

Objectives

At the conclusion of this presentation the learner should be able to:

- 1. Understand blood flow through the heart
- 2. Understand why CHF occurs
- 3. Understand how salt plays a role
- 4. Know how to monitor your patient
- 5. Understand why daily weights are so important
- 6. List what CNA's should look for



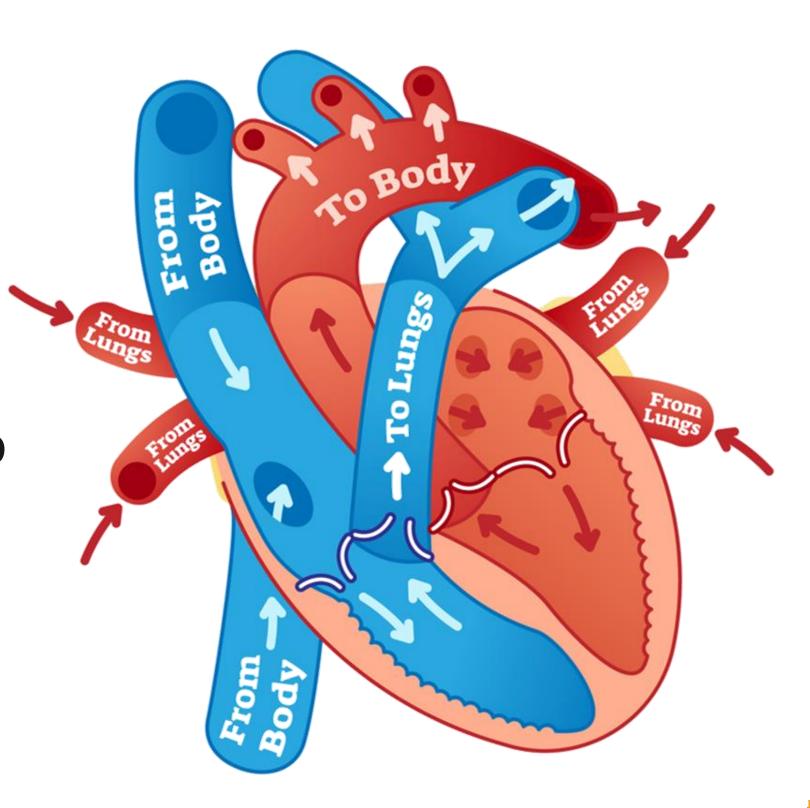
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Back to Basics

- The heart has 4 chambers:
 - ✓2 top chambers called atriums
 - √2 bottom chambers called ventricles
- The top chambers contract together
- The bottom chambers contract together
- Blood flows one way through the heart.

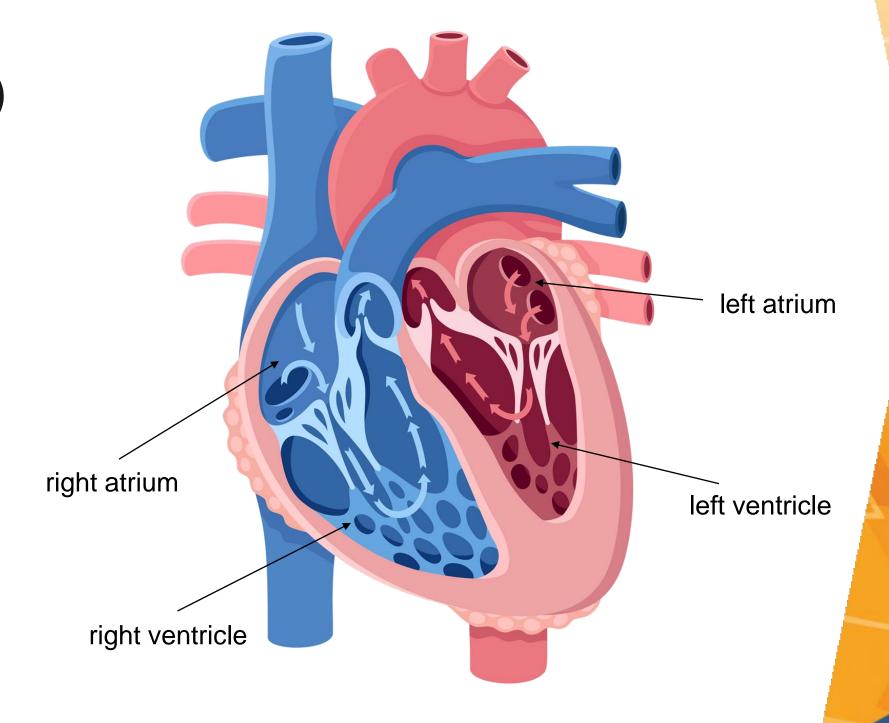
The Heart and Circulation

- The job of the heart is to circulate blood throughout the body.
- The heart is really 2 pumps working side-by-side.
- The **right** side is pumps blood to the lungs to get oxygen.
- The left side pumps blood that has oxygen to all tissues of the body.



Blood Flow Through the Heart

- Right Atrium (top chamber) →
 right ventricle (bottom chamber)
 → lungs →
- Lungs → Left atrium (top chamber) → left ventricle (bottom chamber) → body





What Causes the Heart to Have CHF?

- CHF is the hearts inability to pump enough blood through the body to meet the needs of the body.
- This leaves the body needing more oxygen and nutrients, or food.
- CHF can be:
 - ✓ Right-sided or Left-sided
 - ✓ Diastolic or systolic
 - ✓ Acute or chronic.

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Left-sided and Right-sided Heart Failure

Left-sided heart failure

- Lungs → Left atrium (top chamber) → left ventricle (bottom chamber) → body
- Blood is not pumped from the heart to the lungs
- Causing difficulty breathing, congested cough, and low POX levels

Right-sided heart failure

- Right Atrium (top chamber) →
 right ventricle (bottom chamber)
 → lungs →
- Blood is not pumped from the right side of the heart backs up into the body
- Causing fluid buildup in legs, abdomen, and feet



How Does Heart Failure Affect the Body?

- Not enough blood circulating
- "Congestion" or fluid build up
- Shortness of breath, tired, patient is unable to lie flat in bed.





What are the Symptoms?

• Think FACES...

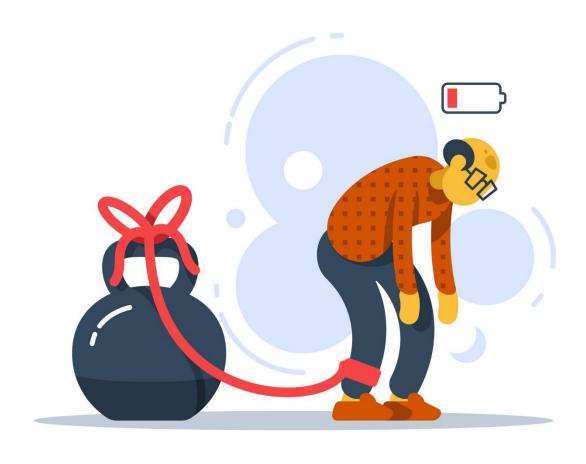
Fatigue

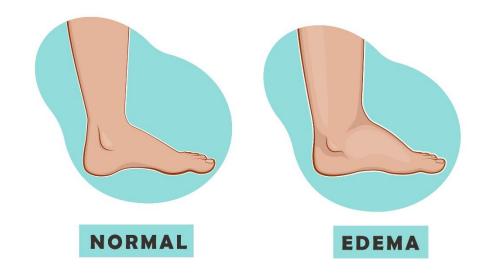
Activities limited

Chest congestion

Edema or ankle swelling

Shortness of breath







What Does Salt Intake Have to Do With This?

- In heart failure, the body holds on to extra sodium and water.
- Salt has sodium.
- For most people, the more sodium you eat, the more fluid you will hold on to...



Where are the Sodium Sources?

• 15% of sodium intake from the saltshaker.

• 10% of sodium comes naturally from food.

• Remainder (75%) comes from the making of convenience foods!







Where's the Salt?

Foods such as:

- Frozen dinners
- Cold cuts, pizza, cheeses, dried and canned soups
- Salad dressings, biscuit mixes, canned and jarred sauces
- Canned beans and vegetables
 - ...are all higher in sodium than salty chips and French fries!









Not Following a Low-Salt Diet Accounts for 24% of Readmission Rate

- Avoiding table salt does not constitute a low-sodium diet.
- There is no such thing as low salt ham.
- Just because a can of soup says "low sodium" doesn't mean it is low in salt.
- Eating at McDonald's doesn't make you gain 3 pounds in fat overnight - but can make you gain 3 pounds of water!





How Does a Nurse or CNA Monitor a Resident for Problems?

- 1. Make sure that daily weight is done at the same time, using the same scale, every day.
- 2. Look for trouble breathing during movement.
- 3. Look for swelling in feet and ankles.
- 4. Ask resident how they feel.
- 5. Look at mouth for dry membranes.

Why are Daily Weights So Important?

- Weight loss = fluid loss
- •2 pounds = 1 quart of water
- Medications and treatments are guided by weight.
- By the time we see swelling in the legs there is more than a gallon of extra fluid in the body!





What Causes Edema?

- Excess fluid in the body
- Usually found when the fluid volume exceeds 5 liters (approx 5 quarts)
- Look for: tight shiny skin, puffiness
- Press fingers on area to see if your fingers leave marks
- REPORT CHANGES that you see
- Elevate the patient's legs whenever possible



Heart Failure Zones

GREEN ZONE All Clear- THIS ZONE IS YOUR GOAL

- No SOB
- No weight gain
- No swelling
- No chest pain

YELLOW ZONE THIS ZONE IS A WARNING.

Call the doctor if:

- There is a weight gain of 3lbs in 1 day or 5 or more lbs in 1 week
- More SOB, harder to breathe lying down
- More swelling, feeling more tired
- Dry hacking cough
- Dizziness

RED ZONE Serious need to get MD involved ASAP!

- Struggling to breathe, unrelieved shortness of breath while still sitting
- Chest pain
- Confusion or can't think clearly



What Can a Nurse or a CNA Do to Prevent a Readmission?

- 1. Report to nurse or doctor any weight gain of 3 pounds in a day or 5 pounds in a week.
- 2. Keep patients' legs elevated.
- 3. Take vital signs every shift. Report a fast or slow pulse or a high or low B/P.
- Take POX every shift and report changes (POX is the probe that goes on a fingertip and tells you the oxygen level)
- 5. Look for edema and report it
- 6. Look for Shortness of Breath with movement or when lying down and report it.

The sooner the doctor knows of a problem the sooner meds can be given.



Doctor-Ordered Treatments

- Medications called diuretics make the body lose the extra water, but they can hurt the kidneys.
- Ace wraps on legs. ALWAYS start at the toes and wrap up while patient is in bed. BLOOD FLOWS UP.
- Watch how much fluid your patient takes in and puts out.
- Lab work called a BNP monitors CHF.
- Lab work to see how the kidneys are doing. Call doctor if there are any changes in the following:
 - Sodium
 - Potassium

 - Creatinine



What Do You Know? Summary

- There are 4 chambers in the heart and 2 pumps
- Weight is the best way to tell if the body has too much fluid
- Salt should not be used by a patient with CHF.
- Diuretics make the body get rid of extra fluid.
- Diuretics can hurt the kidneys.
- Doing daily weights at the same time and with the same scale helps track how much fluid is in the body.
- If ordered, ace wraps should be wrapped starting from the toes up to the thighs.
- Always report if the patient is SOB or has more edema
- When in doubt, call the doctor.

CHF Made Easy - Quiz

1. There are how many chambers in the heart?

A. 1 B. 2 C. 3 D. 4

2. Blood leaves the left side of the heart and goes to the lungs.

A. False

B. True

3. Fluid buildup in the tissues (edema) can be a sign of CHF.

A. False

B. True

4. Patients with CHF should not have:

A.Salt B. Water C. Juice D. Fruit

5. Edema is swelling in the legs.

A. True B. False

CHF Made Easy - Quiz, Part 2

6. Daily weights need to be done every day with the same scale at the same time.

A. True

B. False

7. Which of the following should you do to monitor your resident?

A. Look at daily weights for weight gain every day

B. Look for swelling in the legs

C. Ask my patient how they feel

D. All of the above

8. Diuretics can hurt the kidneys.

A. True

B. False

9. I should always wrap my resident's legs from the top to the bottom.

A. True

B. False

10. When in doubt, call the doctor.

A. True

B. False

Answers

- 1. **D** Four chambers
- 2. False Blood leaving the left side goes to the body.
- 3. True Edema is a sign of CHF.
- 4. **A** Salt
- 5. True Edema is swelling in the legs.
- 6. **True** Weights need to be done every day, with the same scale, at the same time.
- 7. **D** All the above
- 8. A Diuretics can hurt the kidneys.
- 9. False Wrap legs from toes to thighs, as blood flows up.
- 10. True Always call the doctor if you are in doubt.

