue (exhaustion)

6. GET IMMEDIATE MEDICAL HELP FOR:

Severe chest discomfort that is not quickly relieved by rest and/or nitroglycerin, unexplained fainting or blackout spells

Other special considerations:

- Take slow continuous deep breaths during exercise; do not hold your breath.
- Avoid caffeine before exercise.
- Wear comfortable clothing and shoes.
- Drink plenty of fluids before and during exercise, unless on a fluid restriction.
- Do not exercise while you are sick or right after eating a big meal.
- Avoid hot showers, saunas, Jacuzzis and hot tubs after exercise.
- Exercise inside, or if exercising outside, avoid extreme hot and cold temperatures. The Sunset Mall in San Angelo is a great indoor walking option.

Cardiac Rehabilitation Patient

Inpatient Exercise Prescription

For: _____

Warm-up Phase: Mild stretching and strengthening exercises performed for 5 minutes. All exercises should be done slowly and smoothly. Do not hold your breath while doing these exercises. Do these before each walking or cycling session.

Exercise: Walk

Duration: Heart surgery _____ **minutes. PTCA** _____ **minutes.**

Angina, Heart attack, CHF _____ **minutes.**

Frequency: _____ **times every day.**

Intensity: Exercise heart rate (pulse) should be no more than 30 beats above your resting heart rate (pulse). If it exceeds this level, slow your pace. Be comfortable. Enjoy your walks.

Check pulse for 15 seconds, multiply by four or count one minute.

Rate Perceived Exertion Limit: 3-4

Cool-Down Phase: Slow walking or slow cycling with little or no resistance for 5 minutes. You should do some of the cool-down exercises after each exercise session.

For Heart Surgery Patients: Continue to do breathing exercises 6 times a day every day for 10 repetitions until all physician office visits are completed.

NURSE

DATE

325-747-2845

HOSPITAL PHONE

Exercise Prescription

What Kind of Exercise/Activity?

For at least six weeks, you should limit your exercise to the range of motion, stretching and walking and/or stationary cycling programs in this booklet. Activities like jogging or swimming should not be done until your doctor gives you permission. Tennis and golf are not recommended for three to six months and not until you have done some getting-in-shape exercises. You also need to initially avoid lifting, pushing and pulling activities (push-ups, chin-ups, and weight lifting). No lifting over 10 pounds for one month (for heart surgery patients).

How Hard Should You Exercise? (Intensity)

The best guides to measure how hard to exercise are your exercise heart rate and how you feel. After talking with your doctor, the cardiac rehabilitation nurse will tell you what your perceived exertion for exercise should be. You should continue your exercises at this upper target heart rate as long as you do not feel any symptoms of exercise intolerance. Be comfortable. Enjoy your exercise.

Counting Your Heart Rate (Pulse)

Your heart rate is the same as your pulse rate. Your pulse can be felt on the thumb side of your wrist or along the Adam's Apple of your neck. To find your pulse, use your first and second fingers. Do NOT use your thumb. Press gently when you are feeling the pulse.

Using a watch or clock with a second hand, count your heartbeats for one minute. You should count your heart rate before exercise, at the halfway point during exercise and immediately after you stop exercising.

Perceived Exertion Scale

10 9	I'm so tired, I can't go anymore.
8 7	I'm really tired.
6 5	Tired.
4 3	A little tired.
2 1	Not tired at all.

Rate of Perceived Exertion (RPE)

To determine how hard you are exercising, your Rate of Perceived Exertion (RPE) can be used. The RPE scale is designed for you to rate your overall feeling of exertion and physical fatigue. Try to concentrate on your total inner feeling of exertion and not just on any one factor such as shortness of breath, leg pain or incision discomfort. Try to estimate as accurately as possible.

Sitting comfortably in a chair, a rating of two should correspond to your overall feeling of effort. A rating of 3-4 is recommended during the first six weeks.

How Long Should You Exercise? (Duration)

How long to exercise will be written on your Exercise Prescription. You can divide your exercise time into shorter periods if you still feel tired more than an hour after your exercise. By exercising for a shorter period of time, you will recover more quickly and feel less tired. The important fact is the total time of daily exercise.

How Often Should You Exercise? (Frequency)

Because you are exercising at a low intensity in the early months after your heart surgery, you should exercise every day. As you improve and can exercise harder and for longer periods of time, you can exercise three to five times a week.

Stationary Cycling Program

Before you begin your cycling program, adjust your cycle seat to the proper height. When you are sitting on the seat, your knee should be slightly bent with the ball of your foot on the pedal in the lowest position.

Pedal continuously and rhythmically. The most efficient pedaling rate is 60 to 70 revolutions per minute, but you need to find a pedaling rate that is comfortable. You should maintain this pedaling rate throughout your cycling program. If you are unable to maintain the pedaling rate at 60, you should decrease the amount of resistance.

1. To warm up, pedal with little or no resistance for two to three minutes.
2. Increase the resistance on the bike until you feel comfortable at 60 revolutions per minute. Remember that if you have too much resistance, the local fatigue in the legs will cause you to slow down and tire too early.
3. Increase your cycling time 5 to 10 minutes per week until you are able to ride for 30 minutes continuously.
4. Once you are able to ride for 30 minutes continuously, do one of the following:
 - a. Increase the resistance slightly and decrease your cycling time. Add 5 to 10 minutes of cycling each day until you are able to ride continuously for 30 minutes. As your exercise tolerance improves, add more resistance in the same manner as long as your heart does not go over your upper limit.
 - b. Add moderate resistance for 5 to 10 minute intervals as tolerated. For example, pedal 5 minutes with added resistance, pedal 5 minutes with less resistance, and continue this pattern for the duration of your workout. As your exercise tolerance improves, add more resistance in the same manner as long as your heart rate does not go over your upper limit.
5. After five weeks of this program, you may increase the total duration of your cycling session to 40-45 minutes.

Precautions for Open Heart Surgery Patients

If you have recently had open heart surgery, only do exercises that won't "pull" your chest incision.

Do not do stretching exercises with incision to leg until 3-4 weeks after surgery.

Range-of-Motion Exercises

Arm Exercises

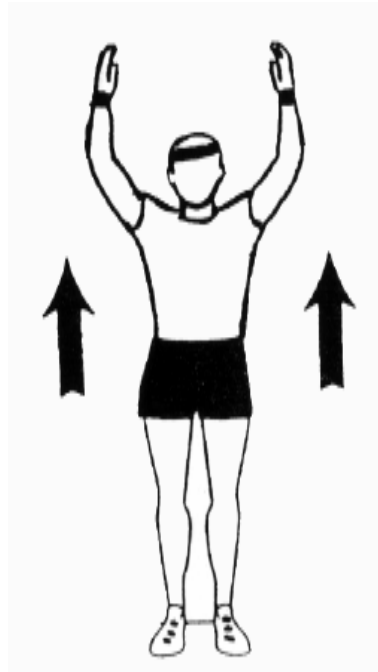
Purpose: To stretch and strengthen muscles of the chest and shoulder area.

Repetitions: 5-10

1. Arm Raise

Starting position: Stand erect with feet shoulder-width apart and arms comfortably at side.

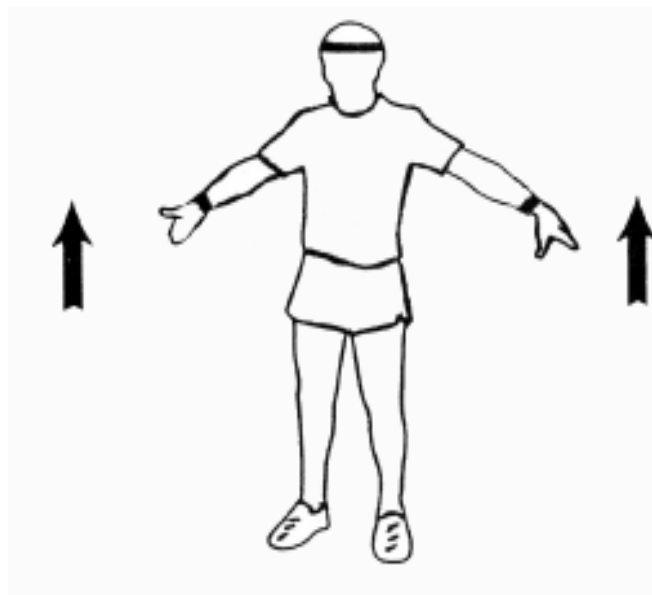
Movement: Raise arms out straight and then over your head. Return to starting position.



2. Side Arm Raise

Starting position: Stand erect with feet shoulder-width apart and arms comfortably at side.

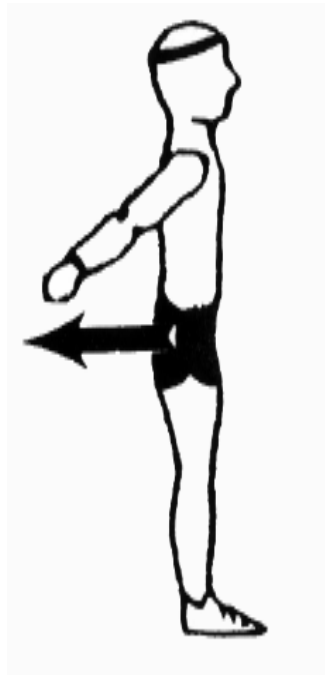
Movement: Raise both arms out to the side towards the ears and up over the head.



3. Arms Behind Back

Starting position: Stand erect with feet shoulder-width apart and arms comfortably at side.

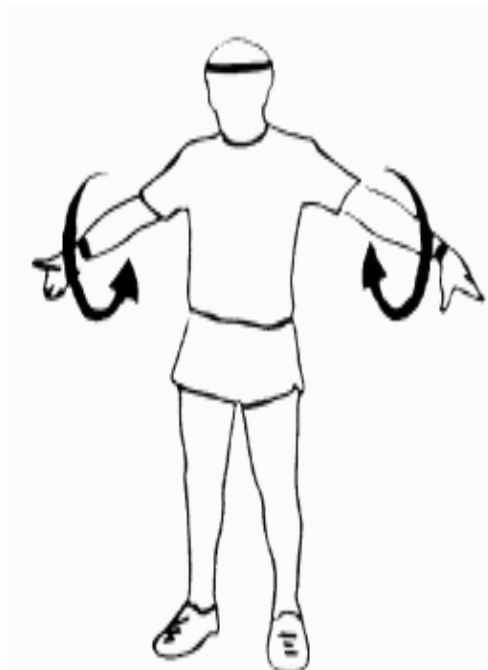
Movement: Keeping your elbows straight, move arms backwards. All movement should come from the shoulders. Do not lean forward. Return to starting position.



4. Arm Circles

Starting position: Stand erect with feet shoulder-width apart and arms comfortably at side.

Movement: Individually rotate each arm from the shoulder in a large circle backwards.



Trunk Exercises

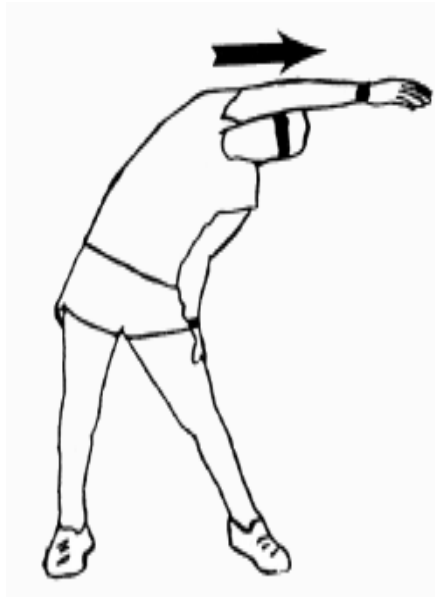
Purpose: To stretch the muscles of the trunk (abdomen) area.

Repetitions: 5-10

5. Side Bends

Starting position: Stand erect with feet shoulder-width apart and hands on hips.

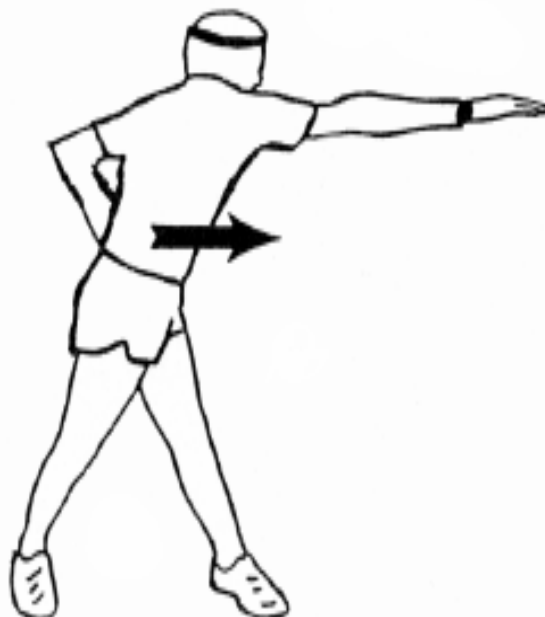
Movement: Without twisting the trunk or bending the knees, lean trunk to one side as far as possible and then to the other side. Keep the soles of your shoes on the floor. For heart surgery patients, keep arms at sides.



6. Trunk Rotation

Starting position: Stand erect feet shoulder-width apart, knees slightly bent, and hands on hips.

Movement: Keeping hips straight, twist upper trunk to one side, return to starting position, and then repeat to other side. Your head should follow the direction of movement.



Stretching Exercises

Purpose: To stretch the muscles in the calf in the back of the thigh.

Repetitions: 3 each

1. Calf Stretch

Starting position: Stand an arm's length away from a wall, one foot behind the other, toes pointed slightly inward. Lean forward so that your head and arms are resting comfortably against the wall.

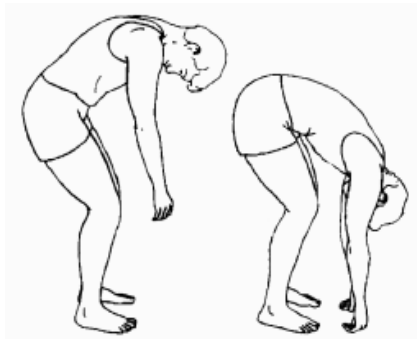
Movement: Stretch the back of the heel cord and calf muscle by moving hips slowly forward, bending the forward knee and keeping the back knee straight. Keep both heels on the floor. Hold for 5 to 10 seconds. Repeat with opposite leg forward.

Never hold your breath!



2. Hamstrings Stretch

With feet shoulder-width apart and pointing straight forward, and with knees bent, lower hands toward floor until stretch is felt. Hold 10 seconds. Bend knees further to return to standing position. Do not do if dizzy.

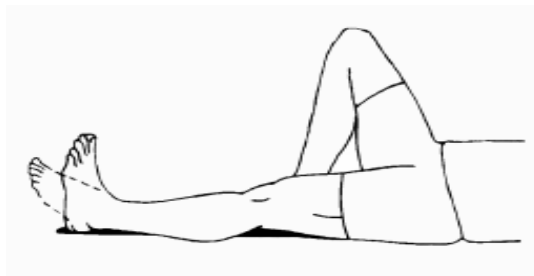


3. Lower Leg -1 Ankle - Plantar/Dorsiflexion

Relax leg. Gently bend and straighten ankle. Move through full range of motion.

Avoid pain.

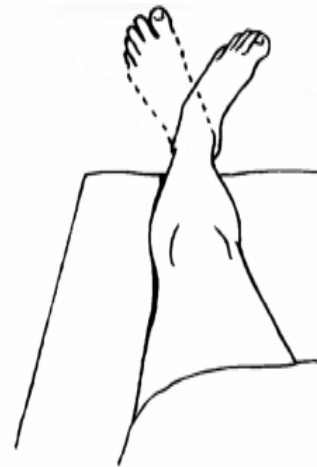
Repeat with other ankle.



4. Lower Leg - 2 Ankle - Inversion/Eversion

With leg relaxed, gently turn ankle and foot in and out. Move through full range of motion. Avoid pain. Repeat with other leg.

Important Note: For patients with leg incisions, wait until incisions are well healed before doing exercises #5 and #6



5. Lower Back Stretch

Starting Position: Lie on back with knees flexed and arms down at side.

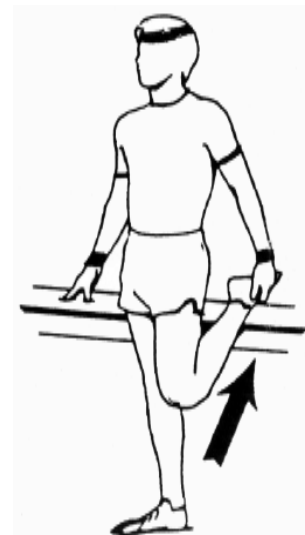
Movement: Slowly raise one knee to chest. Interlock fingers at the knee and hold 5 to 10 seconds. Return to starting position. Repeat with other leg. (May be done with both legs simultaneously.)



6. Quadriceps Stretch

Starting Position: Stand an arm's length away from a wall, feet shoulder-width apart, one hand resting comfortably against the wall.

Movement: Bend one knee and hold foot with hand behind the body. Hold position for 5 to 10 seconds. Keep the body erect and do not lean forward. Return to starting position. Repeat with other leg.



Warm-Up Exercises

Sitting

1. Straighten your knee and then slowly bend your knee. Repeat 10 times with each leg.
2. Pull your knee up towards your chest. Repeat 10 times with each leg.
3. Start with both hands on your shoulders and reach up toward the sky and back to shoulders. Repeat 10 times.

Standing

1. While holding on to a stationary object, move one leg out away from your body, keeping knee and trunk straight. Repeat 10 times with each leg.
2. While holding onto a stationary object, raise up and down on toes of both feet, keeping body straight. Repeat 10 times.
3. With hands at your side, raise both arms sideways to shoulder level and back to your sides. Repeat 10 times.

Cool-Down Exercises

Marching

March in place, bringing knees up and down at even pace. Count softly out loud, marching for 20 beats.

Trunk Twisters

Stand with arms extended out to sides at shoulder level. Swing arms horizontally while rotating at waist, left to right and right to left. Allow arms to bend at end of swing. Repeat 10 times.

Calf Stretches

Stand two feet away from wall, enough to lean against the wall with arms extended. With left leg behind right, bend right knee and push into wall until you feel a moderate pull in the calf muscle of your left leg. Change leg positions and repeat stretching the calf muscle of the right leg. Repeat 5 times for each leg.

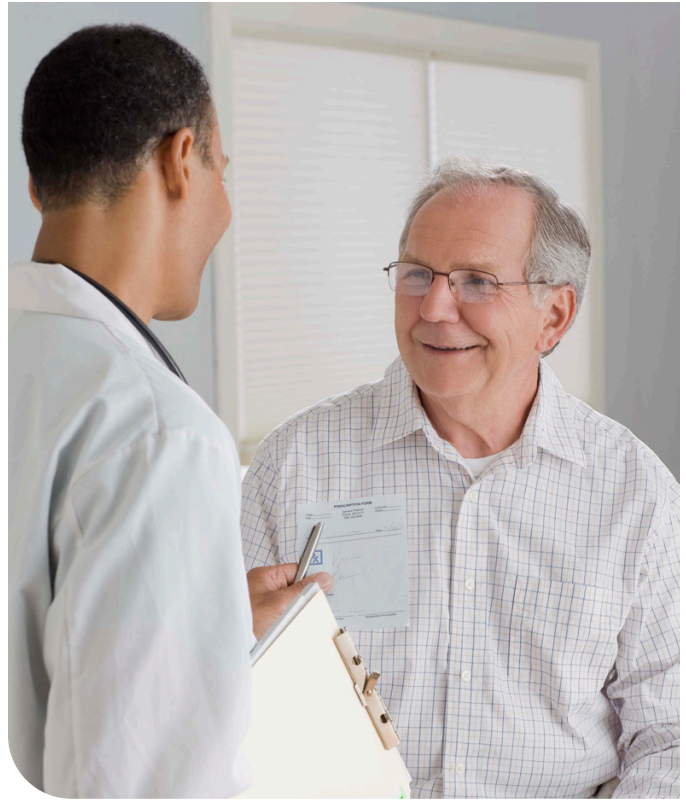
How Can Physical Activity Become A Way of Life?

If you aren't in the habit of being physically active, you're probably being told you should start. That's because regular physical activity reduces your risk of heart disease and stroke. It also helps you reduce or manage other risk factors — high blood pressure, high blood cholesterol, excess body weight and diabetes.

But the benefits don't stop there. You may look and feel better, become stronger and more flexible, have more energy and reduce stress and tension.

How Do I Start?

- Talk to your doctor about a physical activity plan that's right for you if...
 - You've been inactive a long time or have medical problems,
 - You're middle-aged or older and you're planning a relatively vigorous exercise program.
- Choose activities you enjoy. Pick a start date that fits your schedule and gives you enough time to begin your program.
- Wear comfortable clothes and shoes.
- Start slowly — don't overdo it!
- Try to exercise at the same time each day so it becomes a regular part of your lifestyle.
- Drink water before, during and after each exercise session.
- Ask a friend to start a program with you — use the buddy system!
- Note the days you exercise and write down the distance or length of time of your workout and how you feel after each session. Aim for at least 150 minutes (2 hours and 30 minutes) of moderate-intensity, aerobic exercise each week.
- If you miss a day, plan a makeup day. Don't double your exercise time during your next session.



What Will Keep Me Going?

- Get your family into physical activity! It's great to have a support system, and you'll get them into an important health habit.
- Join an exercise group, health club or YMCA.
- Choose an activity you like and make sure it's convenient for you. If you need good weather, have a back-up plan on bad days (e.g., when it rains, walk in the mall instead of the park).
- Learn a new sport you think you might enjoy, or take lessons to improve at one you know.
- Do a variety of activities. Take a brisk walk one day, swim the next time. Then go for a bike ride on the weekend!
- Make physical activity a routine so it becomes a habit.
- If you stop for any length of time, don't lose hope! Just get started again slowly and work up to your old pace.



What Else Should I Know?

- Try not to compare yourself to others. Your goal should be personal health and fitness.
- Think about whether you like to exercise alone or with other people, outside or inside, what time of the day is best and what kind of exercise you most enjoy doing.
- If you feel like quitting, remind yourself of the reasons you started. Think about how far you've come!
- Don't push yourself too hard. You should be able to talk during exercise. Also, if it takes more than 10 minutes to recover from exercising, you're working too hard.

How Can I Learn More?

Talk to your doctor, nurse or other healthcare professionals. If you have a heart disease or have had a stroke, members of your family may also be at a higher risk. It's important for them to make changes now to lower their risk.

Call **1-800-AHA-USA1 (1-800-242-8721)**, or visit **heart.org** to learn more about heart disease.

For information on stroke, call **1-888-4-stroke (1-888-478-7653)** or visit **StrokeAssociation.org**.

Do you have questions for the doctor or nurse?

Take a few minutes to write your questions for the next time you see your healthcare provider.

For example: Should I take my pulse? Can I exercise "too much?"



How Can I Manage My Weight?

Reaching and maintaining a healthy weight can be a challenge. You may have tried to lose weight before without much long-term success. Be assured, you are not alone.

There is no magic formula for losing weight. The key is to find a daily eating plan that provides the right balance of calories and nutrition with the appropriate amounts of physical activity.

What Are the Keys to Healthy Weight Loss?

To lose weight, you must take in fewer calories than you lose through normal metabolism and physical activity. It's a matter of:

- Eating less
- Choosing nutritious foods
- Following an overall healthy diet pattern
- Getting and staying physically active



How Can I Make Better Food Choices?

Follow these guidelines to improve your overall diet pattern.

- Eat a diet rich in fruits and vegetables.
- Eat whole-grain, high-fiber foods.
- Limit how much saturated fat, trans fat and cholesterol you eat.
- Select fat-free and low-fat (1%) dairy products.
- Limit beverages and foods high in calories and low in nutrition.
- Choose and prepare foods with little or no salt.

What Happens When I Reach A Healthy Weight?

- After you reach a healthy weight, add about 200 calories of heart healthy food to your average daily intake.
- After a week, if you're still losing weight, add a few hundred more calories.
- If you change the amount of physical activity you do, adjust your eating.
- Keep a record of what you eat and how much physical activity you get so you'll know how to make adjustments.

How Can I Stay A Healthy Weight?

- Remember that eating smart means eating some foods in smaller amounts and eating high-calorie and high-fat foods less often.
- Always keep low-calorie, heart-healthy foods around.



- Use a shopping list, and don't shop when you're hungry.
- Plan all your meals. When you're going to a party or out to eat, decide ahead of time what you can do to make it easier to eat right.
- When you're hungry between meals, drink a glass of water or eat a small piece of fruit.
- When you really crave a high-calorie food, eat a small amount of it. Stay active! Don't give up on your physical activity plan.

What If I Go Back To Old Habits?

A lapse is a small mistake or return to old habits. This can happen when you have had a bad day and overeat or skip exercise. A relapse is when you go back to old habits for several days or weeks.

Remember that having a lapse or relapse is not failing. You can get back on track.

How Can I Learn More?

Talk to your doctor, nurse or other healthcare professionals. If you have a heart disease or have had a stroke, members or your family may also be at a higher risk. It's important for them to make changes now to lower their risk.

Call **1-800-AHA-USA1 (1-800-242-8721)**, or visit **heart.org** to learn more about heart disease.

For information on stroke, call **1-888-4-stroke (1-888-478-7653)** or visit **StrokeAssociation.org**.

Do you have questions for the doctor or nurse?

Take a few minutes to write your questions for the next time you see your provider.

For example: What if I start gaining weight? How can my family help me?



Medications

General

Shannon Medical Center has a central pharmacy staffed with pharmacists and technicians to ensure safe and suitable use of medications during your stay. Pharmacists are available to answer questions regarding your medications.

Allergy Information

It is very important that your healthcare providers are aware of any medication or food allergies you may have. It is also important for them to know what reaction you had to the medication or food. Knowing which medications or food you are allergic to will help your physician provide the most suitable medication therapy.

Home Medications

Upon admission, a nurse and pharmacist will review your medication list. It is important for your healthcare providers to know what medications you are currently taking, including any over-the-counter medications, herbal medications, vitamins or natural supplements. Your physician will provide medication instructions. You may be asked not to take one or more of your medications. While in the hospital, take only what your nurse dispenses; do not take anything from home.

Upon discharge, you will be provided a list of medications and how to take these medications at home.

Diabetic Medications

If you are diabetic, it is important for you to take your diabetic medications as instructed. Good blood sugar control will help your surgical incisions heal.

Antibiotics Before and After Surgery

You will receive an antibiotic prior to surgery and up to 24 hours after surgery. This is a preventative measure to decrease the risk of infection. Antibiotics can slow or prevent the growth of bacteria normally found on your skin.

Medications You May Be Discharged Home On:

Aspirin

Aspirin is recommended by the American Heart Association and your physicians to reduce the risk of myocardial infarction (heart attack) and sudden death in patients with atherosclerosis, due to aspirin's antiplatelet effects.

81mg, 162mg or 325mg daily

Plavix 75mg daily

Beta Blockers

These medications have cardiac protective properties. The American Heart Association and your physician recommend you take a beta blocker if you have heart disease, heart failure, and/or hypertension.

Carvedilol (Coreg)

Metoprolol Succinate (Toprol XL) or Metoprolol Tartrate (Lopressor)

Ace Inhibitor

Prescribed for hypertension, heart disease and diabetics for kidney (renal protection).

Lisinopril (Prinivil or Zestril)

Cholesterol-Lowering Agent

Your body makes cholesterol. You also consume cholesterol in your diet. Due to you having heart disease, the American Heart Association and your physician recommend you take a cholesterol medication to help prevent future heart events and progression of heart disease. The recommended cholesterol medications include:

Atorvastatin (Lipitor) 80mg daily, best taken at bedtime

or

Rosuvastatin (Crestor) 20 to 40mg daily, best taken at bedtime

Pain Medication

You will have pain medication available during your hospitalization. Ask for your pain medication when you first start feeling pain. When you go home, you will be given a prescription for pain medication. Again, take your medication when you first start feeling pain to keep your pain under control. Pain medication and many over-the-counter medications contain Acetaminophen. Therefore, watch all medication labels for acetaminophen and **DO NOT TAKE MORE THAN 4 grams (4,000 mg) total of Acetaminophen in a 24 hour period.**

Hydrocodone (Norco, Lortab)

Contains 325 to 500mg of Acetaminophen per tablet. Take one or two tablets every 6 hours as needed for pain control.

Tramadol (Ultram)

Take one or two tablets every 8 hours as needed for pain control.

DO NOT EXCEED 400mg in a 24 hour period.

Tylenol

If you are not taking Hydrocodone, Ultram or any other pain medication prescribed to you prior to your surgery, then you may take Tylenol for pain control. Remember, **DO NOT EXCEED 4 grams (4,000 mg) in a 24 HOUR PERIOD.**

Amiodarone

Prescribed for irregular heart rhythm called Atrial Fibrillation. This medication is prescribed for 20-30 days.

Stool Softener

Surgery, decreased activity and pain medication can slow the GI tract and cause constipation. Therefore, you will be prescribed a stool softener during your hospitalization and upon discharge.

Docusate or Surfak

You may also use Metamucil or any over-the-counter stool softener.

How Do I Manage My Medications?

Taking medicine may be new to you, and there may be a lot to remember. For example, why are you taking it? What time should you take it? How often do you take it, and how many pills do you take?

It's very important to take medicine the right way - just as your doctor tells you.

If you don't follow your doctor's directions, what could happen? First of all, if medicine isn't taken the right way, it may not work. It could also cause side effects that may be mild - or very harmful. Without knowing it, you could counteract one medicine by taking it with another. When not taken properly, medicine can also make you feel sick or dizzy.



How Can I Remember to Take My Medicine?

- Take it at the same time each day along with other daily events, like brushing your teeth.
- Use a weekly pill box with separate sections for each day or time of day. Computerized pill boxes can alert you when it's time to take a pill or order refills.
- Ask family and friends to help remind you.
- Use a pill calendar or drug reminder chart.
- Leave notes to remind yourself.
- Try an e-mail or calendar reminder.
- Wear a wristwatch with an alarm.

What Else Should I Know?

- Ask your doctor or pharmacist when to take your medicines and if they can be taken with food.
- Store your medicine the way your doctor or pharmacist tells you. Keep medicine in the original containers, or label new containers.
- Keep track of what pills you can and can't take together, including over-the-counter medicines.
- Always get your prescription filled on time, so you don't run out.
- Try to see the same pharmacist each time.
- Don't take more of your medicine than the prescribed dose.
- Always check with your doctor before you stop taking a medicine.
- Ask your doctor or pharmacist before buying a new over-the-counter medicine, such as an antihistamine or "cold tablets" or vitamin supplements, to be sure they don't interfere with your prescribed medicine.
- If you have questions about your pills, make a note to remind yourself to ask your doctor or pharmacist.
- Tell your doctor and pharmacist if you have any side effects.
- Write down the names and doses of medicines you are taking. If you go to more than one doctor, take your updated medication list with you to each visit.



My Current Medications List

Name: _____ Month: _____

Take this record with you each time you go to the doctor.

NAME OF MEDICINE	DOSAGE OF MEDICINE	WHEN TO TAKE IT	WHAT IT IS FOR	DATE STARTED	DATE STOPPED	DOCTOR ORDERED

What Do My Cholesterol Levels Mean?

High blood cholesterol signals a higher risk of heart attack and stroke. That's why it's important to have your cholesterol levels checked regularly and discuss them with your doctor. A "lipoprotein profile" test is a test to find out your cholesterol numbers. It gives information on the total cholesterol, LDL ("bad") cholesterol and HDL ("good") cholesterol, as well as triglycerides (blood fats).

What Should My Total Cholesterol Levels Be?

Total Blood Cholesterol Levels:

Less than 200 mg/dL = Desirable (lower risk)

200 to 239 mg/dL = Borderline high (higher risk)

240 mg/dL and above = High blood cholesterol (more than twice the risk as desirable level)



What Should My HDL and LDL Cholesterol Levels Be?

HDL stands for high-density lipoprotein. HDL is "good" cholesterol because it seems to lower your risk of heart attack and stroke. That means that unlike other cholesterol levels — the higher your HDL cholesterol, the better. You can raise your HDL cholesterol by quitting smoking, losing weight and being more physically active.

HDL Cholesterol Levels:

Less than 40 mg/dL for men = Low HDL (higher risk)

Less than 50 mg/dL for women = low HDL (higher risk)

40 to 59 mg/dL = the higher, the better

60 mg/dL and above = High HDL (lower risk)

LDL stands for low-density lipoprotein. This is the main carrier of harmful cholesterol in your blood. A high level LDL cholesterol means there's a higher risk of heart disease and stroke.

LDL Cholesterol Levels:

Less than 70 mg/dL = Optimal goal if you're at a very high risk of heart attack

Less than 100 mg/dL = Optimal for people with heart disease or diabetes

100 to 129 mg/dL = Near or above optimal

130 to 159 mg/dL = Borderline high

160 to 189 mg/dL = High

190 mg/dL and above = Very High



What Should My Triglyceride Level Be?

Triglycerides are the most common type of fat in your body. They're also a major energy source. They come from food, and your body also makes them. As people get older, gain excess weight or both, their triglyceride and cholesterol levels tend to rise. Many people who have heart disease or diabetes have high fasting triglyceride levels. Some studies have shown that people with above-normal fasting triglyceride levels (150 mg/dL or higher) have a higher risk of heart disease and stroke.

Triglyceride Levels:

Less than 150 mg/dL = Normal

150 to 199 mg/dl = Borderline High

200 to 499 mg/dL = High

500 mg/dl and above = Very High

My Cholesterol and Triglyceride levels

Use the chart below to keep track of your cholesterol and triglyceride levels each time you have a test. Make sure you discuss these numbers with your doctor.

	MY GOAL	1ST VISIT	2ND VISIT	3RD VISIT
Total Blood Cholesterol Level				
HDL Cholesterol Level				
LDL Cholesterol Level				
Triglyceride Level				

How Can I Learn More?

Talk to your doctor, nurse or other healthcare professionals. If you have a heart disease or have had a stroke, members of your family may also be at a higher risk. It's important for them to make changes now to lower their risk.

Call **1-800-AHA-USA1 (1-800-242-8721)**, or visit **heart.org** to learn more about heart disease.

For information on stroke, call **1-888-4-stroke (1-888-478-7653)** or visit **StrokeAssociation.org**.

Do you have questions for the doctor or nurse?

Take a few minutes to write your questions for the next time you see your provider.

For example: What about other fats? How often should I have my levels checked?

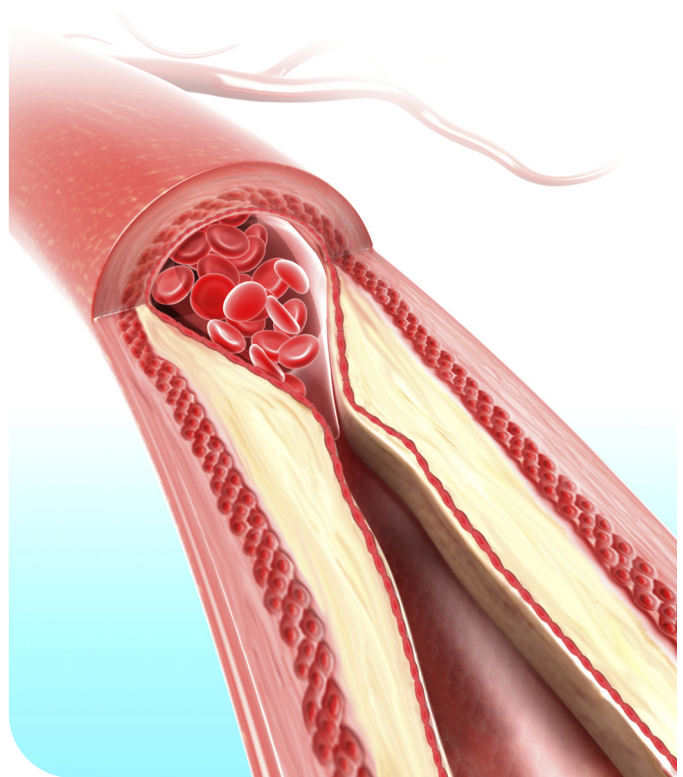


How Can I Lower High Cholesterol?

Too much cholesterol in the blood can lead to heart disease and stroke — America's #1 and #4 killers.

You can reduce your cholesterol by eating healthful foods, losing weight if you need to and being physically active. Some people also need to take medicine because changing their diet isn't enough. Your doctor and nurses will help you set up a plan for reducing your cholesterol — and keeping yourself healthy!

Most heart and blood vessel disease is caused by a buildup of cholesterol, plaque and other fatty deposits in artery walls. The arteries that feed the heart can become so clogged that the blood flow is reduced, causing chest pain. If a blood clot forms and blocks the artery, a heart attack can occur. Similarly, if a blood clot blocks an artery leading to or in the brain, a stroke results.



Cholesterol can join with fats and other substances in your blood to build up in the inner walls of your arteries. The arteries can become clogged and narrow, and blood flow is reduced.

What Should I Eat?

- Focus on low-saturated-fat, trans fat-free, low-cholesterol foods such as these:
 - A variety of deeply colored fruits and vegetables (4 to 5 servings of each per day)
 - A variety of fiber-rich grain products like whole grain bread, cereal, pasta and brown rice (6 to 8 servings per day with at least half of the servings whole grains)
 - Fat-free, 1 percent and low-fat milk products (2 to 3 servings per day)
 - Lean meats and poultry without skin (choose up to 5 to 6 total ounces per day)
 - Fatty fish (enjoy at least 2 servings baked or grilled each week)
 - Nuts, seeds and legumes (dried beans or peas) in limited amounts (4 to 5 servings per week)
 - Unsaturated vegetable oils like canola, corn, olive, safflower and soybean oils (but a limited amount of tub or liquid unsalted margarines and spreads made from them)

What Should I Limit?

- Whole milk, cream and ice cream
- Butter, egg yolks and cheese - and foods made with them
- Organ meats like liver, sweetbreads, kidney and brain
- High-fat processed meats like sausage, bologna, salami and hot dogs
- Fatty meats that aren't trimmed
- Duck and goose meat (raised for market)



- Bakery goods made with egg yolks, saturated fats and trans fat
- Saturated oils like coconut oil, palm oil and palm kernel oil
- Solid fats like shortening, partially hydrogenated margarine and lard
- Fried foods

What Are Some Cooking Tips for Me?

- Use a rack to drain off fat when you broil, roast or bake.
- Don't baste with drippings; use wine, fruit juice or marinade.
- Broil or grill instead of pan frying.
- Cut off all visible fat from meat before cooking, and take all the skin off poultry pieces. (If you're roasting a whole chicken or turkey, remove the skin before cooking.)
- Use a vegetable oil spray to brown or saute foods.
- Serve smaller portions of higher-fat dishes, and serve bigger portions of lower-fat dishes like pasta, rice, beans and vegetables.
- Make recipes or egg dishes with egg whites or egg substitutes, not yolks.
- Instead of regular cheese, use low-fat, low-sodium cottage cheese and other fat-free or low-fat, low-sodium cheeses.

How Can I Learn More?

Talk to your doctor, nurse or other healthcare professionals. If you have a heart disease or have had a stroke, members of your family may also be at a higher risk. It's important for them to make changes now to lower their risk.

Call **1-800-AHA-USA1 (1-800-242-8721)**, or visit **heart.org** to learn more about heart disease.

For information on stroke, call **1-888-4-stroke (1-888-478-7653)** or visit **StrokeAssociation.org**.

Do you have questions for the doctor or nurse?

Take a few minutes to write your questions for the next time you see your provider.

For example: What about eating out? Why are weight control and physical activity important?



How Can I Reduce High Blood Pressure?

By treating high blood pressure, you can help reduce your risk for a stroke, heart attack, heart failure or kidney failure. Here are steps you can take now:

- Lose weight if you're overweight.
- Eat a heart-healthy diet low in saturated fat, trans fat, cholesterol, salt (sodium) and added sugars. Eat a variety of deeply colored fruits and vegetables; fiber-rich whole grains; fat-free, 1% fat and low-fat dairy products; lean meats and skinless poultry; fish with healthy omega-3 fatty acids; and nuts, seeds and legumes.
- Be more physically active.
- Limit alcohol to no more than one drink per day for women or two drinks a day for men.
- Take medicine the way your doctor tells you.
- Know what your blood pressure should be and work to keep it at that level.



How Can I Lose Weight?

If you're overweight, you're putting too much strain on your heart. Talk to your healthcare provider about a healthy eating plan. When you lose weight, your blood pressure often goes down! By eating a heart-healthy diet low in saturated fat, trans fat, cholesterol, salt (sodium) and added sugars, you'll help reduce your risk for heart attack and stroke.

How Do I Limit Salt?

Eating a lot of salt (sodium) increases blood pressure in many people. It holds excess fluid in your body and puts added stress on your heart. Your doctor may tell you to cut down on the salt you use in cooking and not to add salt to foods. They may also tell you to avoid salt completely. Read food labels so you'll know which foods are high in sodium. And learn to use herbs and salt-free spices instead!

How Do I Limit Alcohol?

Ask your doctor if you're allowed to drink alcohol, and if so, how much. If you drink more than two drinks a day if you're male or more than one drink a day if you're female, it may add to high blood pressure. One drink is equal to 12 ounces of beer, 4 ounces of wine, 1.5 ounces of 80-proof distilled spirits or 1 ounce of 100-proof spirits. If cutting back on alcohol is hard to do on your own, ask about community groups that can help.



How Can I Be More Active?

An inactive lifestyle is a risk factor for heart disease and stroke. It also tends to add to obesity, which is a risk factor for high blood pressure. Regular physical activity helps to reduce blood pressure, control weight and reduce stress. It's best to start slowly and do something you enjoy, like taking a brisk walk or riding a bicycle. Aim for at least 150 minutes (2 hours and 30 minutes) of moderate-intensity, or 75 minutes (1 hour and 15 minutes) of vigorous-intensity, aerobic exercise each week. Talk to your healthcare provider for a good plan for you.

What Should I Know About Medicine?

Your doctors may prescribe different types of medicine for you. Don't be discouraged if you need to take blood pressure medication from now on. Sometimes you can take smaller doses after your blood pressure is under control, but you may always need some treatment.

What's most important is that you take your medicine exactly the way your doctor tells you to. Never stop treatment on your own. If you have problems or side effects with your medicine, talk to your doctor.

How Can I Learn More?

Talk to your doctor, nurse or other healthcare professionals. If you have a heart disease or have had a stroke, members of your family may also be at a higher risk. It's important for them to make changes now to lower their risk.

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Do you have questions for the doctor or nurse?

Take a few minutes to write your questions for the next time you see your provider.

For example: Can I drink any alcohol? How often should my blood pressure be checked?



Diabetes

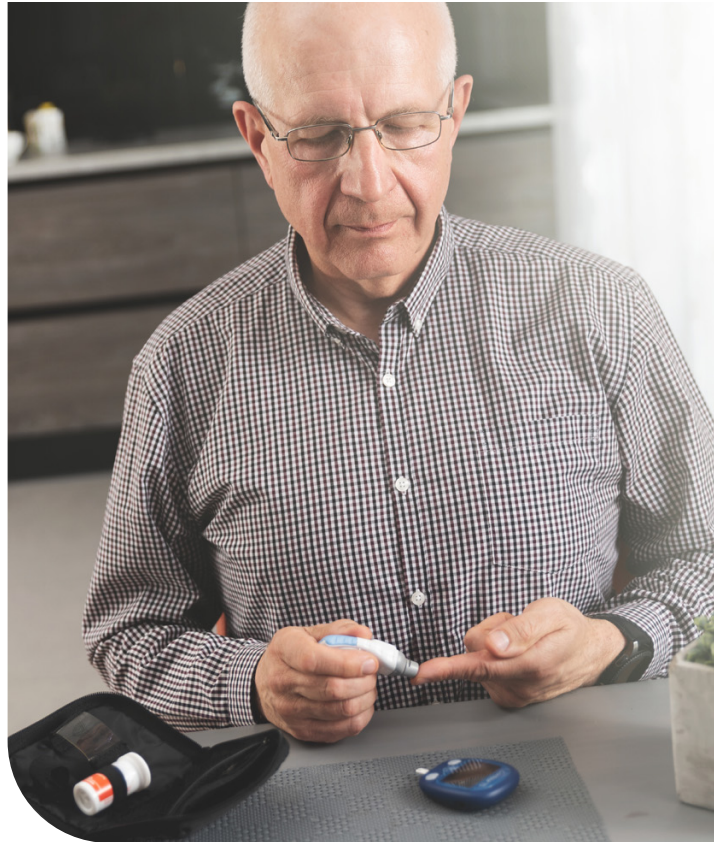
What is Diabetes and How Can I Manage It?

Most of the food you eat is turned into glucose, or sugar, for your body to use for fuel or energy. Insulin is a hormone needed to convert sugar and other food into energy and to help glucose get into your body's cells.

When you have diabetes, your body does not make enough insulin, or you are insulin resistant. This means your body is not using your insulin efficiently or you are not providing enough. This causes sugars to build up and become too high in your blood.

Types of Diabetes

Type 1 – It results from the body's inability to produce insulin, typically starts early in life and people must take insulin to control it. Accounts for 5-10% of the diabetes population.



Type 2 – The most common type of diabetes, develops when the body doesn't make enough insulin and doesn't use it efficiently. Risk factors for developing Type 2 diabetes include being greater than or equal to 30 pounds overweight, family history of Diabetes Mellitus, ethnicity- Hispanic/Latino, African American, American Indian or Asian American heritage, over 30 years of age and overweight or over age of 45, gestational diabetes (diabetes during pregnancy) or delivery of a large baby (9 pounds or more), inactive lifestyle (exercise less than 3 x week), high blood pressure (140/90 or higher) and abnormal cholesterol (lipid) levels. Accounts for 90-95% of the diabetes population.

Am I At Risk?

The number of people with diabetes is increasing. By the year 2050 it is predicted that 1 in 3 people will develop diabetes. This is because there are more people who are overweight or obese, do not exercise enough and an aging population. However, many young people are developing Type 2 diabetes at an alarming rate. This is likely due to their weight and inactivity.

How Can I Control My Risk for Heart Disease and Stroke?

1. Manage your weight, blood pressure and cholesterol levels with a heart healthy diet that includes low amounts of salt, saturated fat, trans fat, cholesterol and added sugars. While you are in the hospital, ask to speak with the dietician and diabetes educator for assistance with a meal plan.
2. Be physically active – Try for 150 minutes per week (2 hours and 30 minutes) of a moderate intensity activity such as brisk walking or an aerobic exercise program.
If you cannot manage 150 minutes per week, aim for as many as you can – some exercise is better than none.
Remember to check with your healthcare provider before starting any exercise program.

3. If you drink alcohol, don't have more than one drink per day for women or two per day for men. Remember to discuss your alcohol intake with your provider.
4. Lower your blood pressure if it's too high. Take your blood pressure meds as ordered by your healthcare provider, participate in regular physical activity and follow a low salt diet to maintain blood pressure under 140/90 mm Hg.
5. Don't smoke and avoid second hand smoke as well
6. Keep your blood glucose readings within the target range set by your provider or your diabetes educator. Always bring your glucose log or meter with you to every appointment so your healthcare team can review. If you take medications for diabetes management, take them exactly as prescribed. Do not stop taking your medications without first discussing with a healthcare provider. If you have questions regarding your medications ask your pharmacist or your doctor.
7. Ask your healthcare provider about a referral to a diabetes self-management education class where a certified diabetes educator and a registered dietician will help you to manage your diabetes reducing risk factors. In these classes you will learn what diabetes is, a healthy eating plan, which foods increase your glucose, target ranges for your blood sugar, glucose monitoring, medications, long-term complications and taking care of your feet.



Daily Blood Glucose Record

Name: _____ Month: _____

Take this record with you each time you go to the doctor.

DATE	WEIGHT	BLOOD GLUCOSE:		BLOOD PRESSURE:		HEART RATE
		AM	PM	AM	PM	

Daily Blood Glucose Record

Name: _____ Month: _____

Take this record with you each time you go to the doctor.

DATE	WEIGHT	BLOOD GLUCOSE:		BLOOD PRESSURE:		HEART RATE
		AM	PM	AM	PM	

CABG Nutrition

Good nutrition is beneficial in the healing process. Your diet should be low in fat and sodium.

Each day should include:

Whole Grains – 6 to 8 servings per day

- Examples: whole grain bread, pasta or cereal, brown rice
- Serving sizes: 1 slice bread, 1/3 cup pasta or rice, ½ cup hot cereal, ¾ cup dry cereal

Fresh Vegetables – 4 to 5 servings per day

- A variety of colors is recommended
- Serving sizes: 1 cup leafy green vegetables; ½ cup chopped or cooked vegetables

Fruits – 4 to 5 servings per day

- A variety of colors is recommended, especially deep colored fruit
- Fruit juice is not recommended
- Serving sizes: 1 small to medium fresh fruit, ½ cup canned or chopped fruit, 15-17 grapes, 1 cup berries

Lean Protein – 8 to 10 ounces per day

- Lean beef or pork, poultry, fish (not pre-breaded or fried), legumes, egg whites
- Serving sizes: 3 ounces of meat is about the size of a deck of cards, 1/3 cup nuts, 2 tablespoons peanut butter, ½ cup cooked dried beans or peas

Fat-Free or Low-Fat Milk Products – 2 to 3 servings per day

- Skim or 1% milk, fat-free or low-fat yogurt, dry-curd, fat-free or low-fat cottage cheese (watch sodium content)
- Serving sizes: 8 ounces milk, 6 ounces fat-free yogurt

Fats and Oils – 2 to 3 servings per day

- Choose oils high in monounsaturated fats such as olive or canola oils. Healthy snacks include limited amounts of unsalted nuts and avocados. Avoid saturated or trans fats such as stick margarine, processed snack foods and commercially baked goods.
- Serving sizes: 1 teaspoon vegetable oil or soft margarine, 1 tablespoon regular salad dressing or mayonnaise

2,300 mg of Sodium is the Recommended Daily Limit. One teaspoon of table salt contains 2,300 mg of sodium.

- If you are diabetic, the grains, fruits and dairy servings will need to be included in your carbohydrate servings at meals.



Eat Smart for a Healthy Heart

Heart disease is the leading cause of death worldwide. The foods & drinks you consume can impact your heart health and increase your risk of heart disease. Using the nutrition guidelines below can lead to a longer, healthy life!

Eat Smart

Control Your Portion Size

Use a smaller plate or bowl at mealtimes. When eating out, limit portions by sharing with another person or boxing up half your meal. Restaurant foods tend to be higher in calories, saturated fats, sodium, and sugar so asking for no added butter or salt can help limit these. Look for nutritional information on their website to make healthier choices.



Choose Low Fat Protein Sources

Lean meat (like poultry & fish) low fat dairy, plant-based proteins (like beans, peas, lentils & nuts) and eggs are good sources of protein.

Choose Low Fat Dairy

such as skim, 1% milk or fat free cheeses and yogurt.

Enjoy Fish at Least Twice a Week

Fish such as salmon, herring and mackerel are **rich in omega-3 fatty acids** that can lower blood fats called triglycerides. Flaxseed and walnuts are good sources too.

Eat More Fruits & Vegetables

Vegetables and other plant-based foods help prevent heart disease. Choose a variety of fruits & veggies in a wide range of colors, without added sauces.

Choose Whole Grains

Whole grain foods are good sources of dietary fiber. Fiber can help improve blood cholesterol levels and lower your risk of heart disease and stroke.

Limit Saturated & Trans Fats

Choose foods with 0 grams of trans-fat when looking at food labels. To limit intake of saturated fat, trim any visible fat from meats you are cooking at home.

Include Heart Healthy Fats in Moderation

Olive oil, canola oil, avocado oil, nut butters, nuts and seeds, whole avocado, and tub margarine are good choices.
1 tsp of oil=1 serving

Eat Less Salt/Sodium

Excessive intake of salt can lead to high blood pressure and fluid retention. Make sure to prepare foods at home without adding extra salt. Try a variety of herbs and spices to add flavor! When choosing frozen or packaged meals, look for those with 650 mg or less sodium per serving. **The AHA recommends <2300 mg sodium daily but the average American is currently consuming more than 3400 mg/day.** Be sure to check with your doctor before using “No Salt” or “Salt Substitute” as these contain potassium and could interact with some of your medications.

Limit Added Sugars

These are found in sodas, candies, sweets, and desserts. A 20 ounce soda has 15 teaspoons of sugar and is more than the amount of added sugars allowed for an entire day!

Limit Alcohol

Alcohol intake to 1 drink per day for women and 2 drinks per day for men. 1 drink= 5 ounces wine, 1.5 ounces liquor or 12 ounces of beer. Be sure to discuss alcohol intake with your physician.



Get Moving

Exercise

Exercise has been shown to strongly decrease your risk of heart disease. Physical activity can help in reducing cholesterol & triglyceride levels. The AHA recommends at least 150 minutes of moderate physical activity each week, which includes walking, light weightlifting, biking and even housework. Always check with your physician before starting new activities.

Healthy Weight

Extra Body Weight Can Increase Your Risk for Heart Disease

Losing 5-10% of your extra body weight can lower your risk for heart disease.

Healthy Cooking

Healthy eating encompasses more than just choosing the right foods. Preparing your own foods at home:

1. Gives you control over what you and your family eat;
2. Allows you to be creative with your culinary creations; and
3. Saves you money.

You don't have to be an experienced cook to make something your family will enjoy, nor do you have to give up taste or foods you love. Learning heart-healthy cooking skills will (almost) allow you to have it all!

10 Tips to Get You Started

1. Find inspiration in healthy cookbooks, cooking shows, blogs, or Pinterest, then try new recipes to “wow” your family.
2. Choose healthier meats and proteins.
3. Add more color with fruits and vegetables. Fresh, frozen, canned, and dried are all good choices, just watch out for excess salt and added sugars.
4. Make healthy substitutions when you can (i.e., Greek yogurt for sour cream).
5. Break up with salt and learn new ways to add flavor to foods, such as herbs, spices, or vinegars.
6. Start a new love affair with salad. Look for recipes for colorful, hearty salads that can stand on its own as an entrée.
7. Upgrade your fats. Opt for healthy vegetable oils instead of lard, shortening, and tropical oils.
8. Stock your pantry (cabinets, fridge, and freezer) with the right staple ingredients to have ready for healthy meal preparation.
9. Learn new cooking techniques and methods. See below for alternatives to frying.
10. Don't be afraid to have fun in the kitchen. Everyone has a cooking fail and lived to tell the tale.



Healthy Cooking Methods to Try

Air Fry

Basically, a small convection oven that cooks food with minimal oil and circulating hot air.

Bake

Cook foods slowly in dry heat like an oven.

Braise

Cook food using both dry heat (from an oven or stovetop) and wet heat from liquid. Refrigerate the cooked dish and remove the chilled fat before reheating.

Broil

Cook directly under a heat source at high temperature

Grill

Cook directly or indirectly over a heat source

Microwave

Needs no extra fat; in fact, you can drain food of fat by placing it between two paper towels while it cooks.

Poach

Cook by immersing food in simmering liquid like water, broth, or wine.

Roast

Cook uncovered in the oven. Set meat or poultry on a rack so it doesn't sit in its own fat drippings. Roast vegetables at 400° for 20-25 minutes to give them a richer, deeper flavor.

Sauté

Cook food in a pan over direct heat using a small amount of liquid like vegetable stock, fruit juice, wine, healthy oil or cooking spray, or water.

Steam

Cook in a covered pot over boiling water, vegetable stock, or chicken stock. Foods will retain more of their shape, texture, and flavor.

Stir-fry

Use a wok or large pan to cook food quickly over very high heat in a small amount of liquid or oil. Stir constantly to prevent sticking or burning.



How to Read a Food Label

By understanding how to read a nutrition facts label you can eat smarter! Take control of your health by reading and understanding nutrition facts labels.

What to Look for

Serving Size

Be sure to check the number of servings & serving size. Aim to only consume the serving size. If you eat double the serving size, you would need to double the nutrient values.

Limit Fat

- **Saturated Fat:** Aim for no more than 5-6% of total calories from saturated fat (For an 1800 calorie diet this would equal no more than 11 grams of fat per day)
- **Trans Fat:** Aim to only consume foods with 0 grams

Limit Sodium

Foods with **less than 140mg** of sodium/serving for a snack/side item and **less than 650 mg** for an entire meal

Goal is to limit total sodium intake to <2300 mg /day

Total Carbohydrates

Looking at **Total Carbohydrate** can help:

- Control your blood sugars & prevent risk of developing diabetes
- Help promote a healthy weight loss
- Aim for less than 30 g total added sugars/day or <7 tps.

If you follow a consistent carbohydrate diet for diabetes:

- 1 carbohydrate choice = 15 grams of carbohydrate
- 2 carbohydrate choices = 30 grams of carbohydrate
- 3 carbohydrate choices = 45 grams of carbohydrate
- 4 carbohydrate choices = 60 grams of carbohydrate
- 5 carbohydrate choices = 75 grams of carbohydrate

Nutrition Facts

4 servings per container	
Serving size	1 cup (140g)
Amount per serving	
Calories	160
% Daily Value*	
Total Fat 8g	10%
Saturated Fat 3g	15%
<i>Trans Fat</i> 0g	
Cholesterol 0mg	0%
Sodium 60mg	3%
Total Carbohydrate 21g	8%
Dietary Fiber 3g	11%
Total Sugars 15g	
Includes 5g Added Sugars	10%
Protein 3g	
Vitamin D 5mcg	25%
Calcium 20mg	2%
Iron 1mg	6%
Potassium 230mg	4%

*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.

*Before buying “**sugar-free**” foods, check label for **Total Carbohydrate**. “**Sugar-free**” does not mean calorie or carbohydrate free. Some contain sugar alcohols such as sorbitol or mannitol which may cause gas, stomach discomfort, or a laxative effect.

*A “free” food is one with 0-5 grams carbohydrate and less than 10 calories per serving including most non-starchy vegetables such as green beans, cucumber, spinach, broccoli, lettuce, tomato, carrots, or zucchini.



Heart Healthy Diet Sample Menu

Breakfast

- 1 medium banana
- 2 eggs
- 1 slice whole wheat toast
- 1 tsp margarine
- 1 Tbsp sugar free jelly
- 1 cup 1% milk
- 1 cup coffee

Lunch

- 2 oz low sodium turkey breast
- 1 oz Swiss Cheese
- 1 Tbsp light mayo
- 2 slices 100% whole wheat bread
- 2 lettuce leaves/tomato slices
- 1/4 cup avocado
- 1 oz lightly salted chips
- 10 carrot sticks
- 1 cup unsweet tea

Dinner

- 3 oz grilled chicken
- 1/2 C cooked pinto beans
- 1/2 medium baked potato
- 1 Tbsp low fat sour cream
- 1 cup steamed broccoli
- 1 cup lettuce salad
- 1 Tbsp light ranch dressing
- 1 cup melon
- 1 cup unsweet tea

Snacks

- 5.5 oz Non-fat Greek yogurt
- 1/2 C Mixed Berries

Nutrient Analysis


- 1627 calories
- 106 grams Protein (26%)
- 182 grams Carbohydrate (45%)
- 55 grams of Fat (29%)
- 2010 mg Sodium



Heart Healthy Diet

FOOD	CHOOSE	LIMIT
<p>Breads, Cereals, Rice, & Pasta Eat 6 to 8 daily servings, with at least half as whole grains.</p> <p>1 serving = 1 slice bread, 1oz dry cereal, or 1/3 cup cooked rice</p>	<ul style="list-style-type: none"> • low fat, corn, or whole wheat tortillas (6 inch) • whole grain breads, yeast rolls, breadsticks, melba toast, pita bread, bagels, English muffins • homemade low-fat muffins, cornbread, waffles, pancakes, biscuits • low fat unsalted crackers, baked chips, graham crackers, unsalted pretzels, unsalted rice cakes, air-popped popcorn • whole grain pasta & brown rice, whole grain unsweetened cereals, oatmeal, low fat granola 	<ul style="list-style-type: none"> • tortillas made with lard • cornbread, biscuits, croissants • commercially prepared croissants, muffins, waffles, pancakes, pastries, doughnuts, sweet rolls • snack crackers & chips such as corn chips, potato chips, buttered or salted popcorn, pork rinds • convenience mixes such as seasoned pasta, rice, stuffing, fried rice, Chow Mein noodles, Hamburger Helper™, Mac & Cheese, Ramen Noodles, Cup-a-Soup®
<p>Vegetables Eat at least 3-5 servings of vegetables each day in a variety of colors</p> <p>1 serving = 1 cup raw, ½ cup cooked</p>	<ul style="list-style-type: none"> • all fresh, frozen, or "no salt added" canned vegetables or rinsed canned vegetables; unsalted tomato and vegetable juices 	<ul style="list-style-type: none"> • fried vegetables, regular canned vegetables, sauerkraut, pickled vegetables, French fries, tater-tots, fried okra, frozen vegetables with sauces that may be high in fat and salt
<p>Fruits Aim for 3-5 servings of fruit</p> <p>1 serving = 1 cup raw, ½ cup cooked</p>	<ul style="list-style-type: none"> • fresh, frozen, or dried fruits; canned fruits packed in water or juice. Fruits with edible skins and seeds contain more fiber • dried tomatoes, cherries, or cranberries 	<ul style="list-style-type: none"> • fruit juice, fruits served with butter or cream sauce, canned fruit in syrup

Heart Healthy Diet

FOOD	CHOOSE	LIMIT
<p>Proteins: Fish / Poultry / Beef/ Dried Beans & Peas Eat 3 to 6 oz (cooked) of lean meats, poultry, or seafood per meal</p> <p>1 ounce cooked meat= 7 g protein</p> <p>1 egg = 1 oz</p> <p>1 C cooked beans/lentils= 2 oz cooked meat</p> <p>3 oz of meat or poultry is about the size of a deck of cards</p>	<ul style="list-style-type: none"> • low sodium lean cuts of: venison, beef (90/10 or leaner), lamb, or pork <ul style="list-style-type: none"> - Ex: round, sirloin, tenderloin, short loin, extra-lean • skinless chicken or turkey, lean ground turkey • eggs (1-2 whole eggs/day) • fish, water-packed canned tuna, salmon, oysters, scallops, clams, crab, lobster • dried beans, peas, tofu, lentils, rinsed/low sodium canned beans 	<ul style="list-style-type: none"> • high fat cuts of meat: chuck ground beef 80/20, spareribs, bacon, sausage, ham, lunch meats, hot dogs, liver, bologna, salami, organ meats, brisket • poultry skin, fried chicken • fried & breaded meat and fish • Spam®, Vienna sausage
<p>Dairy Eat 2 to 3 cups of fat free or low-fat dairy products each day.</p>	<ul style="list-style-type: none"> • skim or 1% milk, nonfat chocolate milk, nonfat dry milk, evaporated skim milk, nonfat buttermilk • nonfat/unsweet soy, nut, and rice milks • low fat cheese, part skim mozzarella, ricotta, low fat cottage cheese, Swiss, provolone • low fat unsweetened yogurt 	<ul style="list-style-type: none"> • whole or 2% milk, sweetened condensed milk, regular evaporated milk • regular full-fat cheeses (cheddar, jack, etc), American cheese, processed cheese spreads, Velveeta® • sweetened yogurt
<p>Fats Limit intake to 2 to 3 servings per day of fats.</p> <p>Use olive/canola/avocado oils and use tub butter in place of stick butter/ margarine.</p> <p>1 serving fat = 1 teaspoon soft margarine or 1 tablespoon light mayonnaise</p>	<ul style="list-style-type: none"> • monounsaturated oils: olive, canola, peanut • polyunsaturated oils: safflower, corn, sunflower, soybean, vegetable • tub margarine made from unsaturated oils (i.e., Smart Balance®) • low fat or light salad dressings, coffee creamer, sour cream, cream cheese, mayonnaise • peanut butter, unsalted nuts, avocado 	<ul style="list-style-type: none"> • coconut, palm, and palm kernel oils • lard, shortening, bacon, stick margarine (contains trans-fat) • salad dressing made with egg yolk, cream, or whole milk • regular sour cream, cream cheese <div style="text-align: right;">  <p>American Heart Association.</p> </div>

Heart Healthy Diet

FOOD	CHOOSE	LIMIT
<p>Soups</p>	<ul style="list-style-type: none"> • low sodium canned soup and broth • homemade low fat, low sodium soups 	<ul style="list-style-type: none"> • menudo, fideo, cream soups, canned/dehydrated soups, ramen noodles • seasoned pasta and rice mixes
<p>Beverages</p>	<ul style="list-style-type: none"> • Mrs. Dash™, salt-free seasonings, herbs and spices, garlic powder, onion powder • tabasco sauce, cocoa powder • lemon or lime juice, vinegar 	<ul style="list-style-type: none"> • sea salt, salt, olives, pickles, salt-containing seasonings, seasoned salt, lemon pepper, bouillon • soy sauce • dry seasoning mixes (taco, chili, spaghetti, etc.)
<p>Desserts and Sweets Limit to 1 serving/day. These provide calories and fat, with little vitamins or minerals. Use sparingly.</p>	<ul style="list-style-type: none"> • low fat and fat free frozen yogurt and ice cream, sherbet, sorbet, popsicles, gelatin • choose fruit or gelatin instead of baked goods. 	<ul style="list-style-type: none"> • whole fat ice cream and frozen treats, milkshakes • commercial baked goods such as donuts, pies, cakes, cookies



Remember:

- You are not to fill your mug more than twice (2000 ml) in a 24 hour period. This includes all liquids including water, juice, milk, coffee, tea, soda, soup, etc.
- Foods that are liquid at room temperature count toward your total daily fluid intake.

Fluid Conversion Chart

1 cup = 8 ounces = 240 ml or cc

4 cups = 32 ounces = 1 quart = 1,000 ml or CC = 1 liter

8 cups = 64 ounces = 2 quarts = 2,000 ml or cc = 2 liters

1 ml = 1 cc

1 ounce = 30 ml or cc

Post-Coronary Artery/Valve Surgery

Recovery After Heart Surgery

Everyone responds differently to heart surgery. These are guidelines to help you through your recovery period.

Shower daily. Use warm (not hot) water. Clean over your dressing daily with Dial or Safeguard soap, using a clean washcloth. Use a bench or shower stool if needed (to make you feel more secure). No tub baths; do not sit in the water and soak. After seven (7) days from discharge day, remove all dressings and continue to shower daily, lightly scrubbing your incisions with a clean washcloth using Dial or Safeguard soap.

Your incisions (chest and legs) may have numbness and hypersensitivity. This will improve over the next few weeks. You may have a lump at the top of your chest incision. This will flatten over the next several months. If you experience problems with your incisions please call Cardiovascular & Thoracic Surgeon's office at 325-747-2134 or 1-800-530-4143.

You may experience muscle pain/tightness in your shoulders, neck and upper back. Apply heat as needed. Be careful; heat should not be applied longer than 20 minutes, especially if using a heating pad. You may have a loved one massage your neck and shoulders.

Watch for:

- Increased redness to your incisions
- Temperature of 101 degrees or greater
- Large amounts of drainage from your incision (chest or legs) that changes from a clear yellow/pink to cloudy
- Opening of any incision

Keep your legs elevated above your chest when sitting or at rest. This will keep them from swelling. Do not let them dangle. Some swelling to your incisional leg is normal. Avoid sitting or standing in one position for long periods of time as this will also cause your legs to swell.

No driving until your surgeon sees you for a post-operative visit. You may ride as a passenger in a car at any time, but wear your seat belt.

Follow the Post-Operative Activity Schedule for lifting and exercise (page 86). **DO NOT** lift more than 10 pounds the first week at home.

Stop any activity if you feel short of breath, notice irregular heartbeats, feel faint or dizzy or if you have chest pain/pressure. Rest until symptoms subside. If they do not subside after 20 minutes, notify your cardiologist. Phone numbers are listed at the front of this book.

Walk at least four times a day. Walking is one of the best exercises for your heart, lungs and circulatory system. Start at your own pace and gradually increase your activity as tolerated. Rest when you become tired. The first few weeks you may tire easily. This is normal. (See Post-Operative Activity Sheet, page 86.)

You may climb stairs, unless restricted by your doctor. It is best to use the handrail; do not use your arms to pull yourself up the stairs. Take 3-4 steps and rest as needed.

Try to rest for at least eight hours a night. For the first month, you may have difficulty sleeping. This is normal. You may also fall asleep and/or awaken during the night. This will improve with time. Taking your pain medication before you go to bed will help. It is okay to rest for short periods of time during the day.

After your third post-operative week, you may resume normal sexual activities.

Bowel movements. You may use a laxative if needed. Otherwise, your bowel habits will return to normal.

It is normal to not have much of an appetite. It takes several weeks for your appetite to return to normal. You may feel nauseated at times and your sense of smell may be diminished.

Make positive lifestyle changes. Exercising and taking care of yourself will help you regain strength and recover faster. Enrolling in a **Cardiac Rehab Program** that includes exercise classes, nutritional counseling and support groups may help in your recovery process. Cardiac Rehab will be recommended and started by your cardiologist after your hospital follow-up visit.

If you are unable to keep your scheduled appointments with your surgeon or cardiologist, please call prior to your scheduled appointment time(s). If you have any questions concerning your medication, please call your cardiologist's office.

Some people feel angry or depressed after heart surgery. This is normal. Sharing your feelings with your loved ones and maintaining a positive outlook will help.

Mended Hearts is a national volunteer support group for heart patients and their families. If you would like to speak to someone regarding this organization, call 1-888-432-7899 or visit www.mendedhearts.org.

If you have any questions, please feel free to contact the Cardiovascular & Thoracic Surgeon's office at 325-747-2134 or 1-800-530-4143

Post-Operative Activity Schedule

Discharge Week 1

Lifting: Do not lift more than 5-10 pounds.

Activity: No driving
1-2 hours of daily activity

Exercise: 1/4 mile (4 blocks) daily

Rest: 1 hour every morning
2 hours every afternoon
8 hours at night

Diet: 2000 mg of salt (sodium) a day
Low fat, low cholesterol
1800 calorie ADA diet

Discharge Week 2

Lifting: Do not lift more than 5-10 pounds.

Activity: No driving
1-2 hours of daily activity

Exercise: 1/2 mile (8 blocks) daily

Rest: 1 hour every morning
2 hours every afternoon
8 hours at night

Diet: 2000 mg of salt (sodium) a day
Low fat, low cholesterol
1800 calorie ADA diet

Discharge Week 3

Lifting: Do not lift more than 10-15 pounds.

Activity: No driving
2-3 hours of daily activity

Exercise: 3/4 mile (12 blocks) daily

Rest: 1 hour every morning
2 hours every afternoon
8 hours at night

Diet: 2000 mg of salt (sodium) a day
Low fat, low cholesterol
1800 calorie ADA diet

Discharge Week 4

Lifting: Do not lift more than 10-15 pounds.

Activity: No driving
2-3 hours of daily activity

Exercise: 1 mile (16 blocks) daily

Rest: 1 hour every morning
2 hours every afternoon
8 hours at night

Diet: 2000 mg of salt (sodium) a day
Low fat, low cholesterol
1800 calorie ADA diet

Physician's Orders

Cardiac Surgery Discharge Instructions and Orders

Appointments:

Surgeon: _____ Date: _____ Time: _____

Cardiologist: _____ Date: _____ Time: _____

with a CBC, BMP, CXR, EKG, BNP

Date: _____

Primary Care Physician: _____ Date: _____ Time: _____

Other Physician: _____ Date: _____ Time: _____

Heart Failure Clinic: _____ Date: _____ Time: _____

Cardiac Rehabilitation: _____ Date: _____ Time: _____

Entrance Treadmill: _____ Date: _____ Time: _____

Diet:

Heart Healthy

Literature provided

1800 calorie, Diabetic, Heart Healthy - monitor your blood sugar _____ times a day and keep a written record to take to your doctors appointments.

Literature provided

Renal - continue with your scheduled dialysis appointment.

Literature provided

Activity:

- No driving, no working for 3 weeks.
- No lifting over 10 pounds for 8 weeks, 10-15 pounds for 3 months.
- Walk 3-4 times a day for 10-15 minute at a time the first 2 weeks.
- Rest 8 hours each night.
- **NO TUB BATHS.** Shower every day — clean all incisions with Dial or Safeguard soap and water.
- Weigh yourself each morning.

Read and refer to your ***Coronary Artery Bypass/Valve Patient Education Packet.***

Notify Surgeon's Office Immediately If You Experience:

- Large amounts of drainage from your incision or sternum (we expect drainage from tube sites and leg incisions)
- Temperature greater than 101 degrees
- Any increase in redness around sternum or leg incisions
- Shortness of breath
- Weight gain of 2-5 pounds in 2-4 days

Discharge Medications:

Beta Blocker	<input type="checkbox"/> Yes	<input type="checkbox"/> No	⇒	<input type="checkbox"/> Allergy <input type="checkbox"/> Bradycardia <input type="checkbox"/> Hypotension <input type="checkbox"/> Severe COPD/Asthma
ACE/ARB	<input type="checkbox"/> Yes	<input type="checkbox"/> No	⇒	<input type="checkbox"/> Allergy <input type="checkbox"/> Hypotension <input type="checkbox"/> Renal Impairment
Statin:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	⇒	<input type="checkbox"/> Allergy

No Smoking or Tobacco Products:

If you smoke — **QUIT NOW.**

- Get Ready — set a date to quit.
- Get Medicine — talk to your doctor.
- Get Help — call toll free 1-877-448-7848.
- Stay Quit — quit for good.
- Caregivers: by quitting, you protect your loved ones from illness caused by secondhand smoke.

Discharge Weight: _____pounds

Allergies: _____

NOTES:

Award-Winning Care



SHANNON REGIONAL
HEART CENTER

102 N. Magdalen | San Angelo, Tx 76903

325.747.2281

www.ShannonHealth.com