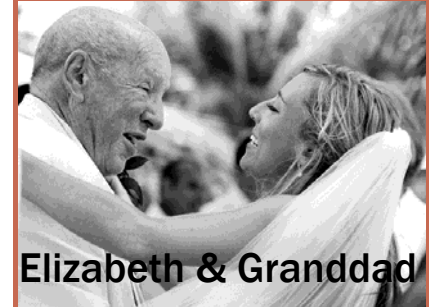


LIVING WITH HEART FAILURE

Presented by your Advanced Practice Registered
Nurses (APRN):



Elizabeth & Granddad



WE WILL TALK ABOUT:

- What is heart failure? Has my heart FAILED?!
- Is it common?
- What causes heart failure?
- How is it diagnosed? What tests can I expect?
- How is this treated?
- Are these pills really necessary??
- How can I prevent heart failure from limiting my lifestyle?

WHAT CAUSES HEART FAILURE?

Anything that damages the heart muscle, or impairs its ability to properly fill with or pump blood, can cause heart failure

- High Blood Pressure

- Coronary Disease

- Diabetes

- Drinking Alcohol

- Birth Defects

- Heart Failure

- Heart Valve Disease

- Myocarditis

- Chronic Lung Disease

- Overactive Thyroid

- Abnormal Heart Rhythm

- Rheumatoid Arthritis

- Kidney Disease

- Sleep Apnea

- Anemia

- Pregnancy

- Medications

- Infection

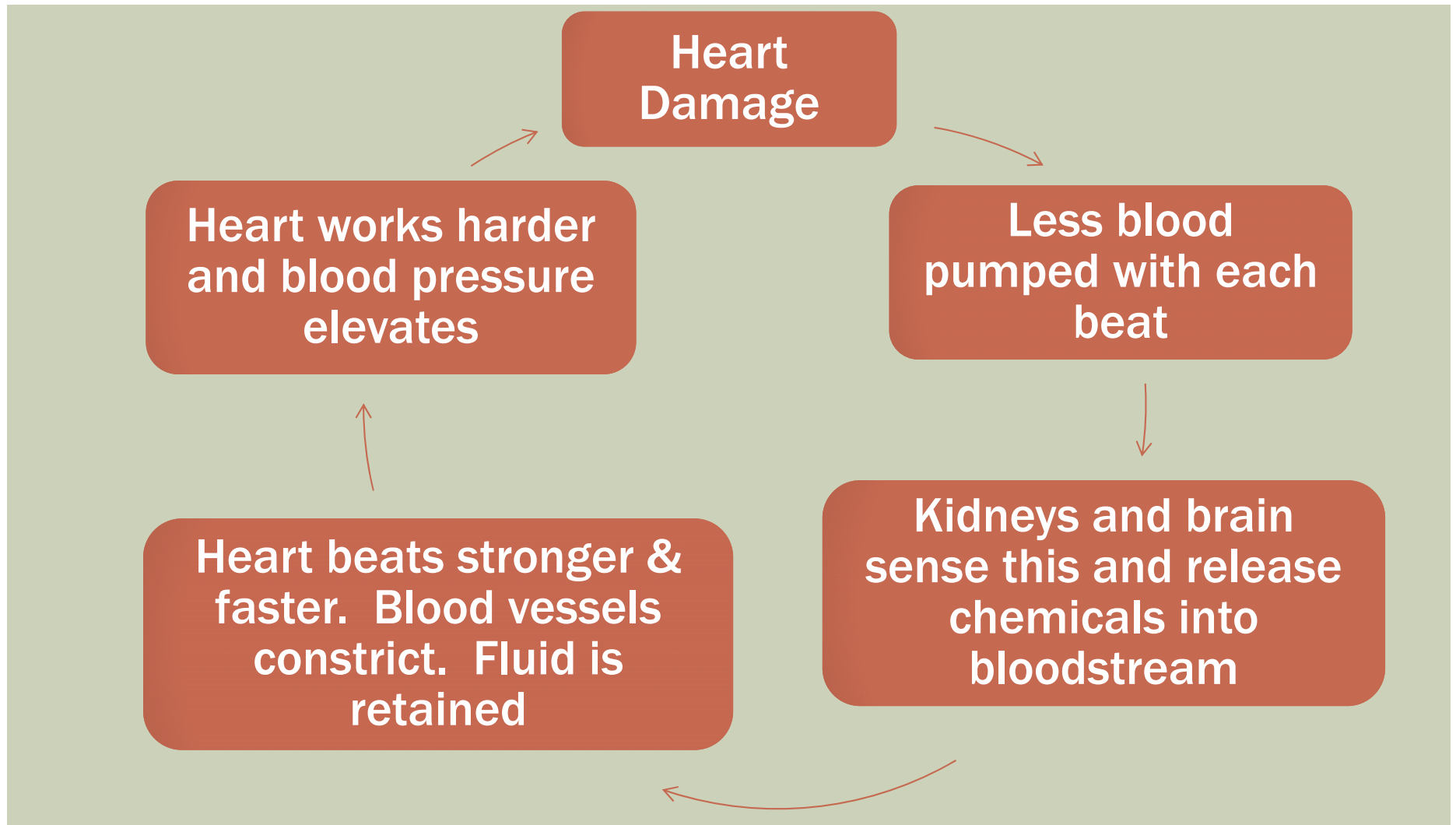
- Trauma

- Radiation

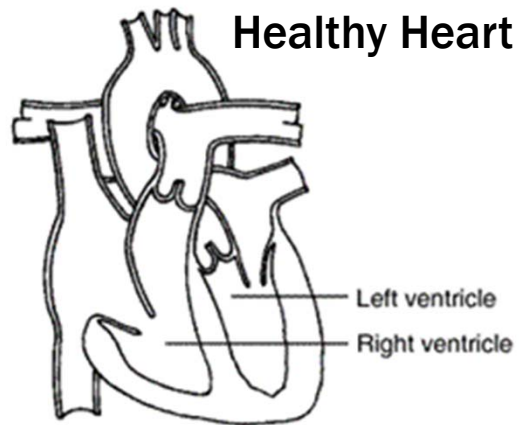
- Cancer

- Heart Failure

HEART FAILURE IS A VICIOUS CYCLE



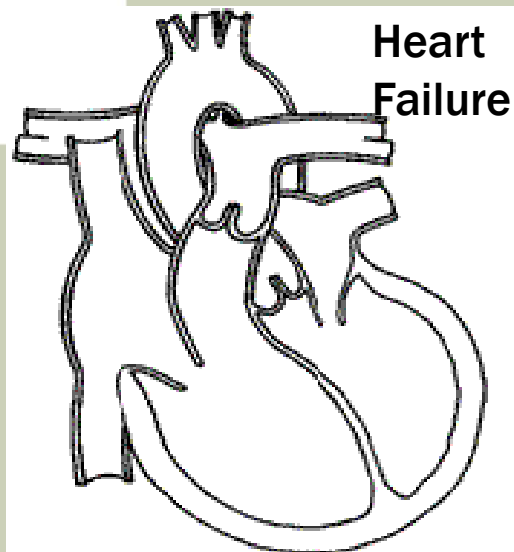
SO, WHAT IS HEART FAILURE?



Heart chambers relax and fill, then contract and pump.

It means the Heart is failing to work as efficiently as it should

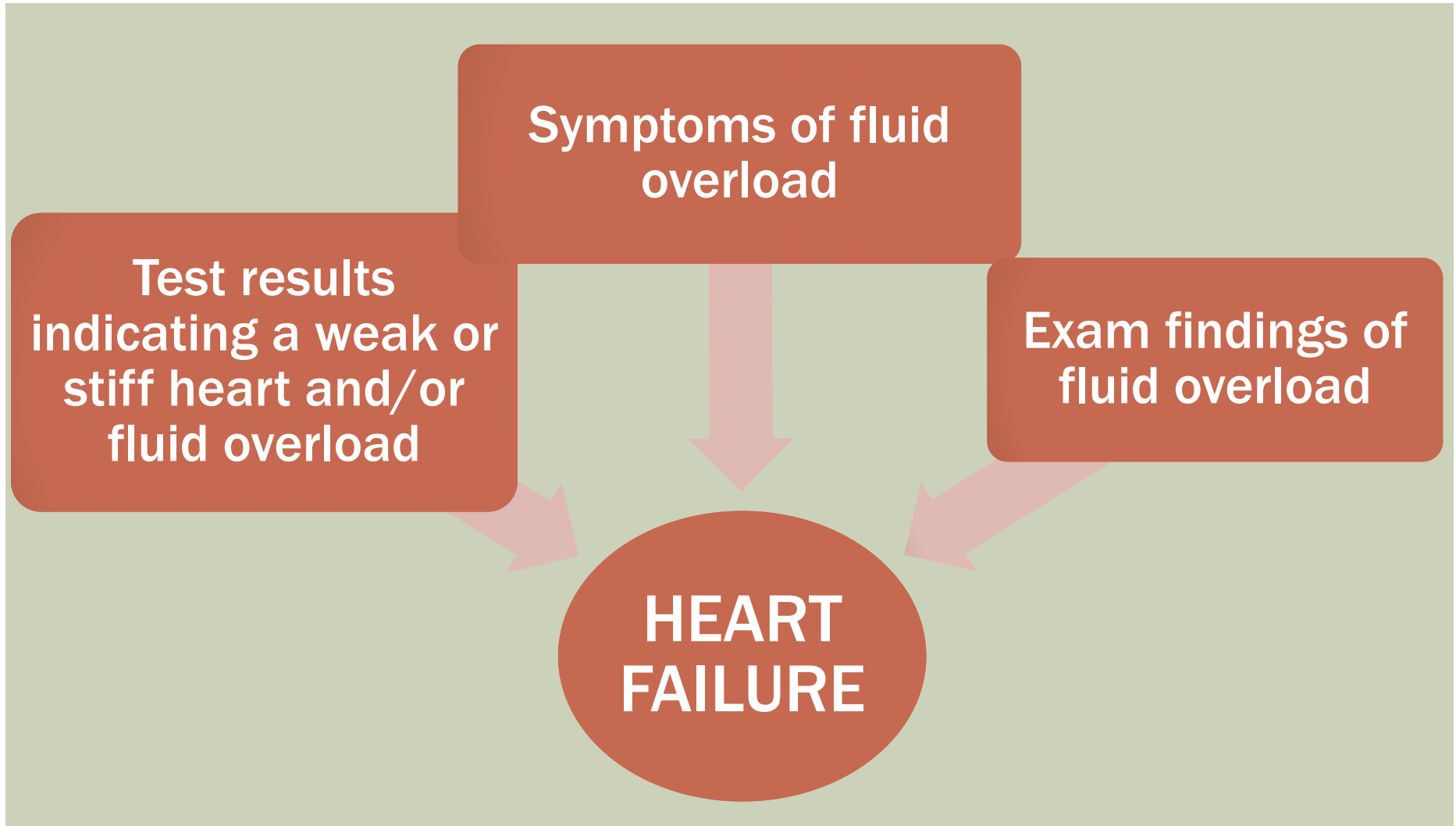
Heart failure does not mean the heart has stopped



Muscle fibers have stretched. Heart chamber enlarges

- The heart is too weak and/or stiff to fill and pump efficiently.
- When the pumping power is inadequate, the blood flows more slowly and backs-up. Fluid overload occurs, causing symptoms.

DIAGNOSIS OF HEART FAILURE



THE SYMPTOMS OF FLUID OVERLOAD



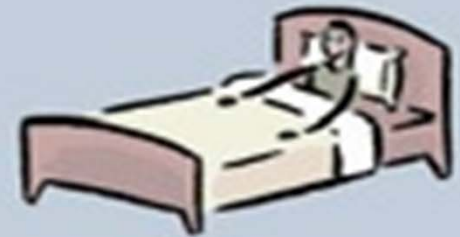
*Shortness
of breath*



*Swelling of
feet & legs*



*Chronic lack
of energy*



*Difficulty sleeping
at night due to
breathing problems*



*Swollen or tender
abdomen with
loss of appetite*



*Cough
with frothy
Sputum*



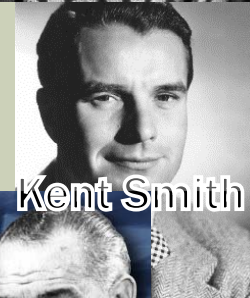
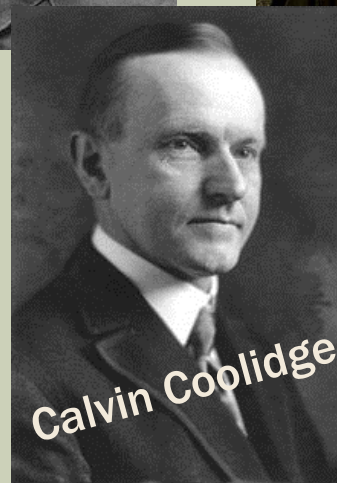
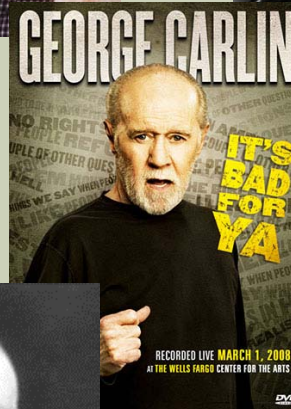
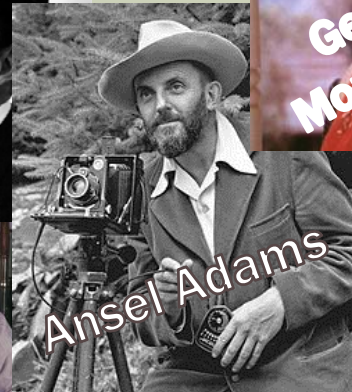
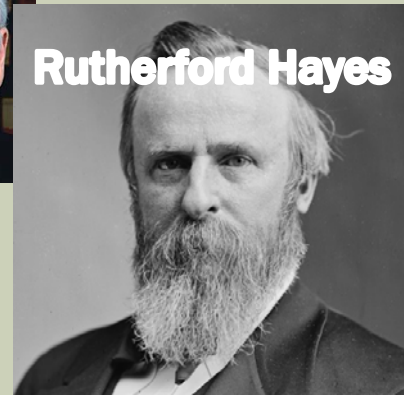
*Increased
urination
at night*



*Confusion and/or
impaired memory*

SO, WHAT TESTS MAY BE NECESSARY?

Clarification of Cause	Evaluate Heart Function	Evaluate Fluid Volume Status	Medication Safety
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Stress test	<input type="checkbox"/> Echo	<input type="checkbox"/> BNP	<input type="checkbox"/> Chemistry Panel
<input type="checkbox"/> Heart Cath	<input type="checkbox"/> MUGA Scan	<input type="checkbox"/> Chest X-ray	
<input type="checkbox"/> Echo			
<input type="checkbox"/> PFT's	<input type="checkbox"/> ECG		
<input type="checkbox"/> Thyroid Panel			



IS IT
COMMON?

Yes!!

- Over 5 million Americans live with it
- More than 500,000 people are diagnosed each year

HOW IS IT TREATED?

■ Treat/manage underlying conditions

- Manage coronary disease
- Manage irregular rhythms
- Fix badly leaking heart valves
- Treat thyroid disease

■ Lifestyle Changes

- To be discussed further

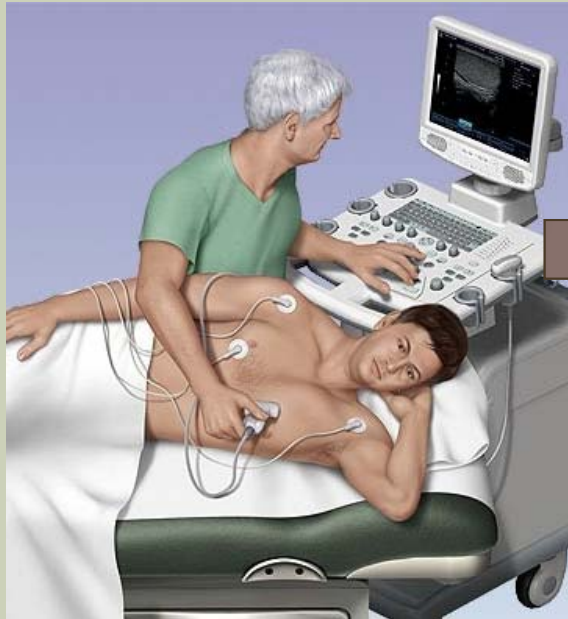
■ Medications

- To be discussed further

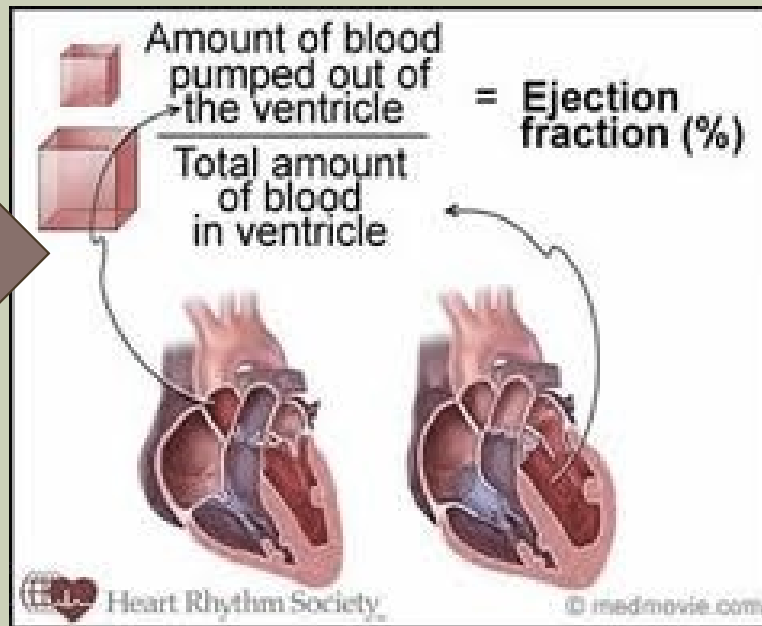
■ Invasive management

- Cardiac resynchronization therapy
- Automatic internal defibrillator
- Heart transplant

TO UNDERSTAND HEART FAILURE TREATMENT, YOU NEED TO UNDERSTAND YOUR “EF%”



An echocardiogram is an ultrasound of the heart. It's used to determine the “EF”.



= “squeeze of the heart”

**Normal EF =
50% – 75%**

The “EF” is the % of blood in the left ventricle that is pumped with each beat.

Beta Blockers keep your heart from looking like this!

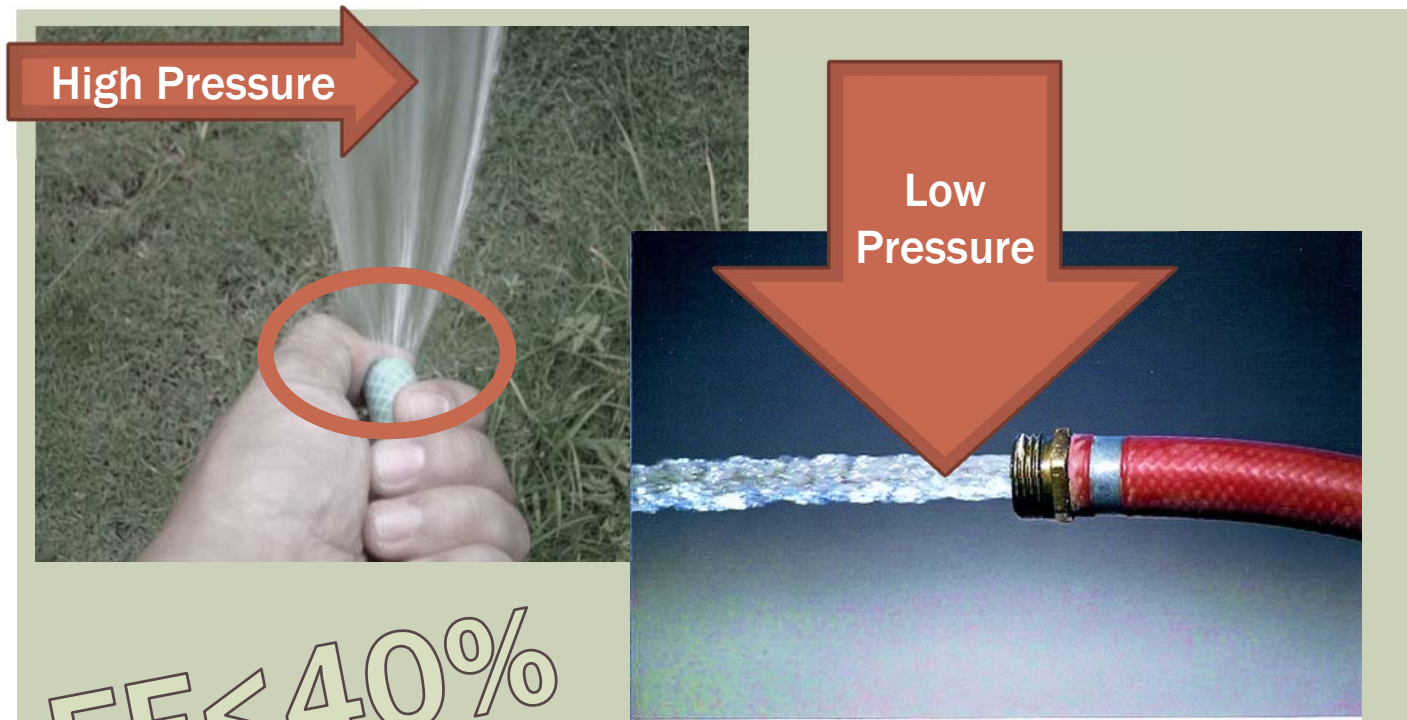


- Beta Blockers reduce the heart's workload
 - Decrease heart rate
 - Lower blood pressure
 - Prevent adrenaline from reaching heart muscle cells, which causes the heart muscle thickening and stiffening

EF < 50%

BETA BLOCKERS

- ❖ Toprol XL (metoprolol succinate)
- ❖ Coreg (carvedilol)
- ❖ Coreg CR (carvedilol controlled – release)



$EF < 40\%$

- Relax/widen/dilate vessels to help the heart pump better
- Stop body's reaction to hormones that hurt the heart

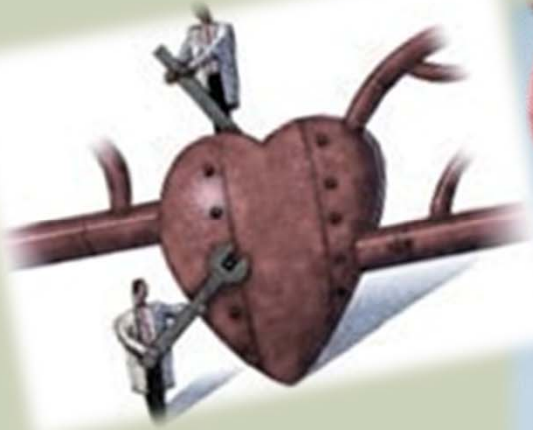
ACE- INHIBITORS - OR - ARBs

ACE- INHIBITORS:

- ❖ Lisinopril (Zestril)
- ❖ Captopril (Capoten)
- ❖ Enalapril (Vasotec)

ARBs:

- ❖ Irbesartan (Avapro)
- ❖ Olmesartan (Benicar)
- ❖ Losartan (Cozaar)
- ❖ Valsartan (Diovan)



Symptoms + EF < 35%

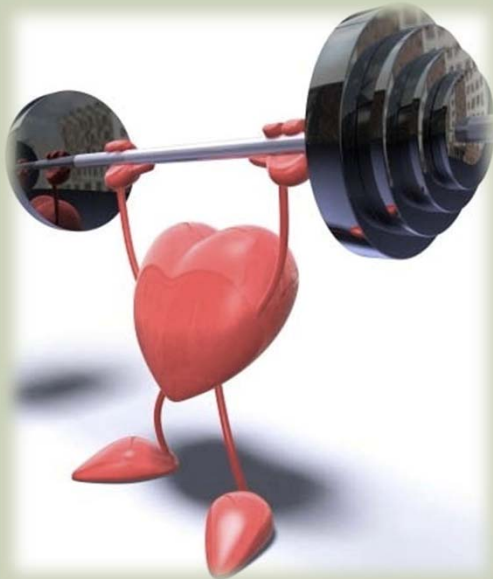
- Block hormones that try to dilate/remodel the heart
- Work on the same system as ACE-inhibitors, but in a different way
- Help the body get rid of extra fluid, while holding onto important electrolytes

ALDOSTERONE-INHIBITORS

- ◆ Aldactone (spironolactone)
- ◆ Inspra (eplerenone)



Improves heart rhythm



Improves heart strength

DIGOXIN

◆ Lanoxin
(Digoxin)

- AKA “water pills”
- Increase urination, so that fluid volume in the body decreases
- Decreased volume makes the heart’s job easier
- Removing water makes you feel better



DIURETICS

- ◆ Lasix (furosemide)
- ◆ Bumex (bumetanide)
- ◆ Demadex (torsemide)
- ◆ Zaroxolyn (metolazone)

HOW TO LIVE WITH HEART FAILURE

Tips for
taking
control

MEDICINE TIPS



Always take your pills as directed

- Don't stop because you're feeling better
- Don't make changes unless directed



Tell us your medication questions

- Bad side effect? Tell us, and we'll make a change
- Confused about what/when to take meds? Call!



Vaccines

- Get your annual flu vaccine
- Keep your pneumonia vaccine up-to-date

MAINTAIN HEALTHY FLUID VOLUME TO REDUCE THE HEART'S WORKLOAD



=



Limit daily fluid intake to
8 cups = 64oz =
2000mL = 2L

Weight gain = fluid retention!

2 pounds of weight = 1 liter of fluid!!



Weigh daily and call office if:

- Gain for 2 consecutive days
- Notice a gain ≥ 2 pounds in a day
- Notice a gain of ≥ 5 lbs in a week

SALT REDUCTION WILL ALSO PREVENT FLUID VOLUME OVERLOAD



Avoid: Tomato/veggie juice, pizza, ham, hot dogs, BBQ sauce, canned foods, frozen entrees, cheese, buttermilk, steak sauce, excess bread, "instant" hot cereals...

<2,000mg

Look at serving size!
4 servings x 75 mg = 300mg
in the package of food



We have heart-healthy
cooking classes here at
the heart center

Nutrition Facts

Serving Size 1/2 cup (115g)

Servings Per Container About 4

Amount Per Serving

Calories 250

Calories from Fat 130

% Daily Value*

Total Fat 14g 22%

Saturated Fat 9g 45%

Cholesterol 55mg 18%

Sodium 75mg 3%

Total Carbohydrate 26g 9%

Dietary Fiber 0g 0%

Sugars 26g

Protein 4g

Vitamin A 10%

Vitamin C 0%

Calcium 10%

Iron 0%

* Percent Daily Values are based on a 2,000 calorie diet.

KEEP HEART FAILURE FROM LIMITING YOUR LIFESTYLE



Lose Weight.

Excess weight stresses the heart. We have classes to help you lose weight.

Avoid/Manage Stress.



Actively manage your blood pressure, diabetes, and cholesterol.



Quit Smoking!



Exercise to tolerance.

Regular activity strengthens your muscles and heart, making ordinary activities easier.



Alcohol in Moderation



Rest when needed.

Dilated pupils, a sympathetic nervous system response

Skin pale, gray, or cyanotic

Dyspnea, SOB/OE is early symptom from pulmonary congestion

Orthopnea, cannot breathe unless sitting up

Crackles, wheeze are adventitious breath sounds

Cough, frothy pink or white sputum

Decreased blood pressure stimulates sympathetic nervous system, which acts on heart to increase rate and increase force of contraction

Nausea and vomiting as peristalsis slows and bile and fluids back up into stomach

Ascites, fluid in peritoneal cavity

Dependent, pitting edema, in sacrum, legs

If I had just called when this started, I wouldn't be in this mess!

Anxiety, gasping from pulmonary congestion

Falling O₂ saturation

Confusion, unconsciousness from decreased O₂ to brain

Jugular vein distention from venous congestion

Infarct, may be cause of decreased cardiac output

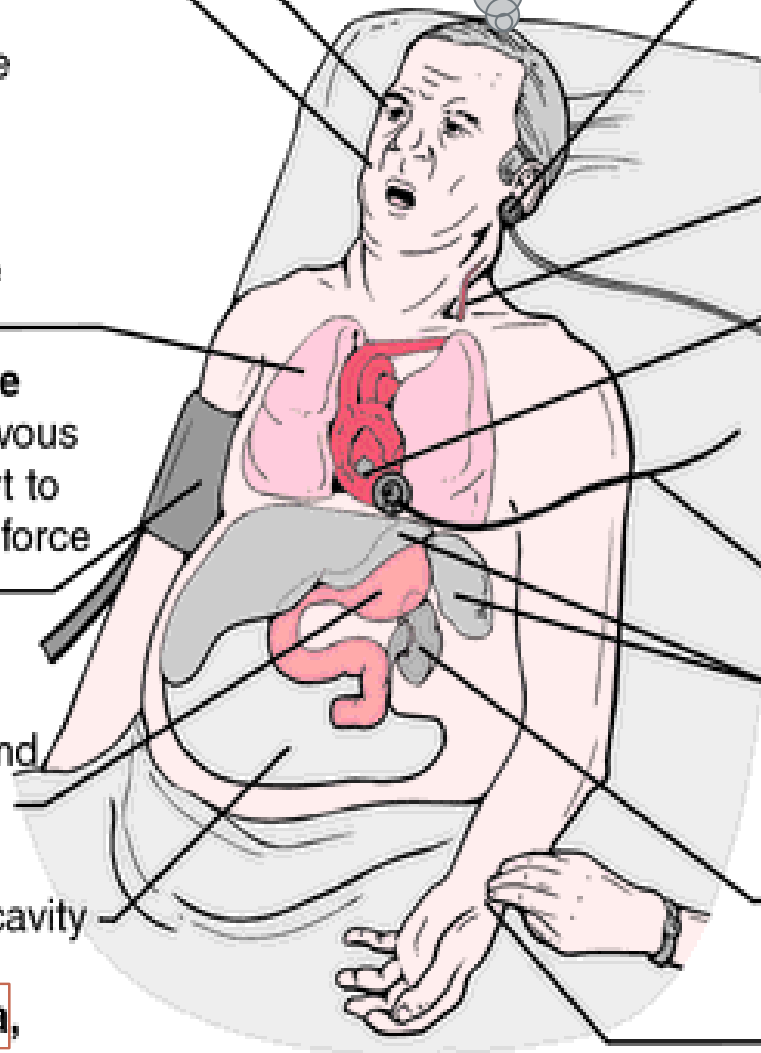
Fatigue, weakness from decreased cardiac output

S₃ gallop, tachycardia

Enlarged spleen and liver from venous congestion. This causes pressure on breathing

Decreased urine output

Weak pulse
Cool, moist skin



A QUICK PHONE CALL CAN KEEP YOU OUT OF THE HOSPITAL

Often, a medication change can be made right over the phone, and then you can be seen 2-3 days later



Pick up the phone if:

- Your breathing and/or swelling has worsened
- You've gained weight for 2 consecutive days, have gained 2lbs in 1 day, or 5lbs in 1 week
- You have to prop your head on several pillows to breathe at night
- You just aren't feeling right

QUESTIONS?????

Thank you
for your
time!