

Pharmacology

Pharmacy Department

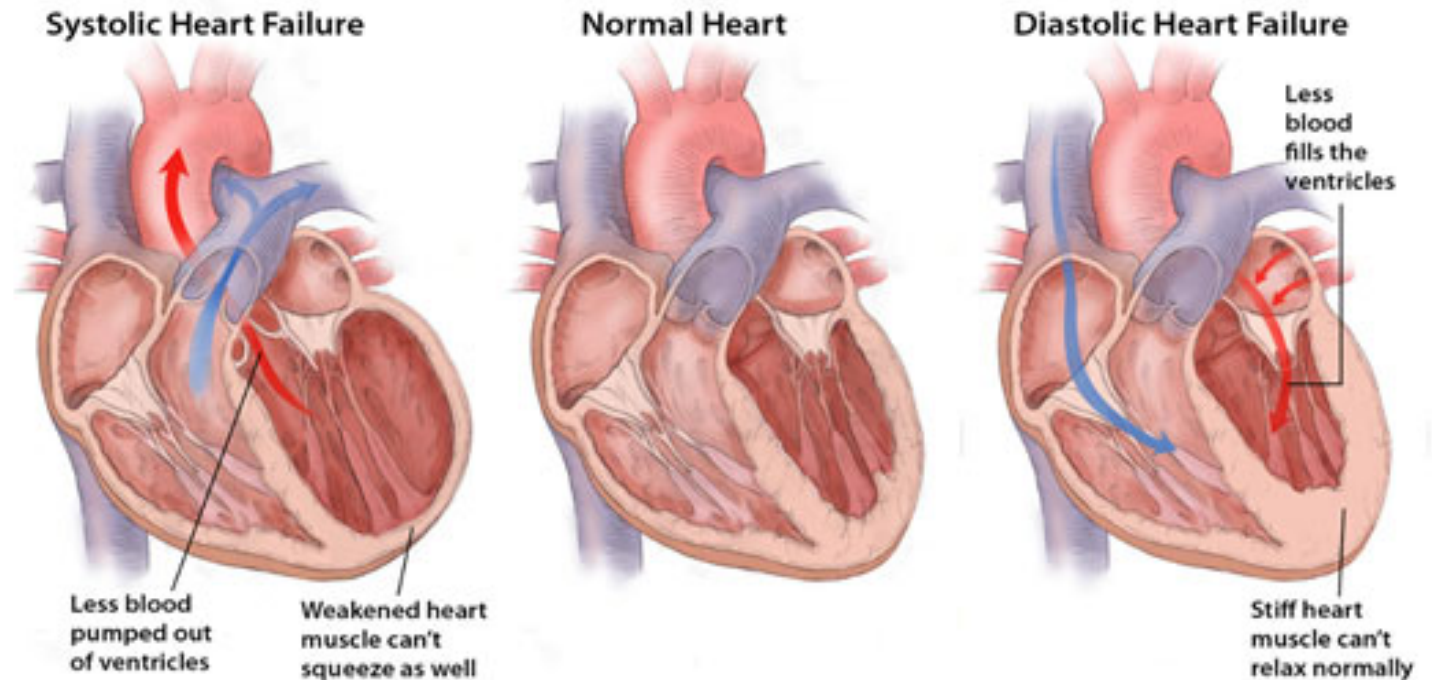
4th Grade

Drugs for Heart Failure

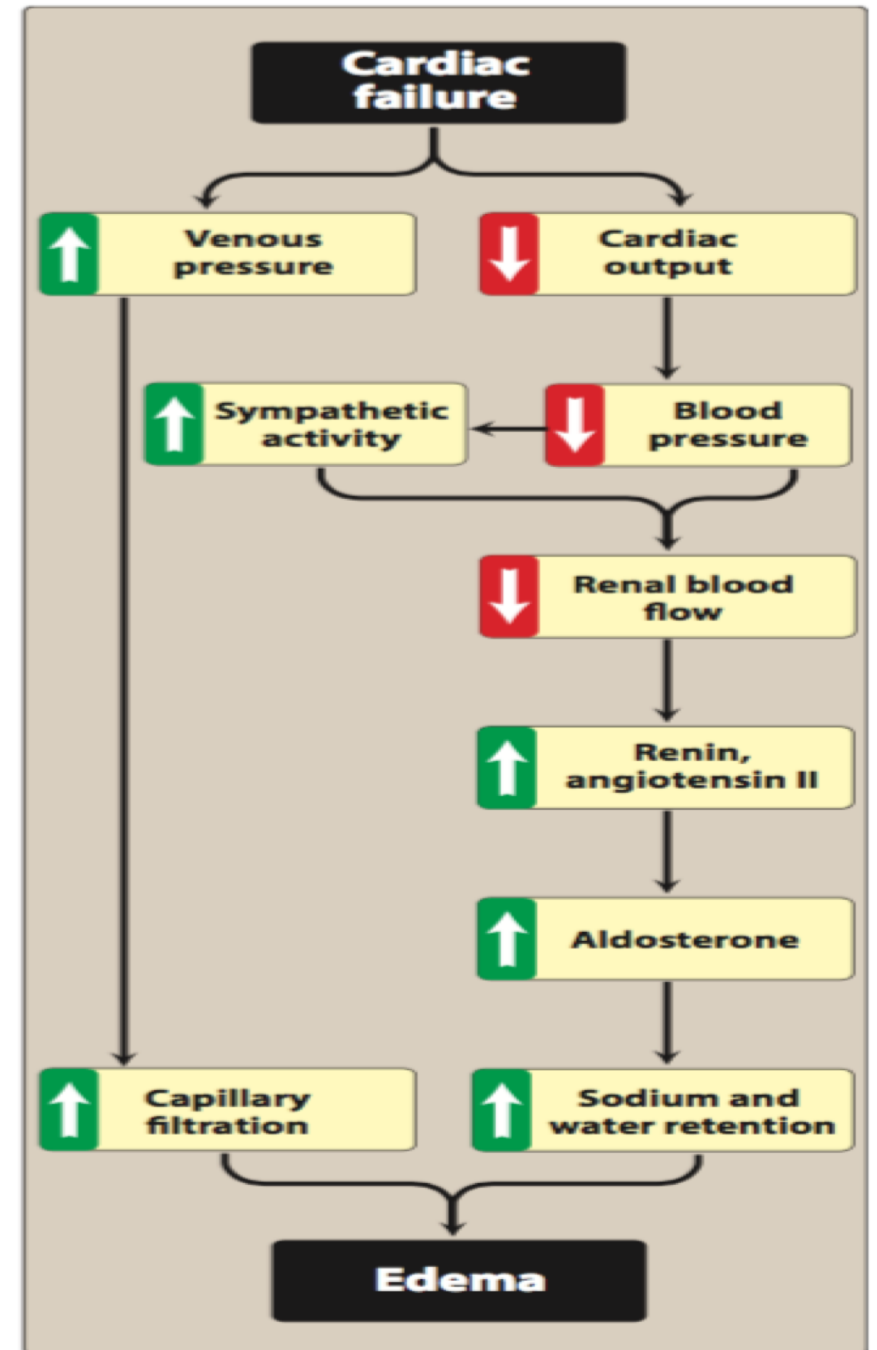
Dr. Ali Al-Athari

Heart Failure:

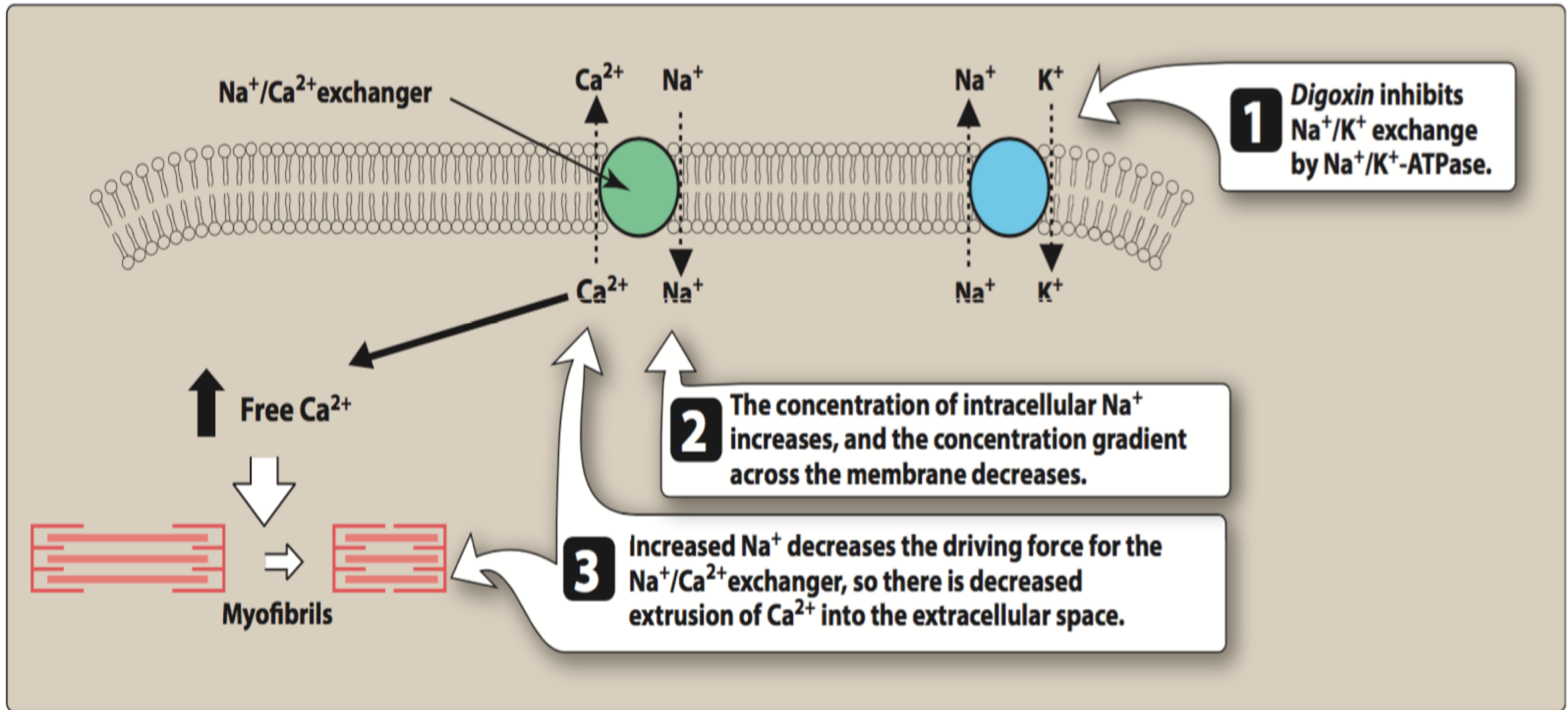
- **Heart failure (HF)** is a complex, progressive disorder in which **the heart is unable to pump sufficient blood to meet the needs of the body.**
- **Its cardinal symptoms are dyspnea, fatigue, and fluid retention.**
- HF is due to an **impaired ability of the heart to adequately fill with and/or eject blood.** It is often accompanied by **abnormal increases in blood volume and interstitial fluid.**
- Underlying causes of HF include **arteriosclerotic heart disease, myocardial infarction, hypertensive heart disease, valvular heart disease, dilated cardiomyopathy, and congenital heart disease.**

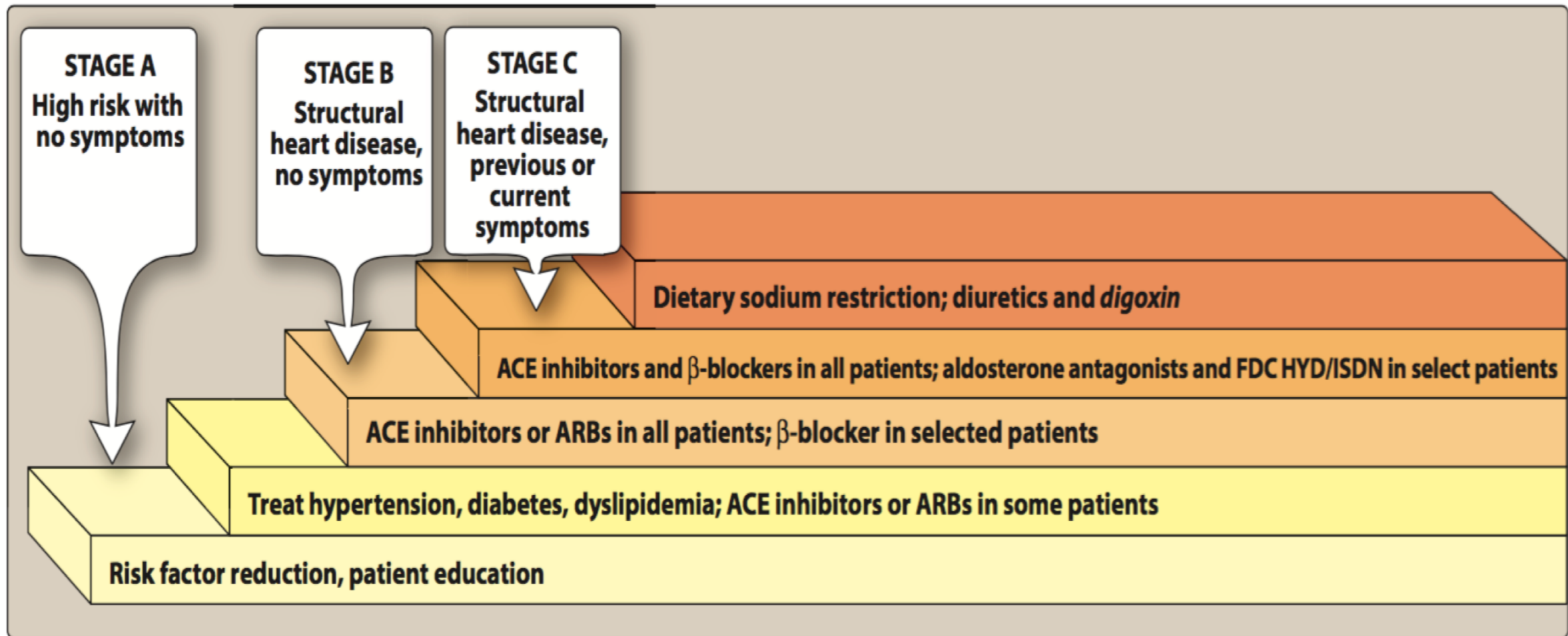


- **Acute (decompensated) HF**
- If the adaptive mechanisms adequately restore cardiac output, **HF is said to be compensated.**
- If the adaptive mechanisms **fail to maintain cardiac output, HF is decompensated** and the patient develops worsening HF signs and symptoms.
- Typical HF signs and symptoms include **dyspnea on exertion, orthopnea, paroxysmal nocturnal dyspnea, fatigue, and peripheral edema.**



Digoxin Mechanism of action:





Treatment options for various stages of HF. ACE = angiotensin-converting enzyme; ARBs = angiotensin receptor blockers; FDC = fixed dose combination; HYD = hydralazine; ISDN = isosorbide dinitrate. Stage D (refractory symptoms requiring special interventions) is not shown.

*Thank
you!*