



Heart Failure in Women

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What is Cardiovascular Disease (CVD)?

- CVD is heart and blood vessel diseases – diseases that affect the circulatory system.
- Heart disease is women's No. 1 killer

Examples of CVD

- High Blood Pressure (HBP)
- Coronary Heart Disease

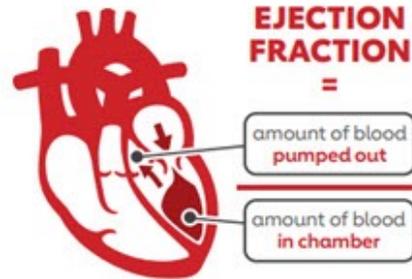
Congestive Heart Failure (CHF)

Ejection Fraction

Ejection fraction (EF) is the measurement of how much blood is being pumped out of the left ventricle of the heart.

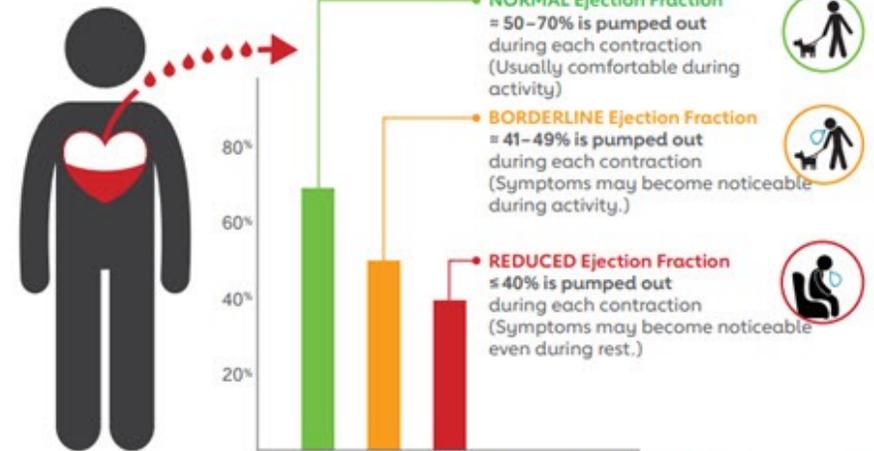
HF and Your Ejection Fraction Explained

The Ejection Fraction compares the **amount of blood in the heart** to the **amount of blood pumped out**. The fraction or percentage helps describe how well the heart is pumping blood to the body.



Source: 2013 ACCF/AHA Guidelines for the Management of Heart Failure
Source: <http://www.ncbi.nlm.nih.gov/pubmed/22172436>

How much blood is pumped out?



It is also possible to have a diagnosis of heart failure with a seemingly normal (or preserved) ejection fraction of greater than or equal to 50%.



With the proper care and treatment, many patients are able to improve their ejection fraction and live a longer and healthier life. Talk with your healthcare provider about your options.

www.RiseAboveHF.org

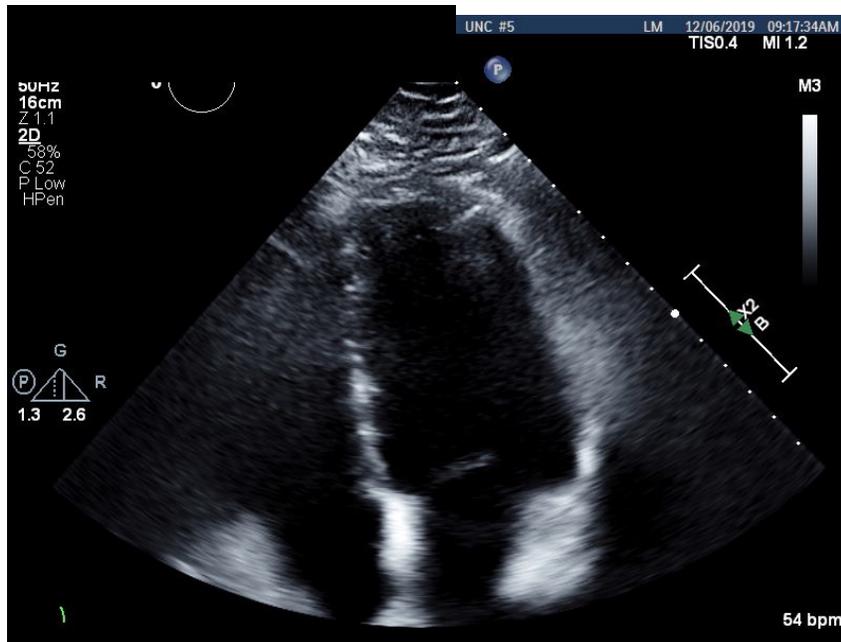
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What is CHF?

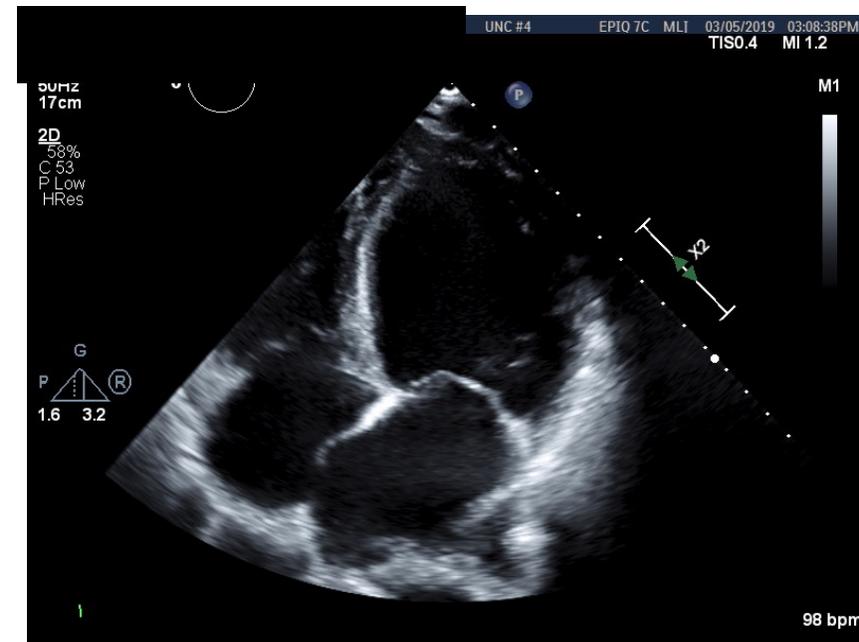
- 2 “Flavors”
 - Systolic (Heart failure with **reduced** ejection fraction or HFrEF)
 - Aka Cardiomyopathy
 - when the heart is weak and doesn't contract with enough force so there is not enough oxygen-rich blood being pumped throughout the body
 - The weak heart causes blood to accumulate, leading to a rise in pressure in the heart and lungs
 - Diastolic (Heart failure with **preserved** ejection fraction or HFpEF)
 - occurs when the heart pumps normally, but the ventricles become stiff and do not relax properly. This causes a back-up of pressure into the lungs from the heart

Echocardiogram



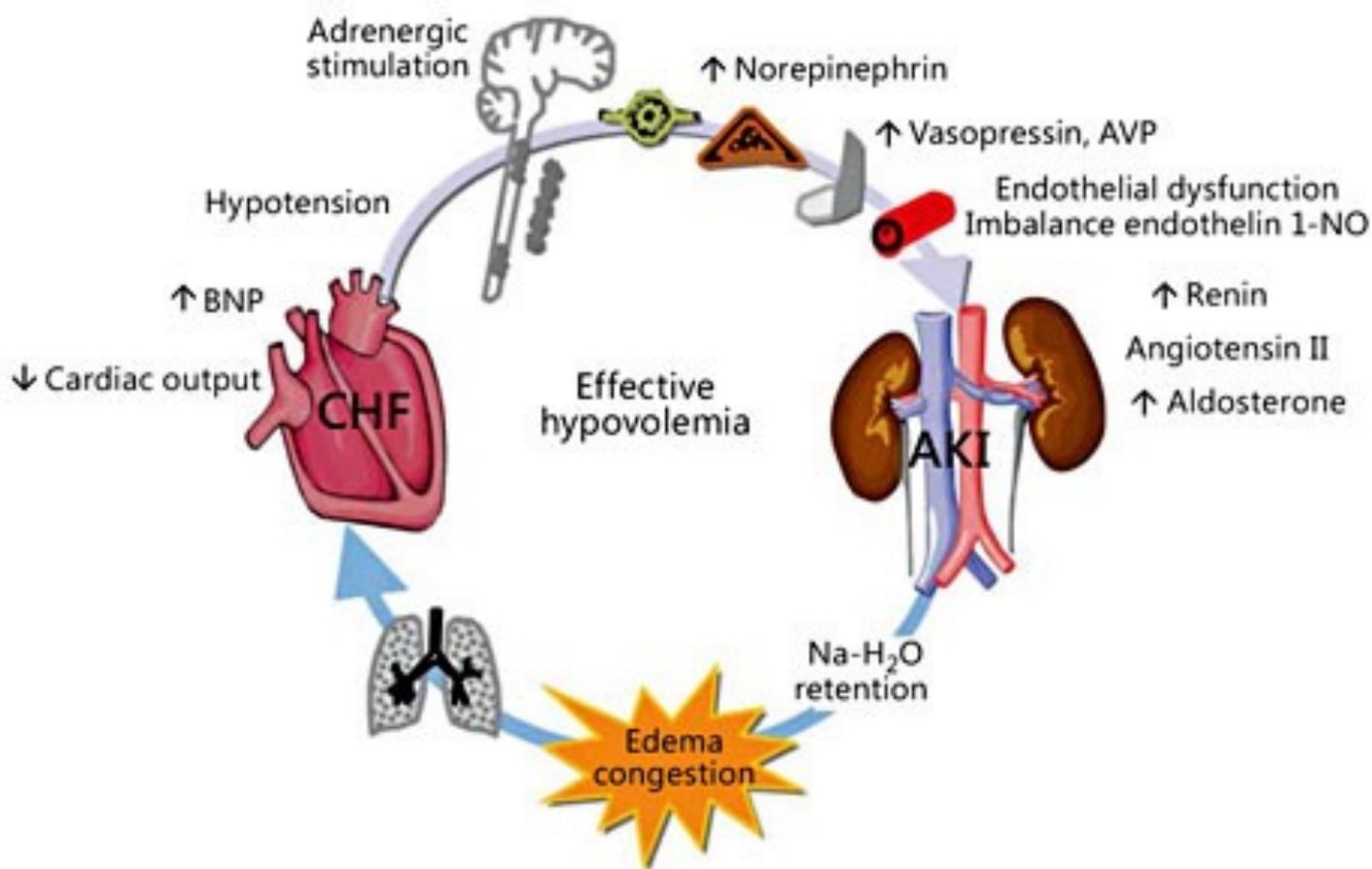
Normal

Systole = contraction
Diastole = relaxation



Heart Failure w
Reduced EF

Neurohormonal Process



Causes of Heart Failure with **Reduced Ejection Fraction**

- Women with heart failure are more likely than men to have:
 - high blood pressure
 - valvular disease
 - diabetes mellitus
- Less likely to have congestive heart failure due to prior heart attacks ([ischemic cardiomyopathy](#))

Coronary Artery Disease as a Cause

- Although frequency of **coronary artery disease** in women < men it is still the **second** leading cause for women with heart failure
- Remember women often have atypical symptoms compared to men
- Women still need to be evaluated for blockages in the arteries

Unique Cause of Heart Failure in Women

Breast Cancer



Skin texture change



Dripping



Armpit pain



Dimpling



Size or Shape change



Redness or Rash



Lumping or Thickening



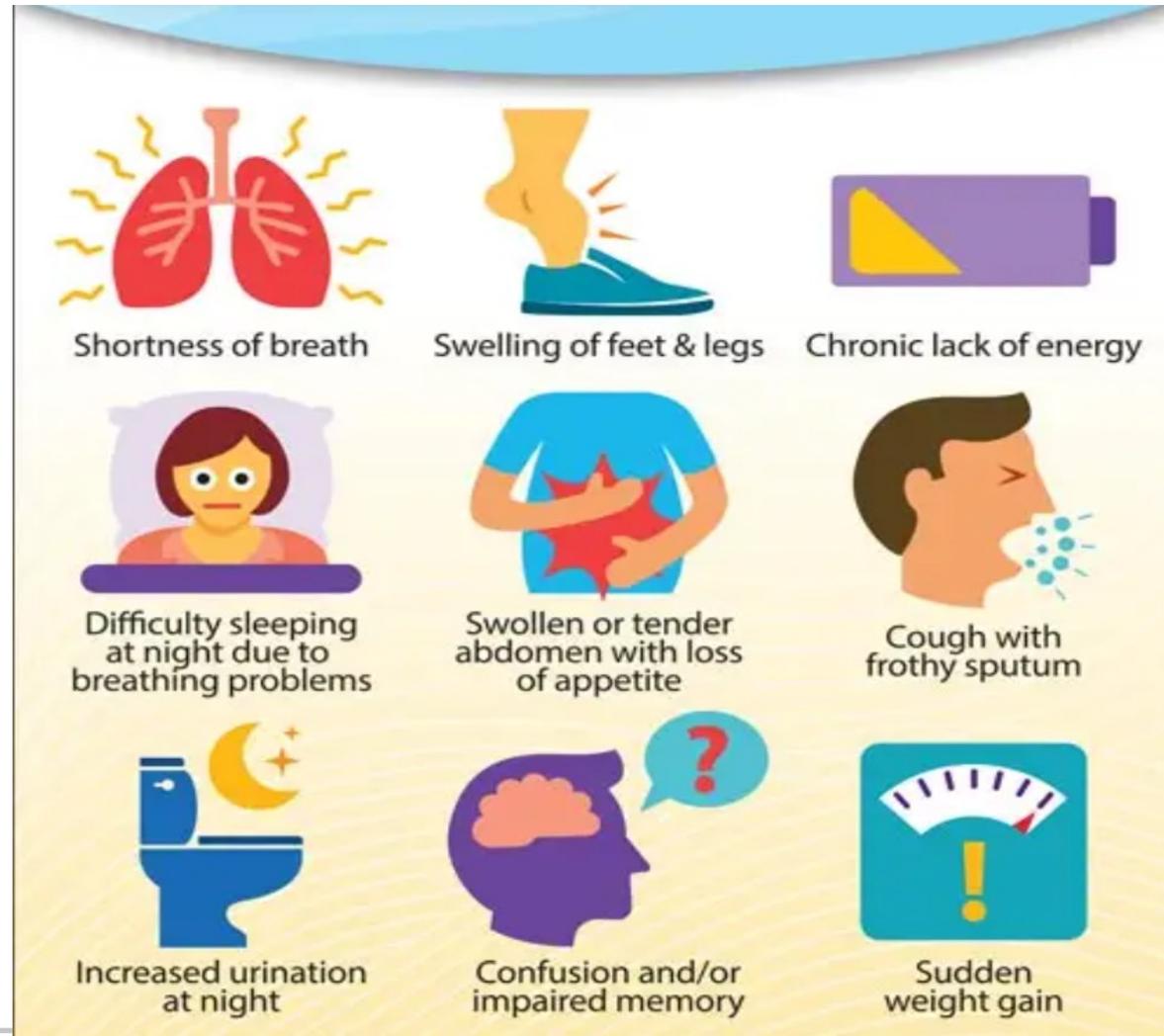
Pulled in Nipple

- Women with breast cancer treated with chemotherapy (like Adriamycin)

- Peripartum Cardiomyopathy



Symptoms of Heart Failure:



More on Heart Failure.....

- Affects about 3.6 million women in the United States
- Women tend to develop congestive heart failure at an older age than men
- Despite the fact that women account for nearly 50% of all hospital admissions for heart failure, only 25% of women are involved in heart failure studies!

Heart Failure Clinical Trials and Women

Study: MERIT-HF

- Number of Women: 898
- %Women/Total Patients: 23

Study: SOLVD Treatment

- Number of Women: 2568
- %Women/Total Patients: 20

Study: RALES

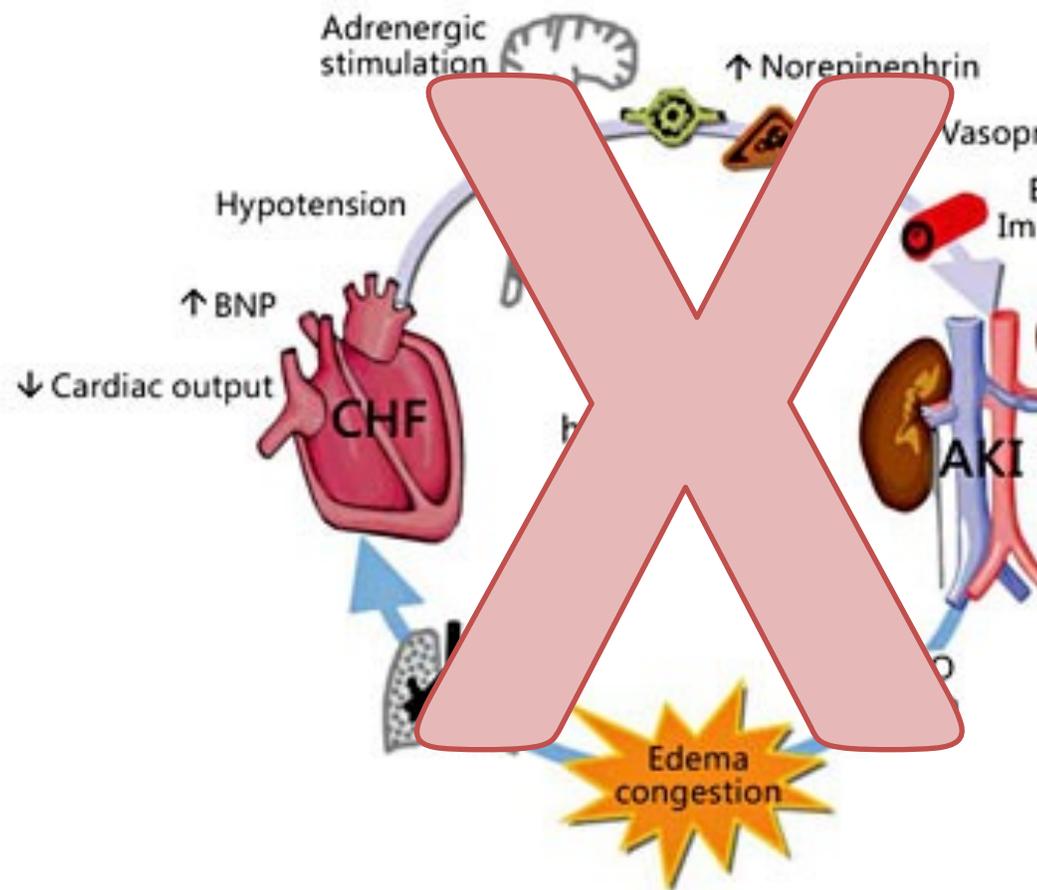
- Number of Women: 446
- % Women/Total Patients: 27

PARADIGM-HF

- Number of Women: 1832
- %Women/Total Patients: 21



Treatment - Neurohormonal Process



Treatment

Follow a Low-Sodium Diet

- Know your daily sodium limit: Ask your doctor or nurse.
- Eat fresh foods whenever possible.
- Avoid fast food restaurants.
- Avoid the “salty six” (bread products, cold cuts and cured meats, pizza, breaded meats and poultry or poultry with added sodium, prepared and canned soups, sandwiches with lunch meat and condiments).

- With the right care, heart failure will not stop you from doing the things you enjoy.
- In general, women survive longer than men with heart failure
- Your prognosis or outlook for the future will depend on how well your heart muscle is functioning, your symptoms, and how well you respond to and follow your treatment plan.