



# Heart Surgery Care Guide



**THE OHIO STATE UNIVERSITY**

WEXNER MEDICAL CENTER

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**Talk to your doctor or health care team if you have any questions about your care.**

For more health information, go to [wexnermedical.osu.edu/patiented](http://wexnermedical.osu.edu/patiented) or contact the Library for Health Information at 614-293-3707 or [health-info@osu.edu](mailto:health-info@osu.edu).



# Welcome

## Learn About Your Care

Our goal is for you to return to the highest possible quality of life after your surgery. To help you meet this goal, we will teach you about your disease and what you should be doing to return safely and quickly to your daily activities. You will learn what signs to watch for, and what you can do to help prevent problems.

We want you to be an active partner in your care. This partnership is best for your health and will help you become as independent as possible. We hope you, your family and friends use this information to help guide your care and recovery.

This book includes basic information about your surgery, disease, treatment and recovery. This material will be used by your health care team to teach you while you are in the hospital. You are not expected to read and learn all of this information before you go home. Keep this book to use as a resource at home. Other materials may be added by members of your care team to answer your questions.

If you'd like a digital copy of this book, please visit **go.osu.edu/pted3538**.

## Write down and ask questions

Please write down any questions you have. Use that list to ask questions of your doctor, nurse and others on your care team. If you do not understand, please ask them to explain in another way.



## Be sure you understand

Your care team will teach you about your care. Use this list to check off topics you feel you will be able to do after you leave the hospital:

- ☐ Know how to care for my incisions.
  - ☐ Manage my pain.
  - ☐ Get ready to go home after surgery.
  - ☐ Protect my chest when I cough and deep breathe, called sternal precautions.
  - ☐ Do breathing exercises with the incentive spirometer.
  - ☐ Know the dangers of bed rest.
  - ☐ Know my activity guidelines after heart surgery.
  - ☐ Participate in a Cardiac Rehab Program.
  - ☐ Know how to eat to improve my heart health.
  - ☐ Know how to take my medicines.
- If I am a smoker,
- ☐ Know how to stop smoking.

# 4 ROSS VISITOR GUIDELINES

AT THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER

## Visiting hours:

8:30 a.m. – 1:00 p.m.

3:00 p.m. – 6:30 p.m.

8:30 p.m. – 10:00 p.m.

- We ask that no more than two people visit in the patient room at one time. This will help the staff to have enough space to safely care for your loved one.
- The patient must be easily accessible for the staff to perform care, especially in the case of emergency.
- If the patient is having a treatment in the room, you may be asked to wait in the waiting area until the treatment is complete for the patient's privacy.
- If the patient is unstable, the nurse may restrict visitation to safely administer care. *Please see criteria below that qualifies the patient as unstable.*

## The patient may be unstable if:

- He or she is having difficulty breathing on the breathing machine, also called a ventilator.
- Blood pressure is not well controlled and the patient needs IV medicines and/or blood products as part of their care.
- Close monitoring is needed after just coming out of the operating room or an invasive procedure, or if he or she is having neurologic changes.
- Several pieces of equipment are needed for care in the room to manage the heart, breathing or other body functions.

## Why are there times when the unit is closed to visitors?

- **6:30 – 8:30 a.m. and 6:30 – 8:30 p.m.:** The unit will be closed to visitors at these times for the nurses and other care providers to safely exchange shifts and information about the plan of care for your loved one.
- **1 – 3 p.m.:** This is the unit quiet time, and the unit will be closed to visitors. This break allows the patients a time for rest and healing.

## Nighttime visitors:

Overnight visitors are not permitted in patient rooms. If you wish to stay overnight in the hospital, we will direct you to a nearby waiting area where we can contact you via cell phone if there is an update or change in the patient's condition.

## Child visitors on 4 Ross:

For our patients' safety and comfort, **children under the age of 12 are prohibited on the unit.**

In certain cases, **approval for a child to visit may be granted if the patient is:**

- The parent or legal guardian of the child **or**
- Having to stay more than 30 days in the hospital **or**
- Nearing death

## Why do we restrict children?

- 4 Ross is an ICU environment.
- Children may be frightened by the equipment on the unit or tubes and wires attached to patients. A loved one may look different than they normally do, and this can be very scary to a child. Even if your loved one is feeling better, children may see other patients who are very sick.
- Equipment used in care can take up a lot of space in the room. To keep the patient safe, we need to be sure the equipment is not bumped, pulled or handled in any way that could harm the patient.
- Our patients need rest to heal and recover. Sometimes young children do not understand when they are not being quiet or the need to be quiet. This is normal for young children, but can be disruptive to those who are not feeling well.

*Thank you for taking part in the care of your loved one. Please let us know if there is anything that we can do to make this a better stay for them or for you.*



**THE OHIO STATE UNIVERSITY**  
WEXNER MEDICAL CENTER

# What You Can Expect after Coronary Artery Bypass or Heart Valve Surgery

Expected discharge date

To help you and your family know what to expect after surgery, we have created this plan for your care. Adjustments will be made based on your needs and recovery.

Learn about your care, so you know what to do after you leave the hospital. Plan to attend **Discharge Class, held on Tuesday, Thursday or Saturday at 1:00 PM.**

Please ask any questions you have or share your concerns with your care team.

## Every Day

- ☐ **Ask about your progress.**
- ☐ Use the breathing exerciser 10 times every hour while awake.
- ☐ Use your pillow to support your chest when you cough and deep breathe to help control pain.
- ☐ Sit up the evening of surgery and then sit up in a chair 3 times each day.
- ☐ You will be helped to get up and walk. The distance will increase each day. The goal is to walk 4 times each day.
- ☐ Notify the team if you have problems with appetite or sleep.
- ☐ Ask for pain medicine before your pain gets out of control to help you be able to breath and move more easily.

## Day of surgery

- ☐ The breathing tube and stomach tube will be removed within 24 hours of surgery if able.

## Day 1 after surgery

- ☐ If you are breathing well and have good oxygen levels, you will have your oxygen removed.
- ☐ Remove tubes and lines as able:
  - ☐ IV line in neck if **not** on IV meds
  - ☐ Arterial line
  - ☐ Catheter in bladder
- ☐ Your blood sugar will be controlled closely to help with wound healing.
- ☐ Start clear liquids and ice chips and then your diet will be advanced as you are able to eat without feeling sick.
- ☐ Restart home meds, if able.
- ☐ Start Cardiac Rehabilitation.

## Day 2 after surgery

- ☐ Remove IVs and if able:
  - ☐ Pacer wires
  - ☐ Chest tubes
- ☐ You may need a stool softener while you are on prescription pain medicines. Tell your nurse if feel that you need to have a bowel movement.
- ☐ The Diabetes team will help if you have high blood sugar or diabetes.

## Day 3 after surgery

- ☐ Remove remaining chest tubes.
- ☐ Review needs for discharge and arrange transportation.
- ☐ Identify discharge location if not home.

## Day 4 after surgery until discharge

- ☐ Review discharge education.
- ☐ Get a copy of your After Visit Summary and any prescriptions you need.
- ☐ Be sure you understand your care instructions for:
  - ☐ Medicines you are to take
  - ☐ Follow up appointments
  - ☐ Special equipment, if needed
- ☐ Pharmacist may review your discharge medicines with you.

## Questions

Write down questions you want to ask your care team. It can be hard to remember, so make a list of your questions and concerns.

We want you to understand your care so please, let us know if we need to explain something in a different way to help you better understand.

Some delays may come up, so if there are questions or concerns please discuss those with your care team.

# Open Heart Surgery

## Discharge Education Summary

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### Activity limits

To protect your heart and incision:

- Light activity for the next 6 to 8 weeks.
- No lifting, pulling or pushing over 10 pounds. A gallon of milk weighs 8 pounds.
- Do not put both hands behind your back at the same time.
- **No driving** until your doctor gives you the okay to drive. Ride in the back seat and use the heart pillow between your chest and the seat belt.

### Walk and move for healing

- Walk and move to reduce chances of blood clots and pneumonia. It also increases your rate of healing.
- Wear shoes that support your feet.
- For safety, have help walking at first. Start with 5 to 10 minute walks, 3 to 5 times each day.
- Start slow and increase your speed and distance slowly.
- Avoid hills and walking outside in bad weather.
- If you do not feel good or get tired, stop and rest.
- Do not use treadmills or stationary bikes for 4 weeks, or until directed by a health care provider.
- After 4 to 6 weeks, start a cardiac rehab program in your area. A referral will be faxed, but if you have questions, call 614-293-6937.

### Rest as needed

- Do the most important chores first and no lifting or sweeping.
- Rest and take naps as needed.
- Limit going up and down stairs.
- Limit visitors and outings.

### Cough and deep breathe

- Use your incentive spirometer every hour you are awake for 2 to 3 weeks or until your cough is very dry.

### After surgery blues

- It is common to feel sad or frustrated. Get plenty of rest and plan for fun and easy activities.

### Eating and drinking

- **Limit fluids** to 2 liters each day.
- **Weigh yourself each morning.** If you gain 2 to 3 pounds in 24 hours, or 5 or more pounds in a week, call your nurse or doctor.
- It is normal to have little appetite, so eat appealing foods until your appetite returns. **Your body needs the calories and proteins for healing.**
- After 4 to 6 weeks or when your appetite returns, focus on heart healthy foods and drinks. Limit sodium or salt, fat, caffeine and cholesterol foods and drinks as directed. Learn more about a heart healthy diet and limiting sodium later in this book.

## Medicines

- Only take medicines listed on your discharge instructions. These may be different than your medicines before surgery.
- You will have a prescription for pain medicine.
- If you need to take insulin injections, ask for information before you leave the hospital.
- **Only take over the counter medicines or supplements if approved by your doctor.**
- Store medicine where children and pets cannot get them. Check with your pharmacist about how to safely get rid of unneeded medicine. Do not throw old medicine in the trash.

## Incision care

- Take showers only, no tub baths. Do not let the shower spray directly hit your incision.
- Clean your incision with soap and water 2 times each day. Rinse the incision gently and pat dry with a clean towel.
- Leave your incision uncovered as much as possible, unless draining. If draining, cover it with gauze.
- Avoid lotions, oils and powders on incision.
- Check for redness, streaking, swelling or fever and report any of these signs of infection.

## Avoid tobacco and smoke

Using tobacco or being around others who smoke can increase your blood pressure and slow healing. Tobacco use increases risk of lung cancer and coronary artery disease. It can limit the life of coronary artery grafts. Ask for tobacco cessation information if needed.



# After Surgery

You will have various tubes and other equipment attached from surgery. Some of these things will come off in the first day or two after surgery and some things will be in place until you are ready to go home.

## Breathing tube and ventilator

A **breathing tube and ventilator** helps you breathe until you are awake enough to breathe on your own. Your doctor will check you and decide when you are able to come off of the ventilator, often later the first day.

When you first wake up, the breathing tube will be taped to your face, and it may feel as if you cannot breathe. Try to stay relaxed and let the ventilator do the breathing for you. You will not be able to talk with the breathing tube in place, but you can nod yes or shake your head no to answer questions.

When the breathing tube is removed, you will get oxygen through a tube under your nose. You may have a sore throat. This often improves after 24 hours.

## IV Lines

- **PA catheter (also known as a Swan-Ganz)** is placed in a neck vein. This is used to measure your heart function and pressure in your heart. Medicines and IV fluids will be adjusted based on the readings from this catheter.
- **Arterial line**, also called an A Line, is a catheter that is placed in an artery in your arm to check your blood pressure. Blood will be taken from this line for tests. IVs are placed in veins to give you fluids and medicines.

## Tubes

- **Chest tubes** are used to drain extra fluid from your chest after surgery. One to four tubes may be placed. These are often taken out two to three days after surgery.
- **A tube, called a Foley catheter**, is placed in your bladder to drain urine and to check how your kidneys are working. You may feel the urge to urinate. This is normal. The catheter drains the urine. It is removed when you are able to get up to use the bathroom.
- **A stomach tube**, also known as a **nasogastric or NG tube**, is put in through your nose or mouth. It is used to remove stomach contents to prevent nausea and vomiting. It is often removed when the breathing tube is removed if you are ready to begin drinking fluids.

## Heart monitor and pacemaker

- **Wires will be attached to patches on your chest** to check your heart rate and rhythm. When you are able to walk, the wires will be attached to a small box, called **telemetry**.
- **Pacemaker wires** are connected to your heart and a pacemaker box. These will be removed when they are not needed.



## Dangers of bed rest

Many people think that resting in bed will help them recover faster. Spending too much time lying down can have many dangerous effects on your body. Bed rest should only be prescribed by your health care provider.

Even if you may not feel like getting out of bed, the benefits make it worthwhile. A balance between activity and rest reduces most effects of bed rest and helps you feel less tired.

Even a single day in bed may cause problems such as:

- Blood clots
- Dizziness with movement
- Depression
- Changes in eyesight or hearing
- Poor balance
- Changes in blood sugar
- Muscle weakness
- Feelings of nausea
- Stiffness and pain
- Bed sores and skin breakdown

## Be active

If you are able to walk, small amounts of activity several times a day is best. Walking around your room is better than lying in bed or sitting in a chair. After checking with your nurse, family and friends may help you get up and walk around. A rest-activity plan will help you keep your strength and build endurance.

# Protect Your Chest

## Sternal Precautions

For the first 6 weeks after surgery, you will need to protect your sternum or breast bone as it heals. This is called sternal precautions.

### For the first 6 weeks after surgery

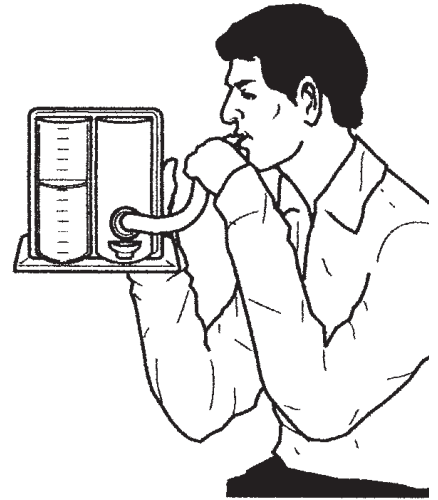
- You may use your arms when getting in and out of your bed or a chair, but try to **keep your arms close to your sides**.
- When moving the first 2 days after surgery, support your incision by holding a pillow or folded blanket firmly against your incision. This will provide support and decrease the pain you may feel with movement.
- Hold a pillow across your chest to support your incision when you cough, sneeze or do your breathing exercises.
- You may move your arms within a pain free range, but **avoid reaching backwards with both arms at the same time**.
- **Do NOT lift, push or pull more than 10 pounds.** A gallon of milk weighs about 8 pounds.
- Do not let others push or pull on your arms when helping you to move.
- Have your helper hold onto a gait belt, waistband of your pants or support you under your arms.



# How to Use an Incentive Spirometer

## Breathing Exerciser

Use your incentive spirometer, also called a breathing exerciser, to help you take deep breaths to open the air sacs in your lungs after surgery. This can help reduce the chance of developing breathing problems like pneumonia.



- **Do your breathing exercises every hour when you are awake each day.**
- **Continue these exercises at home for 2 to 3 weeks or until your cough is dry.**

## Steps for use

1. If possible, sit up straight. It may help to sit on the edge of a chair or your bed.
2. Hold the incentive spirometer upright.
3. Breathe out, then close your lips tightly around the mouthpiece and take in a slow deep breath through your mouth.
4. As you take a deep breath, the piston in the clear chamber of the incentive spirometer will rise. It is important to breathe in slowly to allow the air sacs in your lungs time to open. Your incentive spirometer has an indicator to let you know if you are breathing in too fast.
5. After you breathe in as deeply as you can, hold your breath for 3 to 5 seconds. Set the goal indicator tab at the level that you reached.
6. Take out the mouthpiece and breathe out slowly. Relax and breathe normally for a few seconds until the piston returns to the bottom of the chamber.
7. **Repeat these steps a total of 10 times.** If you start to feel lightheaded or dizzy, slow down your breathing and give yourself more time between the deep breaths.

8. After you do the 10 deep breathing exercises, **take a deep breath and cough to clear the mucus from your lungs.**

Support your incision by holding a pillow or folded blanket firmly against your incision. This will provide support and decrease the pain you may feel when you cough.



## Helpful hints

- Take medicine to control your pain. It is harder to take a deep breath if you are having pain.
- Keep the incentive spirometer within reach, so you remember to use it as directed.
- Use your incentive spirometer when you go home to help keep your lungs clear while you recover.

# Medicine Safety

## During Your Hospital Stay

We want to keep you safe during your hospital stay. Help us by providing a list of all the medicines you take at home, including prescription and over the counter medicines, and any vitamin or herbal supplements.

Include on your medicine list:

- Name of the medicine or supplement
- Dose and strength of the medicine
- How often you take it
- When you last took it
- Any allergies you have to food or medicines and what your reaction to it was

### During your stay

In the hospital, we are responsible for all medicines you take and watching for your response to them.

- We will take special care to select the right medicines for you.
- We do not allow you to take your own medicines, except if medicine is:
  - ☐ Not on hospital's list of preferred medicines.
  - ☐ An oral chemotherapy agent.
  - ☐ A herbal medicine ordered by your doctor.
  - ☐ A controlled substance with no acceptable alternative and approval from Pharmacy leadership.

### Home medicines brought to the hospital

The medicines you bring to the hospital will not be used unless there is an exception as noted above. You will have the option to:

- Send your medicines home with an adult family member or caregiver, or
- Place the medicines in a bag and have them stored in a secure area on the nursing unit until your discharge.

### If your home medicines are to be used in the hospital

For the use exceptions, medicines must be:

- In the original prescription container and clearly labeled and prescribed for you.
- Not expired.
- Reviewed by a hospital pharmacist, your doctor or nurse.
- Kept in the secure medicine cart and given by the nurse. It will not be allowed to be kept at the bedside.



# Pain Management

## After Heart Surgery

Pain is a normal part of surgery, but you will have orders for pain medicine to help control it. Let us know when you need something to treat your pain. The best way to treat pain is to prevent it from becoming severe. Managing your pain is key to your recovery, so you can walk, deep breathe and do other activities.

### What to expect

- Expect pain from your chest tubes, IV lines and your surgical incision.
- **Ask for pain medicine before your pain gets too bad.** Your nurses will wait for you to tell them you are in pain before pain medicine is given.
- There can be risks with pain medicines, but our goal is to control your pain to ease your recovery.
- Your pain will change as your body recovers and heals over several days to weeks.

### Treating your pain

- Pain medicine can be given by mouth or through your IV either by the nurse or by use of a patient controlled analgesia (PCA) pump. With a PCA pump, you are able to press a button to give yourself medicine when you are in pain.
- Your doctor may order more than one pain medicine for you. For example, you may have one medicine ordered for severe pain and another for mild pain.
- Everyone experiences pain in different ways and may respond to pain medicines in different ways. We will develop a pain management plan that works best for you.

- You will often be asked to rate your pain on a scale of 0 to 10. **0 means no pain and 10 means the worst pain you can imagine.** You will be asked to rate your pain to help us decide what type of pain medicine to give you.

### Side effects and cautions

- Constipation is the most common side effect of pain medicines. Drinking fluids, taking stool softeners or laxatives, and activity can help to prevent constipation.
- Other side effects may include itching, dizziness, sleepiness, nausea and vomiting.
- Before surgery, it is important to let your medical team know about any drug allergies you may have.
- Your total dose of Tylenol, also known as acetaminophen or APAP, should not exceed eight, 325 mg tablets or a total of 3000 mg in 24 hours from all sources. Tylenol (APAP) may be in some of your pain medicines, so please remember to not take too much as it can damage your liver.

## Be active in pain control

- Always let your care team know if you are in pain or if you think you are having a side effect.
- Tell us if a certain pain medicine has helped in the past, so we can use what works best for you.
- Gentle activity, such as walking, can help improve healing and reduce swelling. Your doctor will let you know what activities are safe for you after surgery.

## Pain medicines

Common medicines used for mild to moderate pain after surgery include:

- Acetaminophen, also known as APAP or Tylenol
- Tramadol, also known as Ultram
- APAP/codeine, also known as Tylenol #3
- Pregabalin, also known as Lyrica
- Gabapentin, also known as Neurontin
- Hydrocodone/APAP, also known as Vicodin or Norco
- Oxycodone/APAP, also known as Percocet

Common medicines used for moderate to severe pain after surgery include:

- Hydrocodone/APAP, also known as Vicodin or Norco
- Oxycodone/APAP, also known as Percocet
- Hydromorphone, also known as Dilaudid
- Oxycodone
- Morphine

## Treating pain after discharge

- If needed, pain medicines will be prescribed for when you leave the hospital.
- Early after surgery, your pain medicine may be given on a schedule to reduce severe pain. As pain improves, it can be used only as needed.
- If your pain gets worse, contact your surgeon's office.
- When your pain has decreased, begin replacing one tablet or dose of your prescribed pain medicines with over the counter pain medicine, such as acetaminophen (APAP or Tylenol).
- **Avoid taking NSAID (Non-Steroidal Anti-Inflammatory) medicines** unless you have discussed this with your surgeon. These include medicines like ibuprofen (Advil or Motrin) and naproxen sodium (Aleve). Contact your doctor's office if you have questions about over the counter medicines and other options for pain relief.
- If your pain is controlled without prescribed pain medicine, you no longer need to take it.
- You may need to continue taking the prescribed pain medicine just before certain activities or at bedtime if you are not able to:
  - ☐ Sleep well or you are waking often due to pain.
  - ☐ Do gentle activity, such as walking, due to pain.
- Remember, these medicines help to decrease pain, but they do not completely get rid of it. Take pain medicine, so your pain is manageable and mild during your recovery.

# Overview: What You Can Do

You can have a good quality of life if you actively manage your condition. These lifestyle behaviors will help you to protect your health and help your heart.

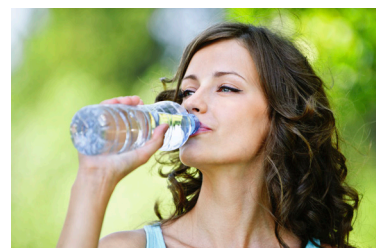
## Take your medicines everyday, even if you feel well.

Take your medicines as directed by your provider. Plan for refills several days before you run out. It can take time to get medicines approved by your provider and filled. Talk to your provider **before** taking any over the counter (OTC) medicines for your safety.



## Limit fluids to 64 oz or 2,000 ml a day.

Find a strategy that works for you to manage your fluid intake. It is important to balance your fluids and salt for a heart healthy diet. Stay within your fluid limits by sipping drinks and balancing what you drink with high water content foods, such as fruit or ice cream.



## Eat a very low sodium diet, less than 2000 mg a day.

Read food labels and plan for low salt meals and snacks. Cook at home and use herbs and spices for great tasting meals instead of pre-packaged meals or processed foods.



## Weigh yourself every morning.

Weigh yourself after using the bathroom and before breakfast every morning. Weigh yourself at about the same time, wearing clothing of similar weight to get an accurate measure of weight. Record your weight on page 38 of this book. **If you gain 2 to 3 pounds in 24 hours, or 5 or more pounds in a week, call your doctor or nurse.**



WomensHealth.gov

## Attend cardiac rehabilitation.

Cardiac rehabilitation is a medically-supervised program for heart patients. It includes activity, education and support for a heart healthy lifestyle. Cardiac rehab is often covered by insurance. Payment plan options are also available. The goal is to keep you healthy and strengthen your heart.





# Attending Cardiac Rehabilitation

Our goal is to help you return to the highest possible quality of life. Cardiac rehabilitation works to address activity and lifestyle after you leave the hospital. It is offered in several phases.

If you have concerns or barriers to taking part in a rehab program, such as transportation or payment, please let us know. We may be able to provide some help.

## Phase 1 (inpatient)

We provide education during your hospital stay and work with you on skills to keep you active when going home. Before you leave the hospital, we will also provide a referral for a local cardiac rehab program.

## Phase 2 (outpatient)

After leaving the hospital, you will have a visit to check your heart health with a cardiac rehab nurse and exercise physiologist. After this evaluation, which may include testing, you will start a personalized wellness program. These are some of the skills covered:

- Learn more about your condition and know how to best manage your condition at home.
- Improve your heart and cardiovascular function.
- Improve your fitness level.
- Reduce the chance of future health problems by working to improve diet, weight, activity level, diabetes and/or cholesterol, stop tobacco use and manage stress.
- Ability to do daily activities without symptoms.
- Reduce fear or anxiety about your heart condition.
- Have a faster return to work and/or normal activities.

## Phase 3 (maintenance)

This is an ongoing fitness and wellness program that continues at the end of Phase 2 cardiac rehab. The program will support you as you work toward your health, fitness and lifestyle goals.

### Cardiac rehabilitation is offered at two locations:

#### Ohio State Outpatient Care Upper Arlington

1800 Zollinger Road, 2nd Floor  
Columbus, OH 43221  
Phone: 614-293-6937

#### Ohio State Outpatient Care East (Phase 2 only)

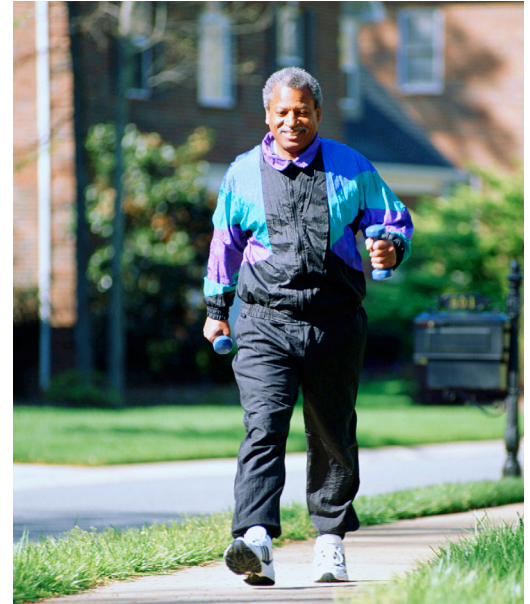
543 Taylor Ave, Room 3068  
Columbus, OH 43203  
Phone: 614-688-6306

# Eight-Week Walking Program

Talk to your doctor about how much exercise is right for you before starting any exercise program. If you have been not been active, this program can help improve your fitness.

Consider investing in comfortable walking shoes to prevent injury.

Walk most days of the week. Over time, walk longer or faster.



## About the program

This program starts slowly to rebuild your strength and stamina. You will walk short distances and then rest. This is called interval training. Your speed or pace when walking will slowly increase over time.

Walk at a pace that does not leave you out of breath. Only move to the next level if you feel you can. It is okay to repeat a week if the effort needed is somewhat hard for you. The goal is to increase activity safely for your body.

Week #	Walking interval	Rest interval	Repeat the intervals	Total activity time (minutes)
1	2 minutes	1 minute	5 times	10
2	4 minutes	2 minutes	4 times	16
3	5 minutes	2 minutes	4 times	20
4	7 minutes	2 minutes	3 times	21
5	5 minutes	2 minutes	5 times	25
6	10 minutes	2 minutes	3 times	30
7	15 minutes	2 minutes	2 times	30
8	20 minutes	2 minutes	2 times	40

## Exercising safely

**If you have chest pain, nausea or light-headedness during exercise, stop exercising and seek medical help.**

Use one or more of these methods to measure how hard the exercise feels to you:

- ☐ **Heart Rate:** To determine your resting heart rate, take your pulse before you get out of bed in the morning:

- Find your pulse on your wrist.
- Count your pulse for 10 seconds then multiply that number by 6.
- **My resting heart rate is \_\_\_\_\_.**

During exercise:

1. Warm up for 5 minutes then check your heart rate. Exercise at 20 to 30 beats above your resting heart rate. Slow down if it is too high.

**My heart rate goal for exercise is \_\_\_\_\_ to \_\_\_\_\_.**

2. End with a 5 minute cool down and then check your heart rate. Your heart rate should be within 10 beats of your resting heart rate. If it is too high, continue to cool down.

**My heart rate should cool down to at least \_\_\_\_\_.**

- ☐ **Talk Test:** Exercise at a level you can hold a conversation without breathing hard.

- ☐ **Borg Rating of Perceived Dyspnea\*:** This scale rates shortness of breath, also called dyspnea (disp-nee-uh). **If your rating is greater than 6, slow down.** If your rating is under 6, you can safely increase your speed or exercise longer.

### Borg Rating of Dyspnea

0	No shortness of breath
0.5	Slight shortness of breath
1	
2	Mild shortness of breath
3	Moderate shortness of breath
4	
5	Strong or hard breathing
<b>6</b>	
7	Severe shortness of breath
8	
9	
10	Shortness of breath so severe you need to stop and rest

- ☐ **Borg Rating of Perceived Exertion (RPE)\*:** This scale rates your effort in response to an activity. **A rating of a 3 or 4 is a safe level of exertion.** This means you are comfortably tired after an activity. If your rating is less than 3, it is safe for you to increase your speed or exercise longer. If your rating is greater than a 4, slow down.

### Borg Rating of Perceived Exertion

0	No effort
0.5	Noticeable effort
1	Very light effort
2	Light effort
<b>3</b>	<b>Moderate effort</b>
<b>4</b>	<b>Somewhat strong effort</b>
5	Strong effort
6	
7	Very strong effort
8	
9	Very, very strong effort
10	Maximum effort

\* Adapted from Borg G. Perceived exertion as an indicator of somatic stress. Scand J Rehabil Med. 1970;2: 92–98.



# Medicines for Heart Disease

There are many medicines to treat heart disease. Ask your doctor, nurse or pharmacist if you have questions about your medicines.

- Take medicines as directed.
- **Do not stop taking your medicines because you feel better or because you have no more refills on the prescription.** Check with your doctor before you stop taking any medicine. Many heart medicines need to be taken for a long time.
- Tell your doctor or nurse if you are taking any over the counter medicines or herbal supplements. They may interact with medicines.
- Talk with your doctor or nurse if you have side effects from your medicines. Side effects are an unwanted effect of a drug.

## Anti-platelets

These medicines prevent platelets in the blood from clumping or clotting. These medicines are often used after a heart attack or stroke, or after stent procedures to prevent platelets from blocking the stent.

**Do not stop taking this medicine without talking to the doctor who ordered it.**

Stopping your anti-platelet medicine puts you at risk forming clots or for the stent to get blocked.

**Side effects may include:** allergic reaction, black, bloody or tarry stools, nausea, vomiting, abdominal pain, skin bruising, dizziness, confusion, hallucinations, loss of hearing or ringing in ears.

### Medicine names:

- ☐ aspirin (Bayer, Bufferin, Ecotrin, St. Joseph's or other generic brands)
- ☐ clopidogrel (Plavix)
- ☐ prasugrel (Effient)
- ☐ ticagrelor (Brilinta)
- ☐ ticlopidine (Ticlid)

## Beta blockers

Beta blockers improve the heart's ability to relax and block the effect of other hormones in the body (adrenaline/norepinephrine). They slow the heart rate and help control blood pressure. These medicines are used to treat high blood pressure, heart failure, angina (chest pain) and may be used after heart attack.

**Side effects may include:** dizziness, slow heart rate, fatigue, shortness of breath when first starting medicine, and sexual dysfunction.

### Medicine names:

- ☐ carvedilol (Coreg)
- ☐ atenolol (Tenormin)
- ☐ metoprolol (Toprol-XL, Lopressor)
- ☐ propranolol (Inderal)
- ☐ bisoprolol (Zebeta)
- ☐ \_\_\_\_\_

## Nitrates

These medicines relax the blood vessels, so blood flows more easily through the body. They open the coronary blood vessels, so more oxygen is supplied to the heart. These medicines are used to treat angina (chest pain) and may be used for heart failure.

**Side effects may include:** headache, dizziness, light-headedness, flushing of face or neck, and skin rash.

### Medicine names:

Nitroglycerin, also called nitro, may be given to patients who have chest discomfort (angina) due to coronary artery disease (CAD). The blood vessels widen to allow for better blood flow to the heart.

- ☐ Sublingual nitro tablets or spray
  - You may feel tingling or a headache when you take nitro.
  - Keep your nitro tablets or spray with you at all times.
  - Keep nitro bottle out of moist areas, such as the bathroom.
  - Check the expiration date and be sure to throw the medicine away after the expiration date. Keep refills up to date.

### Use sublingual nitro tablets or spray if you have chest pain:

1. Sit down and rest before using nitroglycerin.
2. If you have nitroglycerin tablets, put one tablet under your tongue and let it dissolve. **Do not swallow the tablet.** If you use nitroglycerin spray, spray it into your mouth towards the back of your throat.
3. Rest and wait 5 minutes. Take a second tablet under your tongue if you still have chest discomfort or pain or use the spray. **At any time if your chest discomfort or pain does not improve or is getting worse even with nitroglycerin, call 911**

**and seek emergency treatment. Do not drive yourself to the hospital because you may be having a heart attack.**

4. Rest and wait another 5 minutes. Take a third tablet under your tongue or use your spray if the chest discomfort or pain has not gone away.
5. If you have taken 3 tablets or sprays and your chest discomfort or pain is still present after 15 minutes, **call 911 and seek emergency treatment.**

There are other nitrate medicines that are used to decrease chest pain, but should not be used for a sudden attack. These medicines include:

- ☐ Nitroglycerin patch (Nitro-dur, Minitrin, Transderm-nitro) – place on non-hairy skin and rotate sites.
- ☐ Isosorbide dinitrate (Isordil) - short acting
- ☐ Isosorbide mononitrate (Imdur) - long acting

## Diuretics

Diuretics, or water pills, remove excess sodium (salt) and water from your body by increasing the flow of urine. Your heart can work better and you may breathe easier when the extra fluid is removed from your body. These medicines are used to treat high blood pressure, heart failure, and fluid build up in lungs, feet or hands.

**Side effects may include:** dizziness, weakness, muscle cramps, dry mouth and increased thirst.

### Medicine names:

- ☐ bumetanide (Bumex)
- ☐ hydrochlorothiazide (HCTZ)
- ☐ furosemide (Lasix)
- ☐ metolazone (Zaroxolyn)
- ☐ torsemide (Demadex)
- ☐ \_\_\_\_\_

## Angiotensin-converting enzyme (ACE) inhibitors

ACE inhibitors widen the blood vessels and help increase blood flow by blocking the production of a hormone in your body that tightens blood vessels. They help lower blood pressure, lessen the amount of work the heart needs to do and protect the kidneys. These medicines are used to treat high blood pressure, heart failure and may be used after heart attack.

**Side effects may include:** dizziness, weakness, cough and decreased ability to taste. **If you have swelling throughout face, tongue or lips, stop taking the medicine right away and call your doctor.**

### Medicine names:

- ☐ benazepril (Lotensin)
- ☐ captopril (Capoten)
- ☐ enalapril (Vasotec)
- ☐ lisinopril (Prinivil, Zestril)
- ☐ ramipril (Altace)
- ☐ \_\_\_\_\_

## Angiotensin II receptor blockers (ARB)

ARBs widen the blood vessels and help increase blood flow when a person cannot take an ACE inhibitor. They work like ACE inhibitors by blocking a hormone in your body. These medicines are used to treat high blood pressure, heart failure and may be used after heart attack.

**Side effects may include:** dizziness and weakness. **If you have swelling throughout face, tongue or lips, stop taking the medicine right away and call your doctor.**

### Medicine names:

- ☐ candesartan (Atacand)
- ☐ losartan (Cozaar)
- ☐ valsartan (Diovan)
- ☐ \_\_\_\_\_

## Statins (HMG-CoA Reductase inhibitors)

Statins block the production of cholesterol in the liver. This lowers total cholesterol and bad LDL cholesterol levels, but raises good HDL cholesterol levels. High levels of bad cholesterol in the body increase the risk of heart disease.

Your cholesterol levels should be checked with blood tests 1 to 2 times each year.

**Side effects may include:** muscle weakness or pain, elevated liver enzymes, and upset stomach.

Your doctor will check your liver function with a blood test before starting a statin. You should also have liver function testing done if you have signs of liver problems while taking a statin, such as feeling very weak or tired, loss of appetite, upper belly pain, dark urine, yellowing of your skin or the whites of your eyes.

### Medicine names:

- ☐ atorvastatin (Lipitor)
- ☐ lovastatin (Mevacor)
- ☐ pravastatin (Pravachol)
- ☐ rosuvastatin (Crestor)
- ☐ simvastatin (Zocor)
- ☐ \_\_\_\_\_

## Aldosterone inhibitors

Aldosterone inhibitors are weak diuretics, or water pills. These medicines hold on to potassium while getting rid of extra sodium (salt) and fluid in the body by blocking a hormone called aldosterone. This medicine may be given to you after a heart attack or to prevent your heart failure from getting worse.

**Side effects may include:** high potassium, fatigue, or enlargement or breast tenderness of one or both breasts in men may be seen with spironolactone only.

### Medicine names:

- ☐ eplerenone (Inspra)
- ☐ spironolactone (Aldactone)

## Calcium channel blockers

This type of medicine lowers blood pressure by either slowing the heart rate or widening the blood vessels to lower blood pressure and lessen the amount of work the heart needs to do. These medicines are used to treat high blood pressure, angina (chest pain) and slow the heart rate.

**Side effects may include:** dizziness, light-headedness, shortness of breath, slow heart rate and constipation.

### Medicine names:

- ☐ amlodipine (Norvasc)
- ☐ diltiazem (Cardizem, Dilacor, Tiazac)
- ☐ verapamil (Calan, Isoptin, Covera)
- ☐ \_\_\_\_\_

## Other medicines for your heart

### ☐ Amiodarone (Cordarone)

Slows the heart rate to allow the heart's electrical system to beat normally. Used to treat irregular heart rhythms, such as atrial fibrillation or ventricular tachycardia.

**Side effects may include:** slow heart rate, palpitations, fatigue, headache, dizziness, nausea, vomiting, unusual taste in the mouth, stomach pain, constipation or diarrhea, difficulty breathing, rash and vision problems.

### ☐ Digoxin (Lanoxin)

Digoxin can strengthen the heart muscle, so it pumps better. It also helps control the rate of your heart. It is used to treat heart failure and atrial fibrillation.

Digoxin may build up in your body, causing the amount of the drug in your blood to be higher than normal. Your doctor may order a blood test to check your level.

**Side effects may include:** loss of appetite, nausea and vomiting, diarrhea, frequent headaches, changes in vision, skipped or slow heart beats.

## Over the counter medicines for other problems

Check with your doctor or pharmacist before starting any new medicines, whether prescription or over the counter. There are some over the counter medicines that may cause side effects that can impact your heart condition.

### ☐ Acetaminophen (Tylenol)

Used for pain, fever, colds, muscle soreness, headache, arthritis, back aches and toothaches.



Avoid alcohol when taking acetaminophen because it may cause liver damage.

**Side effects may include:** allergic reaction, unusual bleeding or bruising, liver damage, fatigue, nausea, vomiting and abdominal pain.

❑ **Non-steroidal anti-inflammatory drugs (NSAIDs)** such as:

- Ibuprofen also known as Advil, Ibu-Tab, Midol IB, Motrin, Nuprin and Rufen.
- Naproxen sodium also known as Aleve.

Work by reducing the hormones that cause pain and inflammation in the body. Used to treat pain, fever, inflammation, stiffness, some types of arthritis and menstrual cramps.

**Patients with a history of heart failure, heart attack, stroke or stent in their heart should avoid use of ibuprofen or naproxen sodium because it may increase the risk of another heart attack or stroke.**

**Side effects may include:** allergic reaction, increase blood pressure, unusual bleeding or bruising, black, bloody or tarry stools, loss of hearing or ringing in the ears, headache, dizziness, nausea, vomiting, muscle cramps, numbness or tingling, and stomach problems.

❑ **Cold and sinus medicines**

For upper respiratory congestion, sneezing or sniffles. These medicines can cause increased blood pressure.

- Pseudoephedrine, found in Actifed Cold and Sinus, Advil Cold and Sinus, Benadryl-D, Drixoral Cold and Allergy, Sudafed Sinus, Mucinex-D, Zyrtec-D and Claritin-D.
- Phenylephrine, found mostly in inhalers or sprays, like Dristan Advanced Formula, Neo-Synephrine, Nostril, Rhinall, Sinex and Sudafed PE.
- Epinephrine, found mostly in inhalers or sprays, like Primatene Mist.

## Please remember to

- Take your medicines as directed by your doctor. Do not stop any of these medicines because you are feeling better.
- Tell your doctor, nurse or pharmacist if you are taking any over the counter medicines, vitamins or herbal products since they may interact with your heart medicines.

# Limiting Your Fluids

**Tell your provider if you have a water softener for drinking water** at home. Water softeners use salt in the softening agent. Choose bottled water if you can to avoid this extra amount of salt.

## Limit total daily fluids to 64 ounces or 2000 milliliters (ml)

Here are some ways to track fluids. Choose the method that works best for you:

1. Use your hospital water pitcher. If you have a 0.5 L or ½ liter pitcher, it can be refilled 3 times per day for 1500 ml. You may be able to have up to 500 ml more for fluid in foods, such as soup or ice cream, add ice to drinks, take medicines or drink water when brushing your teeth. The lines on the pitcher will show you how many milliliters or ounces you have drank.

**Note: If you have a large hospital water pitcher at home, use a limit of 1 ½ refills.**

2. In the morning, pour 64 oz or 2,000 ml of water into a large pitcher or 2 liter soda bottle. **Each time you drink any kind of fluid, pour out the same amount of water.** When the pitcher is empty, you are finished for the day.
3. Pour drinks into eight (8), 8 ounce cups for a total of 64 oz or 2,000 ml. Or use smaller cups and increase the number of portions for more beverage variety.

Use the table below to convert different kinds of fluid measures to help you keep track.

Converting Fluid Measures			
1 quart (qt.)	=	32 ounces (oz) or 4 cups	= 960 milliliters (ml)
2 ½ cups	=	20 ounces	= 600 milliliters
1 pint (pt.)	=	16 ounces or 2 cups	= 480 milliliters
1 cup (c.)	=	8 ounces	= 240 milliliters
¾ cup	=	6 ounces	= 180 milliliters
⅔ cup	=	5 ⅓ ounces	= 158 milliliters
½ cup	=	4 ounces	= 120 milliliters
⅓ cup	=	2 ⅔ ounces	= 79 milliliters
¼ cup	=	2 ounces	= 60 milliliters
1 tablespoon (Tbsp)	=	½ ounce	= 15 milliliters
1 teaspoon (tsp)	=	⅙ ounce	= 5 milliliters

### What if liquids are written in cubic centimeters?

Medicines may be written in cubic centimeter or cc. As a helpful guide, **1 cc = 1 ml**.

This means: **1 teaspoon = 5 cc = 5 ml**

**2 teaspoons = 10 cc = 10 ml**

## Staying within fluid levels

Here is an example of daily fluids. This example has 60 ounces, which is below the 64 ounce limit per day.

Meal	Food and fluid amount
<b>Breakfast</b> (20 oz)	<b>1 cup (8 oz) coffee or tea</b> <b>1 cup (8 oz) milk</b> 1 cup frosted shredded wheat squares cereal 1 poached egg 1 piece of toast with 1 teaspoon butter and 1 teaspoons jelly <b>1 medium banana (1/2 c. fluid)</b>
<b>Lunch</b> (12 oz)	<b>1 cup (8 oz) soda product</b> 1 grilled chicken sandwich -- 3 ounces grilled chicken, 1 tablespoon mayonnaise, lettuce and tomato 1 whole wheat roll 1/2 cup carrot sticks <b>1 medium apple (1/2 c. fluid)</b> 1/2 cup unsalted pretzels
<b>Snack</b> (12 oz)	<b>1 cup (8 oz) iced tea with 2 cubes of ice) (60 ml or 1/4 c.)</b> 8 unsalted crackers 1 stick low sodium cheese
<b>Dinner</b> (14 oz )	<b>1 cup (8 oz) fruit juice with 2 cubes of ice (60 ml or 1/4 c.)</b> 3 ounces lean beef 1 medium baked potato with 1 tsp butter 1 cup steamed broccoli (fresh/frozen) with lemon and salt free herbs <b>1 cup peaches (raw/canned drained of fluid) (1/2 c. fluid)</b>
<b>Snack</b> (12 oz)	<b>1 cup (8 oz) tea</b> <b>1 cup ice cream (1/2 c. fluid)</b>
<b>Fluid total</b>	<b>60 fluid oz; the daily goal is less than 64 ounces.</b>



## Tips for managing fluids

Keep track of fluids in what you eat and drink.

- Measure out water, coffee, tea, juice, carbonated beverages, all hot or cold drinks and soups.
- Limit milk to 2 cups per day.
- **Tell your provider if you have a water softener for drinking water at home.** This adds salt to the water you drink.
- **Avoid** sports drinks, energy drinks, regular tomato juice, carbonated beverages with sodium or salt added, whole milk, buttermilk, instant cocoa and commercially made milkshakes.
- **Avoid alcohol**, such as wine, beer or liquor. Alcohol can change how well your heart medicine works. Talk with your provider about alcohol.

Ice, 1 cup crushed	=	1/2 c. fluid / 120 ml
Ice, 1 cube	=	2 tbsp fluid / 30 ml
Fruit, 1 cup	=	1/2 c. fluid / 120 ml
Ice cream, sherbet, yogurt or pudding, 1 cup	=	1/2 c. fluid / 120 ml
Gelatin/Jello, 1/2 cup	=	1/2 c. fluid / 120 ml
Popsicles, 1 twin bar	=	1/3 c. fluid / 40 ml

# 10 Ways to Lower Salt in Your Diet

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## How to make a low salt diet work for YOU

**1. Limit processed foods.** Most processed foods, such as chips, cookies, canned soups, tomato sauces, lunch meat and frozen meals have a lot of added salt and sugar. Choose fresh fruits and vegetables, low-sodium whole grains and low-sodium cheeses as snacks.

**2. Plan for salt across your daily meals and snacks.** Plan for 3 meals and 2 snacks a day. Start with a low-salt commercial cereal or no-salt cooked cereal at breakfast. Choose low salt bread or crackers at lunch. Instead of processed meat, cook your own meat at home and use it for a sandwich. Add lettuce and tomato for flavor, instead of condiments. Use herbs and grilled vegetables with chicken for dinner.

**3. Read nutrition labels to guide your food choices.** Choose sodium free, very low sodium or low sodium products. Make healthy choices when food shopping, such as:

- Cheese with less than 80 mg sodium per ounce.
- Breads with less than 100 mg sodium per slice.
- Soups with less than 100 mg sodium per ounce.

**4. Buy fresh or frozen foods instead of canned.** Choose fresh foods when you can or go for frozen without any added sauces. If using canned foods, drain and rinse foods to reduce salt. Rinsing beans, tuna and canned vegetables before using them does remove some, but not all of the salt. **Avoid canned, smoked or processed meats, such as bacon, sausage, pre-packaged lunch meat or products where salt or saline is added.**

**5. Eat more fruits and vegetables.** Add them to salads, main dishes, side dishes or eat them plain. Fruits and vegetables help your body to remove water and avoid fluid build-up. They are also low calorie and naturally low in salt.





**6. Learn to enjoy the natural taste of food.** Many foods are so processed that we have to learn to get used to foods with less salt. It is about changing both how food is prepared and change our taste to enjoy food with spices other than salt. Try to cook meat at home and add unsalted nuts or seeds, lentils, unsalted or low-sodium broth, and herbs or spices. Use the cooking process, such as grilling, poaching, baking to add taste and flavor. Taste food as you cook to know what each food item adds to a dish.

**7. Create low sodium condiments.** Make your own low salt salad dressing, dip, gravy or sauce. Most commercial or packaged products are high in sodium. If you choose the low salt or no salt options, you may be able to have more. Otherwise, limit these ingredients:

- Salted butter or margarine, 4 tablespoons a day
- Mayonnaise, 2 tablespoons a day
- Sour cream, 2 ounces (1/4 cup) a day
- Ketchup or mustard, 1 tablespoon a day
- Regular salad dressing, 2 teaspoons a day
- Canned tomato paste, 1/4 cup a day
- Regular tomato sauce, 1/2 cup a day

**8. Choose low salt or salt-free beverages. Save salt for the food you eat.** Water, coffee, tea, carbonated seltzer water and fruit juices have very low or no salt in them. Limit milk to 2 cups of low fat milk a day. Avoid energy and sport drinks, commercially made milkshakes, and instant cocoa that have added salt.

**9. Ask restaurants for low salt substitutions.** Ask wait staff or the chef how food is prepared. Choose foods made to order or low-salt preparations. Have sauce or dressings on the side where you control the amount used. Choose grilled, broiled, baked, boiled or steamed foods instead of fried. Avoid casseroles where there may be hidden salt, based on the ingredients used.

**10. Check over the counter and non-prescription drugs and supplements for salt.** Many antacids, laxatives, aspirin, and cough medicines have salt or sodium. Many mouthwashes also have sodium. Ask your doctor or pharmacist for help before you buy these products and check product labels.



## Online resources

Check out these links for tips and nutrition calculators:

- US Department of Agriculture  
[www.choosemyplate.gov](http://www.choosemyplate.gov)
- American Heart Association  
[www.heart.org](http://www.heart.org)
- Academy of Nutrition and Dietetics  
[www.eatright.org](http://www.eatright.org)
- FITDAY  
[www.fitday.com](http://www.fitday.com)
- MyFitnessPal  
[www.myfitnesspal.com](http://www.myfitnesspal.com)

# Heart Healthy Foods

## Low Fat, Low Cholesterol and Low Sodium

Follow these guidelines for food items to use and those to avoid to keep your heart healthy.

Type of Food	Foods to <u>include</u>	Foods to <u>avoid</u>
<b>Meat and Meat Substitutes</b>	<ul style="list-style-type: none"><li>• Chicken and turkey with skin removed.</li><li>• Fish, canned tuna or salmon (packed in water), shell fish. Shrimp and crayfish are higher in cholesterol than other fish but lower in fat and cholesterol than most meats and poultry.</li><li>• Lean beef, fresh pork, veal or lamb. Trim all fat. Limit to 3 servings (3 ounces each) a week. These are considered “red meats.” Leanest cuts include beef round, sirloin, loin, rump or pork tenderloin, sirloin or loin roast.</li><li>• Dried beans and peas, cooked without adding meat fat.</li><li>• Low-cholesterol eggs or egg whites.</li><li>• Vegetable patties (watch for high sodium).</li><li>• Casseroles and mixed dishes made with allowed ingredients.</li><li>• Tofu.</li></ul>	<ul style="list-style-type: none"><li>• Fatty, well-marbled meats, poultry skin.</li><li>• Sausage, wieners, lunch meats.</li><li>• Cured meats, such as ham, corned beef, pastrami, salami, or pepperoni.</li><li>• Regular frozen TV dinners and entrees, pot pies, canned or packaged entrees, like Hamburger Helper, frozen or store made pizza.</li><li>• Restaurant prepared Chinese, Italian or Mexican foods.</li></ul>
<b>Milk and Dairy</b>	<ul style="list-style-type: none"><li>• Fat free (skim) or 1% milk.</li><li>• Fat free and low-fat yogurt. Choose “lite” versions if trying to lose weight.</li><li>• Homemade cocoa or chocolate milk made from skim milk.</li><li>• Instant cocoa made with skim milk powder.</li><li>• Low-fat or fat-free sour cream.</li><li>• Low-fat buttermilk.</li><li>• Low-fat or fat-free cottage cheese or ricotta cheese.</li><li>• Low-fat or low-cholesterol cheeses.</li><li>• Reduced-fat or fat-free cream cheese.</li><li>• Low-fat soy milk.</li></ul>	<ul style="list-style-type: none"><li>• 2% and whole milk.</li><li>• Buttermilk, chocolate milk or cocoa made from whole milk.</li><li>• Instant cocoa mixes with palm or coconut oil or butterfat added.</li><li>• Yogurt made with whole milk.</li><li>• Cream, half and half, sour cream, whipped cream, non-dairy or frozen whipped toppings.</li><li>• Processed cheeses and cheese foods that have more than 5 grams fat per serving.</li><li>• Natural cheese made with whole milk or cream.</li></ul>

Type of Food	Foods to <u>include</u>	Foods to <u>avoid</u>
<b>Breads and Starches</b>	<ul style="list-style-type: none"> <li>Whole grain or enriched breads and cereals, bagels and English muffins.</li> <li>Melba toast, matzo, unsalted top saltines, graham crackers, rye wafers and low salt crackers.</li> <li>Homemade stuffing or dressing prepared with allowed ingredients and not cooked inside the poultry cavity but baked in separate dish.</li> <li>Homemade biscuits, muffins, pancakes, waffles, corn bread made with allowed ingredients. Egg substitutes can be used instead of whole eggs in these products.</li> <li>Spaghetti, noodles, macaroni, rice or tortillas. Whole wheat are best.</li> <li>Salt-free pretzels; salt-free, air-popped popcorn; reduced fat microwave popcorn. Limit fat free potato chips to a 1 oz serving per day.</li> <li>Baked goods, such as cookies or cakes, made with allowed ingredients. If you have diabetes, these foods should be consumed in very moderate amounts.</li> </ul>	<ul style="list-style-type: none"> <li>Commercially prepared biscuits, muffins, pancakes, waffles, corn bread, donuts, sweet rolls, coffee cakes, packaged nut breads, cakes, pies or cookies.</li> <li>Egg noodles, packaged breading and stuffing mixes, seasoned rice mixes, soy meat extenders, and any mix that comes out of a box (These are usually very high in sodium).</li> <li>Salted crackers, corn chips, potato chips or pretzels.</li> </ul>
<b>Vegetables and Fruits</b>	<ul style="list-style-type: none"> <li>All raw or fresh cooked vegetables, plain frozen vegetables or salt-free canned vegetables.</li> <li>All fresh, frozen, dried or canned fruits, preferably packed in natural juice or water.</li> <li>Canned tomato puree and tomato paste may be used in recipes, but do not add salt.</li> <li>Homemade tomato sauce without added salt or store bought low sodium sauce</li> <li>Frozen French fries. Do not add salt. Bake, rather than fry them.</li> <li>Pan fried potatoes in minimum amount of polyunsaturated or monounsaturated oil such as vegetable, canola or olive oil.</li> <li>All fruit juices and salt-free vegetable juices.</li> </ul>	<ul style="list-style-type: none"> <li>Sauerkraut.</li> <li>Vegetables, such as greens, cooked with meat fat.</li> <li>Frozen vegetables in cream, cheese or butter sauce.</li> <li>Pickled vegetables.</li> <li>Packaged potato mixes, such as escalloped or au gratin.</li> <li>Regular canned vegetables: if used on occasion, drain and rinse vegetables and cook in fresh water.</li> <li>Regular V-8 or tomato juice.</li> </ul>

Type of Food	Foods to <u>include</u>	Foods to <u>avoid</u>
<b>Fats and Oils</b>	<ul style="list-style-type: none"> <li>Liquid vegetable oils, such as canola, olive, safflower, corn, sunflower, soy, cottonseed or peanut.</li> <li>Soft tub margarines that list “liquid vegetable oil” or water as the first ingredient. Use “squeeze” or spray margarines for the least amount of saturated fats.</li> <li>Low-fat or fat-free mayonnaise or salad dressing.</li> <li>Homemade sauces made with allowed ingredients.</li> </ul>	<ul style="list-style-type: none"> <li>Coconut oil, palm oil, partially hydrogenated oils and products using these oils.</li> <li>Tartar sauce.</li> <li>Butter, lard, salt pork, bacon, meat fat, sour cream, gravy (mixes, canned, or made from meat drippings), cream and cheese sauces.</li> <li>Margarine which list “partially hydrogenated vegetable oil” as the first ingredient.</li> <li>Salad dressings: Roquefort or Blue cheese, any containing cheese or sour cream, creamy varieties, store bought slaw dressing or real mayonnaise.</li> </ul>
<b>Snacks</b>	<ul style="list-style-type: none"> <li>Unsalted popcorn or unsalted pretzels.</li> <li>Regular or sugar-free gum and mints, sugar, brown sugar, molasses, honey, syrups, fructose, gum drops or hard candy.</li> <li>Regular or sugar-free soda pop, Gatorade and Kool-Aid, or canned, sweetened fruit drinks.</li> <li>Decaffeinated coffee, tea, iced tea.</li> <li>Homemade cakes, cookies and pies in moderation, made with recommended oils and margarine.</li> <li>Ice milk, low-fat frozen yogurt, sherbet, sorbet, or popsicles in moderation.</li> <li>Pudding made from fat free (skim) or 1% milk.</li> </ul>	<ul style="list-style-type: none"> <li>Salted popcorn, potato chips, corn chips, pretzels and other salted or deep fried snack foods.</li> <li>Chocolate or candy bars.</li> <li>Store bought pies, cakes and cookies, cake mixes, pie crusts, canned puddings and pie fillings.</li> </ul>



Type of Food	Foods to <u>include</u>	Foods to <u>avoid</u>
<b>Condiments</b>	<ul style="list-style-type: none"> <li>• Mrs. Dash.</li> <li>• Vinegar, lemon juice, garlic, garlic powder, onion powder, herbs and spices, salt substitute.</li> <li>• Horseradish.</li> <li>• Catsup and mustard, but no more than 2 tablespoons per day because of sodium content.</li> </ul>	<ul style="list-style-type: none"> <li>• Meat tenderizer, monosodium glutamate (MSG), seasoned salt, onion salt, celery salt, Morton Lite Salt, sea salt, spice blends which contain salt, seasoning mixes.</li> <li>• Baking powder, baking soda (use as an ingredient for baking only).</li> <li>• Chili sauce, soy sauce, steak sauces, BBQ sauce, Worcestershire sauce, cooking wine, cooking sherry.</li> <li>• Dill pickles, sweet pickles, pickle relish, olives, imitation bacon bits.</li> </ul>

# Making Sense Out of Food Labels

Claims on food packages can be confusing. Knowing what is in food may help you to make healthier choices. Reading food labels is the best way to get information about what is in your foods.



## Nutrition Facts

### 1. Look for the Nutrition Facts on the food label.

The numbers on this picture (right) match the numbers in this section. Refer back to the picture as you learn what each item means.

**2. Serving Size:** This is the amount of food recommended to be eaten at one time. All of the following nutrition information is based on this serving size. For example, if you ate 2 servings, you would need to double the numbers listed on the label.

**3. Calories:** The average adult needs about 2,000 calories a day from food and drinks. Use this number to help you figure out if this product fits into your daily eating plan or not. Too many calories each day can lead to weight gain.

**4. Fat:** Not all fat is created equal. There are 4 types of fat in our foods: saturated fat, trans fat, monounsaturated fat and polyunsaturated fat. The FDA only requires that food makers list saturated fat and trans fat on their Nutrition Facts labels, but sometimes you might find all 4 types listed.

1	<b>Nutrition Facts</b>	
2	6 servings per container	
	Serving size	1 cup (140g)
3	Amount per serving	
	<b>Calories</b>	<b>170</b>
4		% Daily Value*
	Total Fat 8g	10%
	Saturated Fat 3g	15%
	Trans Fat 0g	
5	Cholesterol 0mg	0%
6	Sodium 5mg	0%
7	Total Carbohydrate 22g	8%
8	Dietary Fiber 2g	7%
	Total Sugars 16g	
9	Includes 8g Added Sugars	16%
10	Protein 2g	
11	Vitamin D 0mcg	0%
	Calcium 20mg	2%
	Iron 1mg	6%
	Potassium 240mg	6%
	*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.	

Source: Adapted from U.S. Food and Drug Administration

Too much saturated fat or trans fat in the diet can lead to health problems, such as a heart problem getting worse or cancer. An average adult following a 2000 calorie diet should aim to limit total fat to 45 to 75 grams per day (20 to 35% of total calories) and limit saturated fat to 11 to 13 grams per day (5 to 6% of total calories). Trans fat should be avoided as much as possible.

Check the list below to see how much you should have if you eat a different amount of calories per day.

If your daily <b>calorie total</b> is:	Your <b>total fat</b> limit fat per day is:	Your <b>saturated fat</b> limit per day is:
2000 calories	45 to 75 grams	11 to 13 grams
1800 calories	40 to 70 grams	10 to 12 grams
1500 calories	35 to 60 grams	8 to 10 grams
1200 calories	25 to 45 grams	6 to 8 grams

Note: Although the food label may say the food item has 0 grams of trans fat, it may contain up to 0.5 gram per serving. The best way to check for trans fats is to look at the ingredient list and look for “partially hydrogenated oils.” If you see these words, try to find a similar product made with different ingredients.

- 5. Cholesterol:** Cholesterol is found in animal products, such as cheese, egg yolks, milk and butter. Eating too many of these foods can increase your risk for heart disease. Try to limit total cholesterol intake to 300 mg per day. If you are at risk for heart disease or have type 2 diabetes, 200 mg per day is the maximum recommended amount. Plant-based foods do not have any cholesterol.
- 6. Sodium:** Many processed foods contain sodium, which acts as a preservative and adds flavor. Most Americans are eating too much sodium. Keeping your sodium intake low may decrease high blood pressure and lower your risk for stroke, heart disease and kidney disease. The 2015 Dietary Guidelines for Americans suggests limiting sodium intake to no more than 2,300 mg per day although some older individuals or those with high blood pressure may want to limit this intake even more.  
Guideline: Look for foods that have less than 300 mg of sodium per serving. Watch the number of servings of any food you eat.
- 7. Total Carbohydrates:** Carbohydrates are in foods like bread, pasta, potatoes, fruits and vegetables. Some people, like those with diabetes, may want to control the amount of carbohydrate that they have with their meals and snacks.
- 8. Dietary Fiber:** Fiber is the bulk part of grains, beans, peas, fruits and vegetables. Fiber helps the body’s digestive system work well and may help lower the risk of some cancers and heart disease. If you want to increase your fiber intake, look for foods with at least 3 grams of fiber per serving.
- 9. Added Sugar:** Some sugars are naturally found in food, like those in fruit, and others are added when they are produced or packaged. Too many of these “added sugars” can increase your risk for developing diabetes, heart disease, obesity and other health conditions.  
Men: limit sugar to no more than 150 calories or about 3 tablespoons (38 grams) per day.  
Women: limit sugar to no more than 100 calories or about 2 tablespoons (25 grams) per day.  
Make sure to check drinks also for added sugar.

- 10. Protein:** Protein can help to build muscle, regulate hormones and is involved in immune function. Most people should aim for about 60 to 100 grams of protein per day.
- 11. Vitamins and Minerals:** Most Americans are not meeting the recommended amount of these nutrients each day. Look for food products that are a good source of these nutrients. Your goal is to reach 100% of each for the day.
- 12. % Daily Value:** Daily values are the percentage of nutrients the product provides based on a diet of 2,000 calories per day. Your nutrient needs may be less or more than the Daily Value depending on your health concerns. For certain nutrients, like sodium and added sugar, aim for lower percentages. For other nutrients, like fiber, vitamins and minerals, aim for 100% a day.

## The Ingredient List

In addition to the Nutrition Facts Label, look at a product's ingredient list to help you make better food choices. The ingredient list tells you what is in the food. Food makers list ingredients by weight in order of greatest amount to least amount in the food. This is also helpful for people with food allergies. Use the table to help you find ingredients that are high in that nutrient.

Nutrient	Common Ingredients	
<b>Sodium</b>	<ul style="list-style-type: none"> <li>Baking powder</li> <li>Baking soda</li> <li>Monosodium glutamate</li> </ul>	<ul style="list-style-type: none"> <li>Salt (regular or sea salt)</li> <li>Sodium</li> </ul>
<b>Cholesterol</b>	<ul style="list-style-type: none"> <li>Any animal fats</li> <li>Lard</li> </ul>	<ul style="list-style-type: none"> <li>High fat products, such as whole milk and cheese</li> </ul>
<b>Saturated and Trans Fats</b>	<ul style="list-style-type: none"> <li>Any animal fats except fish</li> <li>Coconut butter</li> <li>Coconut oil</li> </ul>	<ul style="list-style-type: none"> <li>Palm oil</li> <li>Partially hydrogenated oils</li> </ul>
<b>Sugar</b>	<ul style="list-style-type: none"> <li>Brown sugar</li> <li>Carob powder</li> <li>Corn syrup/solids</li> <li>Dextrin</li> <li>Dextrose</li> <li>Fructose</li> <li>Glucose</li> </ul>	<ul style="list-style-type: none"> <li>High fructose corn syrup</li> <li>Honey</li> <li>Invert sugar</li> <li>Lactose</li> <li>Mannose</li> <li>Molasses</li> <li>Sucrose</li> </ul>



## Common food label terms

Key Words	Definition
<b>Free</b>	Contains under: 5 calories; 5 mg sodium; ½ g sugar, fat or saturated fat; 2 mg cholesterol; and 2 g or less of saturated fat per serving
<b>Low</b>	Contains no more than: 40 calories; 140 mg sodium; 3 g fat; 1 g and 15% total calories saturated fat; 20 mg cholesterol or less per serving
<b>Reduced</b>	An altered product that contains 25% less of a nutrient (fat, sugar, cholesterol, sodium) or 25% fewer calories than a reference food
<b>Less</b>	Contains 25% less of a nutrient or 25% fewer calories than a reference food
<b>Light</b>	An altered product contains a fewer calories or 50% less fat per serving; if 50% or more of the calories come from fat, the reduction must be 50% of the fat; the sodium content has been reduced by 50%
<b>Lean</b>	A meat, poultry, seafood, main dish or meal product which contains under 10 g fat, 4.5 g saturated fat and 95 mg cholesterol
<b>Extra lean</b>	A meat, poultry, seafood, main dish or meal product that contains under 5 g fat, 2 g saturated fat and 95 mg cholesterol

# Restaurant Rehab

## Using the Menu to Make Heart Healthy Choices

It can be hard to find heart healthy restaurant foods. Restaurant foods are often high in calories, fat, and sodium. For this reason, limit eating restaurant foods to 1 or 2 times a week. This includes fast food, sit down restaurants, and carry out. Here are some other tips to help you make heart healthy choices.

### Tips to reduce calories and fat

- Restaurant meal portions are enough to feed at least 2 people. Split a meal with another person or take at least half of the meal home for leftovers.
- Ask your server about ways to make a healthier meal. Avoid deep fried foods, remove skin from poultry, and cut off any fat you can see. Try grilled chicken instead of fried chicken to reduce fat and calories. Read menu descriptions for key words, like smothered or sauced. How they prepare your meal or even spice it can play a part in how healthy it is.
- Choose leaner cuts of meat, fish, or poultry prepared with no added fat. Broiling, poached, grilled, baked, and roasted are usually good choices.
- Get sauces, gravies, margarine, butter, salad dressing, and sour cream on the side. Use small amounts of these for flavor. Dip your fork in them before getting your bite of food. Each bite will have the taste, but you will use less.
- Ask for other high fat ingredients on the side, like cheese and nuts. Many salads are loaded with high fat ingredients like these. You can still eat some of them, but if you get them on the side, you can control the amount.
- Pizza is often high fat and high sodium because of the large amount of cheese. Choose a thin crust to lower calories and select vegetables over pepperoni, bacon, ham and sausage. If you want meat on a pizza, chicken is often a better choice. Remember to eat any pizza in moderation!



## Restaurant foods to choose

The following pages have lists with some key words to help you choose **lower fat food options** in various types of restaurants. However, some low fat foods are very high in sodium. If you need to limit your sodium, avoid those marked as such.

Type of Food	Choose These Foods	Limit These Foods
<b>American</b>	<ul style="list-style-type: none"> <li>• BBQ sauce (high sodium)</li> <li>• Cocktail sauce (high sodium)</li> <li>• Green or red onions</li> <li>• Honey mustard</li> <li>• Lettuce and tomatoes</li> <li>• Mustard</li> <li>• Sautéed onions, peppers or mushrooms (with little or no oil)</li> <li>• Foods that are mesquite marinated, grilled, charbroiled or broiled</li> </ul>	<ul style="list-style-type: none"> <li>• Bacon (strips, crisps or crumbled)</li> <li>• Blue cheese</li> <li>• Butter or garlic butter</li> <li>• Cheese (grated, melted, topped or smothered)</li> <li>• Guacamole</li> <li>• Sausage</li> <li>• Sour cream</li> <li>• Food that is battered or fried</li> <li>• Food that is described as large, jumbo, piled high, stacked, layered or stuffed</li> </ul>
<b>Chinese</b>	<ul style="list-style-type: none"> <li>• Assorted vegetables</li> <li>• Bean curd</li> <li>• Light wine sauce</li> <li>• Sizzling platter</li> <li>• Foods that are simmered, steamed, roasted or stir-fried</li> </ul>	<ul style="list-style-type: none"> <li>• Duck</li> <li>• Egg Foo Young with cashews</li> <li>• Hoisin sauce</li> <li>• Foods that are breaded, fried or crispy</li> </ul>
<b>Continental/ French</b>	<ul style="list-style-type: none"> <li>• Cajun spiced</li> <li>• Cilantro</li> <li>• Roasted red peppers</li> <li>• Vinaigrette</li> <li>• Wine and herbs</li> <li>• Wine sauce</li> <li>• Foods that are blackened, roasted, steamed, poached, grill, marinated or broiled</li> </ul>	<ul style="list-style-type: none"> <li>• Au gratin</li> <li>• Bacon or sausage</li> <li>• Casserole</li> <li>• Cheese sauce</li> <li>• Cream sauce</li> <li>• Creamy, mushroom sauce</li> <li>• Drawn butter or butter sauce</li> <li>• Hollandaise</li> <li>• Melted cheese</li> <li>• Pastry shell</li> <li>• Phyllo dough</li> <li>• Foods that are stuffed with bread crumbs</li> </ul>

Type of Food	Choose These Foods	Limit These Foods
<b>Italian</b>	<ul style="list-style-type: none"> <li>• Artichoke hearts</li> <li>• Capers</li> <li>• Florentine</li> <li>• Herbs and spices</li> <li>• Light red or wine sauce</li> <li>• Mushrooms</li> <li>• Peppers</li> <li>• Primavera</li> <li>• Shallots or onions</li> <li>• Sun-dried tomatoes</li> <li>• Foods that are sautéed or grilled</li> </ul>	<ul style="list-style-type: none"> <li>• Alfredo sauce</li> <li>• Cannelloni</li> <li>• Pasta alla Carbonara</li> <li>• Creamy sauce</li> <li>• Egg and cheese batter</li> <li>• Manicotti</li> <li>• Oil</li> <li>• Pancetta</li> <li>• Parmigiana</li> <li>• Prosciutto</li> <li>• Saltimbocca</li> <li>• Veal sausage</li> <li>• Foods that are stuffed with cheese or fried</li> </ul>
<b>Mexican</b>	<ul style="list-style-type: none"> <li>• Enchilada sauce</li> <li>• Lettuce and tomatoes</li> <li>• Mole sauce</li> <li>• Picante sauce (high sodium in large amounts)</li> <li>• Salsa (high sodium in large amounts)</li> <li>• Soft corn tortillas</li> <li>• Spicy beef or chicken</li> <li>• Foods that are grilled, marinated or simmered</li> <li>• Guacamole (eat in small amounts - high in fat but healthy monounsaturated fat)</li> </ul>	<ul style="list-style-type: none"> <li>• Bacon</li> <li>• Cheese sauce</li> <li>• Chorizo</li> <li>• Fried taco bowls</li> <li>• Refried beans</li> <li>• Sour cream</li> <li>• Tortilla chips</li> <li>• Foods that are covered with cheese or fried</li> </ul>

# Check Your Weight

After surgery, there is a risk of fluid overload where your body is not able to rid itself of excess fluid. This can put extra strain on your heart. Check your weight each day to measure weight gain. **If you gain 2 to 3 pounds in 24 hours, or 5 or more pounds in a week, call your doctor or nurse** so treatment can be started if needed.

**Check your weight and record it every morning after using the bathroom, but before eating breakfast.** Weigh yourself at about the same time and wear clothing of similar weight to get an accurate measure of weight.

[illegible][illegible][illegible]



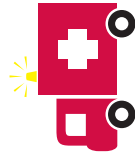
## SYMPTOMS:

## WHAT TO DO:

### Emergency Zone

#### Suspected stroke:

- New numbness, muscle weakness, trouble swallowing or problems talking
- Severe headache or confusion
- Onset of severe chest pain, jaw pain and/or severe shortness of breath
- Loss of consciousness



# Call 911

### Red Zone

- Shortness of breath that is not relieved by rest (particularly if it worsens when you lay down or if you need to sit in a chair to sleep)
- Racing/fast heartbeat or if it is very slow or “skips” a beat
- Lightheadedness, dizziness or feeling unsteady
- Worsening changes in your incisions or wounds (swelling, redness, drainage)
- Signs of bleeding
- Vomit that looks like coffee grounds or vomit with bright red blood
- Bright red blood in stool or dark, tarry stool

### You May Need to Be Evaluated Right Away

**Call 614-293-5502**

for further assessment by a doctor or nurse practitioner

If you're unable to reach us, please contact your local physician

### Yellow Zone: Caution

If you have any of the following signs or symptoms:

- Weight gain of 2 to 3 pounds in 24 hours; or 5 or more pounds in a week
- Increased swelling in your legs, feet, ankles or stomach
- Increased cough or increase in shortness of breath with activity
- Loss of appetite, nausea and/or vomiting lasting greater than 24 hours
- Swelling, redness, drainage of wounds or fever
- Questions or concerns about medications or side effects

### Your Symptoms Need Further Assessment

We will work to determine if medications or other therapies may need to be adjusted or if an appointment may be needed:

- If you're at a skilled nursing/rehabilitation facility or if you have home health services, notify your nurse (they may need to contact your doctor)
- If you're at home, please call 614-293-5502

### Green Zone

- No shortness of breath, swelling or weight gain
- No chest pain
- No increase in surgical site pain
- No swelling, no redness, no drainage of wounds and no fevers
- Ability to maintain your activity level

### Progressing as Expected

- Your symptoms are under control
- Continue taking your medications as ordered
- Continue daily weights
- Continue to follow dietary restrictions that have been recommended
- Keep all physician appointments

**If you're not feeling like yourself or something has changed and is bothering you, please call 614-293-5502.**



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