**Definition:**
- The normal heart is a strong, muscular pump
- Heart failure is a chronic, progressive condition in which the heart muscle has become weakened and is not able to pump effectively
- Left sided failure
  - The heart muscle cannot pump blood out of the heart effectively
- Right sided failure
  - The heart cannot fill with blood effectively because the heart muscle is too stiff.

Consequence...
The heart is not capable of providing oxygen rich blood to vital organs of the body

**Causes of Heart Failure:**
- High Blood Pressure
- Diabetes
- Irregular Heart Beat
- Heart Attack
- Heart Valve Disease
- Excessive Alcohol Intake
- Infection or Illness

**Common Medications and Treatment:**
Take medications exactly as prescribed
Do not stop medications without consulting your primary care provider or cardiologist
- Decrease blood pressure and the demands on the heart
  - Ace-inhibitors (lisinopril): decreases blood pressure
  - Angiotensin receptor blockers (losartan): generally for persons who cannot tolerate Ace-inhibitors
  - Beta-Blockers (metoprolol): slows heart rate and is generally given after someone has a MI
  - Calcium Channel Blockers (diltiazem): relaxes coronary arteries and allows more oxygen to the heart muscle.
- Improve the functioning ability of the heart
  - Cardiac glycosides (digoxin or the brand name Lanoxin): results in each beat of the heart being more controlled and efficient. This medication needs to be monitored by a regular laboratory test to ensure that the dosage is correct.
- Decreases the amount of fluid in the body and prevents fluid overload
  - Diuretics (hydrochlorothiazide or furosemide). Removes excess fluid out of the body so the
heart does not have as much to pump around.

**Monitoring**
Keep a Log of daily weight, daily blood pressure, and symptoms (and take your log to every MD visit)

- **Weigh DAILY**
  - Weigh every morning right when getting out of bed, after urinating, before any change in clothes, food or fluid
  - Report changes in weight to healthcare provider on same day:
    - Increase in 2 pounds overnight, or
    - Increase in 3 pounds in 5 days, 5 pounds in 7 days, or
    - Decrease of 3-5 pounds, they maybe becoming dehydrated.
- Check your blood pressure daily and keep a log
- Log your symptoms (and/or changes in symptoms)
- Monitor how much fluid you are drinking.
  (not all persons require a fluid restriction but if they get edema (swelling)—limit fluid to 2000 cc/day or 8.5 cups (cup = 8 ounces)

**When to Seek Medical Attention:**
Signs and symptoms of worsening conditions:
- Getting tired very easily
  - Cannot engage in any kind of activity (including ADLs) for very long, decreasing ability to exercise or even walk across the room
- Muscle weakness
- Nausea or anorexia (no appetite)
- Early satiety
  - Becomes full when eating very early and does not eat much
- Weight loss, unexplained
- Feeling tired and run down all the time (malaise)
- Sleep disturbance
- Confusion, impaired concentration
- Resting rapid heart rate (tachycardia)
- Decrease urination during the day and increased at night due to gravity and positioning (Daytime oliguria with recumbent nocturia)
- Cool extremities

**Call PCP right away**
- Weight gain of 3 pounds in 1 day, or 5 pounds in a week
- Difficulty breathing at rest
- Increased shortness of breath with activity
- Finding that you have to use more pillows to sleep at night so you can breathe better
- Restlessness
- Dizziness
Requires emergent care (call 911):
✓ Trouble breathing: Shortness of breath that is worse than usual or not being relieved with rest or very rapid breathing (tachypnea)
✓ Sudden swelling in legs, feet, ankles, or hands
✓ Rapid heart beat
✓ Feeling like you might pass out, dizziness, pale and sweating
✓ Cough that won’t go away or produces pink foamy sputum
✓ Chest pain that won’t go away and is not relieved by Nitroglycerin
✓ Anxiety with a senses of suffocation
✓ Confusion

What Else Can I Do To Help Manage This Condition?

- Lifestyle changes
  - If you smoke quit
  - Avoiding alcohol and caffeine
    - Decrease or if advance heart failure avoid alcohol.
    - Alcohol consumption should be limited to special occasions. (10 ounces of beer, 5 ounces of wine, 1.5 ounces of hard liquor)
  - Eat a heart healthy low sodium diet
  - Being physically active—Have an exercise plan!
    - Low level of exercise 3-4 x a week and slowly increase. After a hospitalization, person may be a candidate for cardiac rehab.
  - Manage stress
- Low salt diet
  - Sodium (salt) restriction: 2000 mg a day-- not more than 700 mg per meal
  - Choose foods naturally low in salt:
    - Fresh fruits & vegetables
    - Fresh meat, poultry, fish
    - Canned vegetables that say “No Salt Added”
  - Regularly check sodium content on food labels
  - Most IMPORTANTLY...
  - Stop adding salt to food!!