

Effects of Exercise on Heart

By

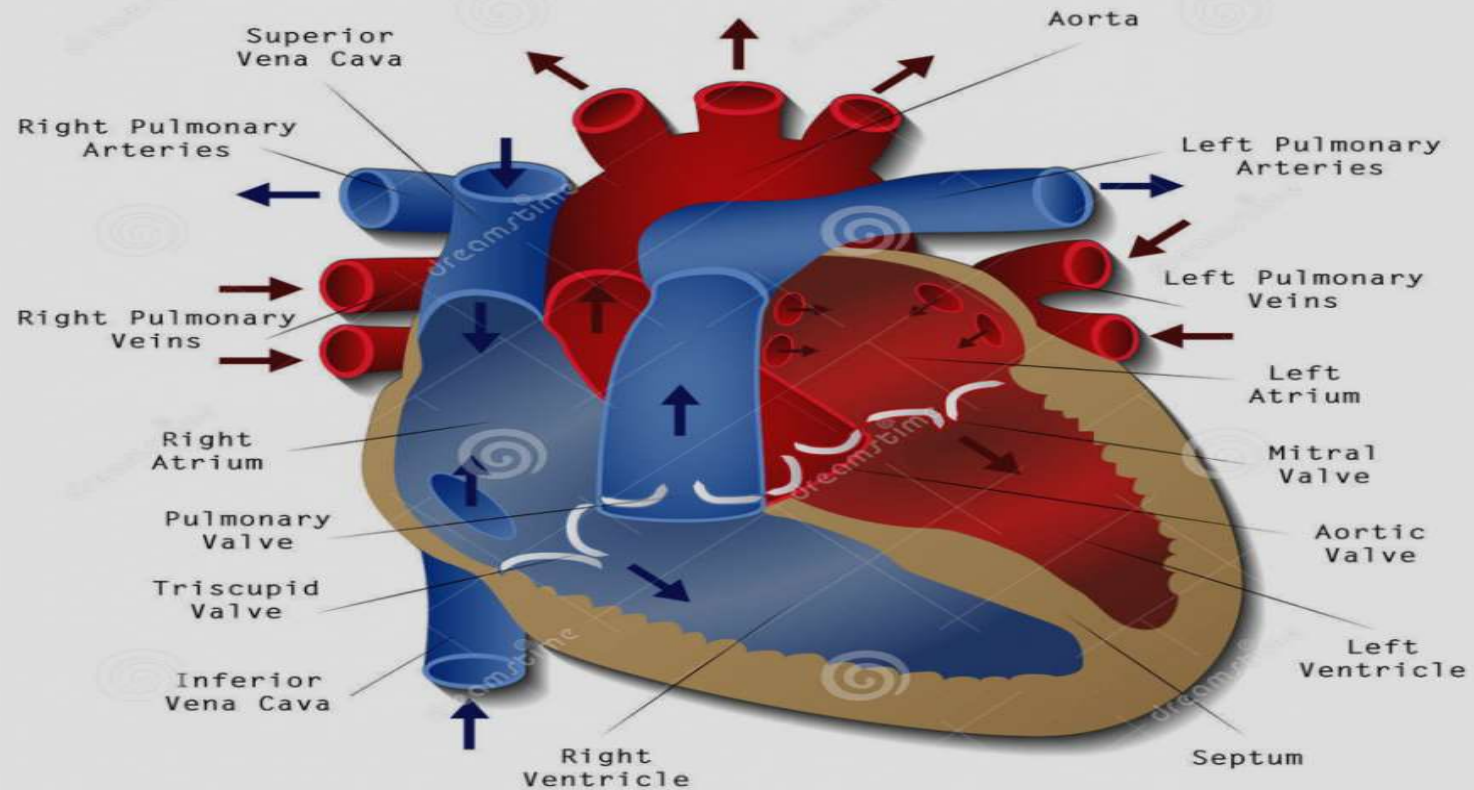
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HUMAN HEART

Diagram



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Exercise

- Aerobic Exercise
- Anaerobic Exercise
- Isometric Exercise
- Isotonic Exercise
- Iso-kinetic Exercise
- Therapeutic exercise
- Resistance Exercis

Major Risk factor of Cardiac Disease and mediating role of exercise

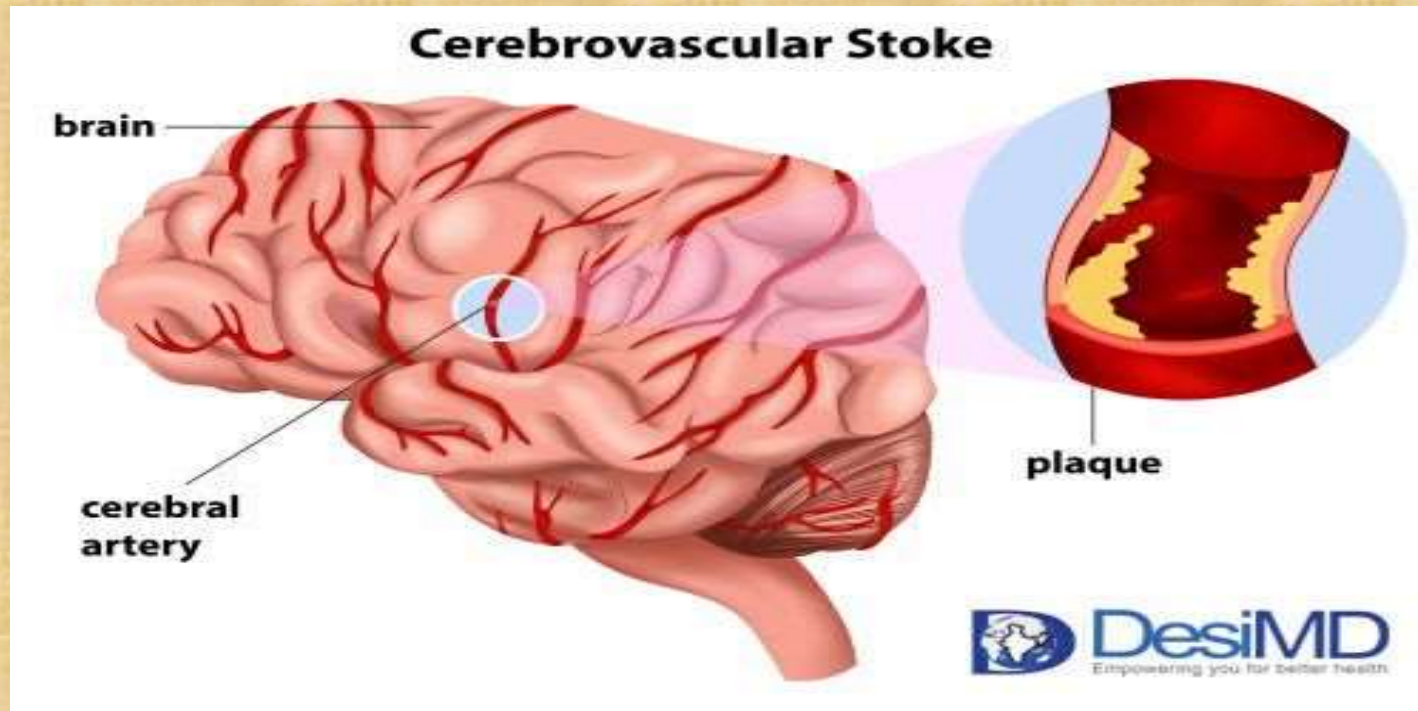
- 1. Sedentary Life Style**
- 2. Diabetes**
- 3. Blood Pressure**
- 4. Obesity**
- 5. Bad Cholesterol**
- 6. Smoking/ Tobacco**
- 7. Too Much Alcohol Drinking**
- 8. Chronic Stress (Academic and Occupational Stress)**
- 9. Family History of CVD**
- 10. Feeding Habits**
- 11. Excessive secretion of PTH**
- 12. Heavy exercise / Physical Activities**
- 13. Anabolic Steroids**

Medication of Heart Disease and Exercise

- ARB
- ACE
- Diuretics
- Beta- blockers
- Other medications

Types of Cardiac Disease

1. Cerebrovascular disease (Stroke)

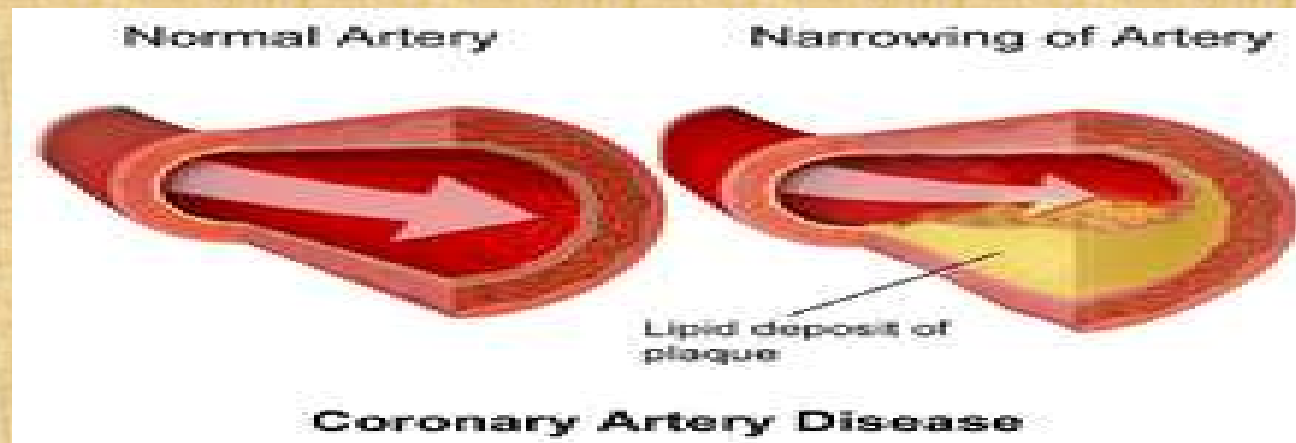


Types of Cardiac Disease

4. Ischemic heart disease

(i) Angina

(ii) Coronary artery disease (caused by atherosclerosis)



(iii) Coronary heart disease

Types of cardiac disease

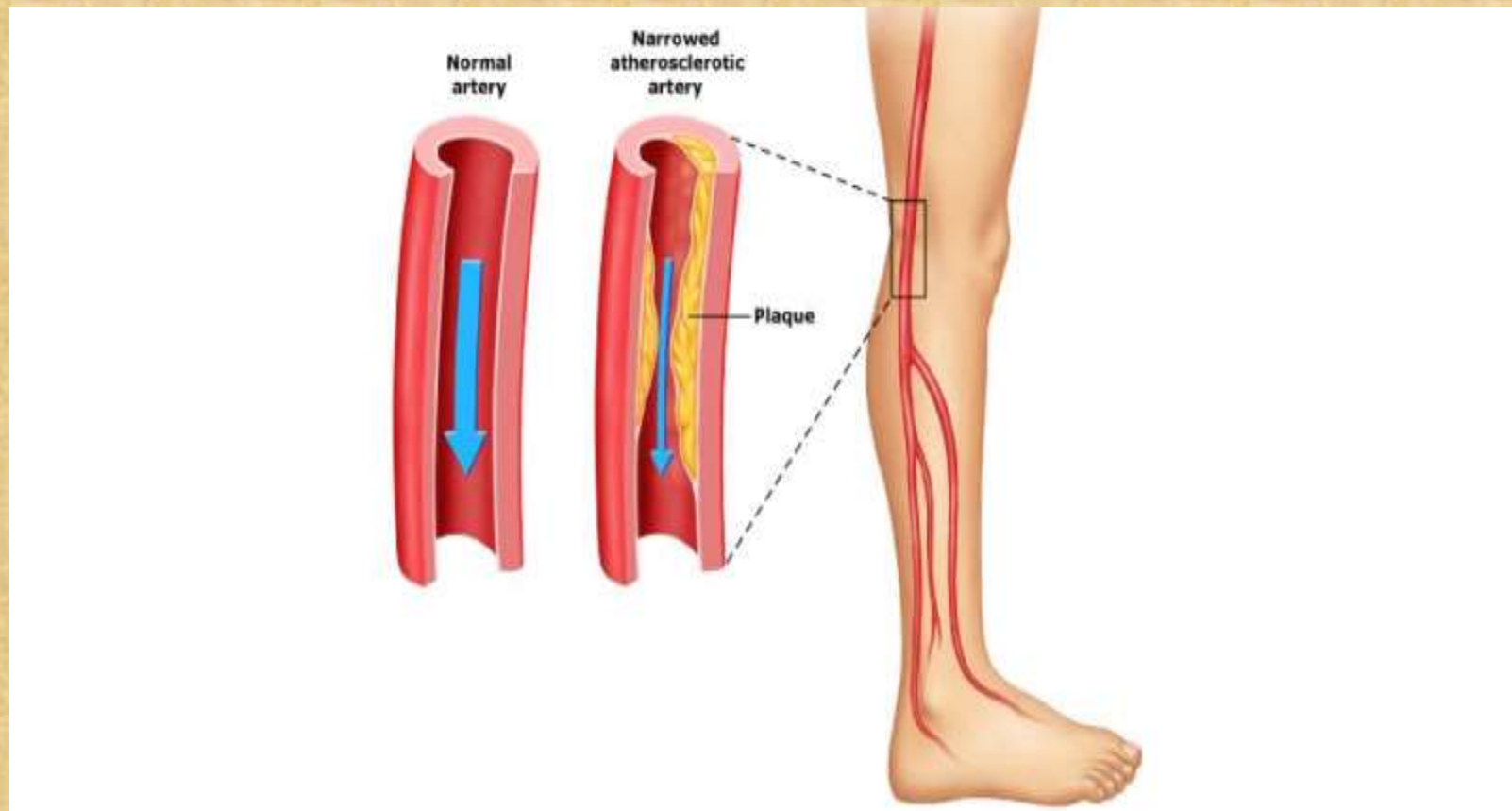
5. Hypertensive heart disease

(i) Aneurysm (weakness in the wall of a blood vessel)

(ii) Hypertension

(iii) Peripheral arterial disease

Peripheral arterial disease



Types of Cardiac Disease

6. Rheumatic heart disease

(i) Rheumatic heart disease :heart's valves by rheumatic fever

(ii) Valvular heart disease

7. Inflammatory heart disease

(i) Cardiomyopathy

(ii) Pericardial disease

(iii) Valvular heart disease

8. Congenital heart disease

9. Cardiac arrhythmias

10. *Dyspnea*

Prevention of heart disease

1. Exercise

(i) Improve Cardiac Ejection Fraction

50-75% : Heart's pumping ability is
Normal

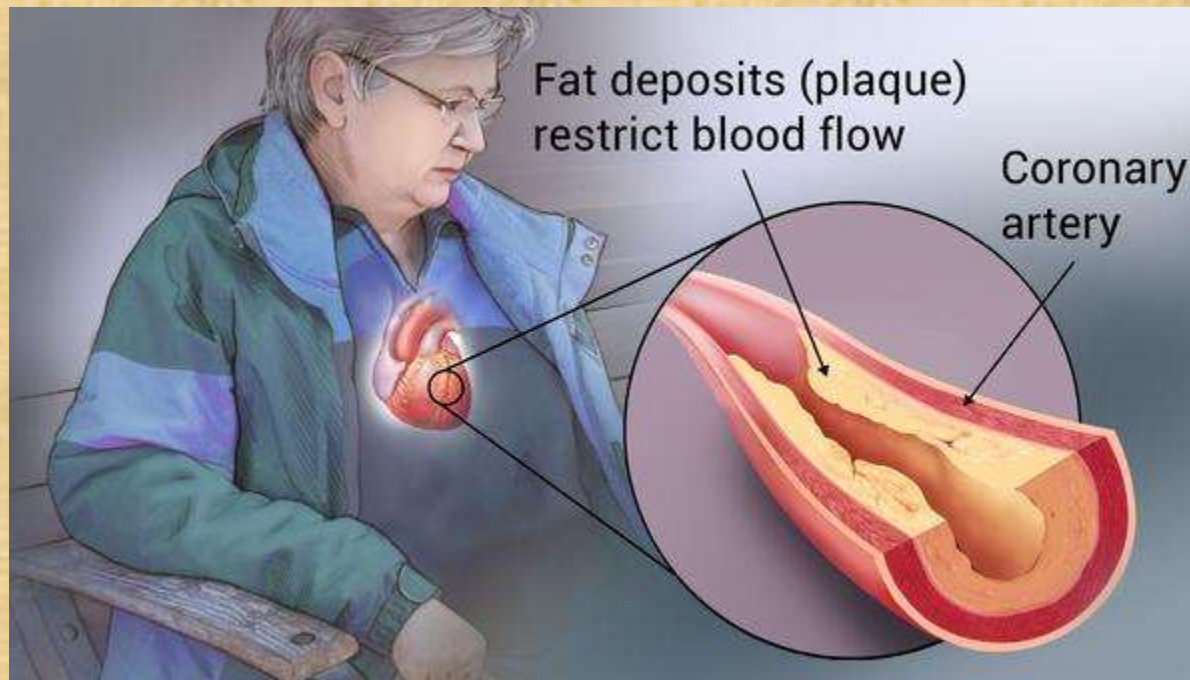
36-49% : Heart's pumping ability is
Below Normal

35% : and Below Heart's pumping
ability is Low

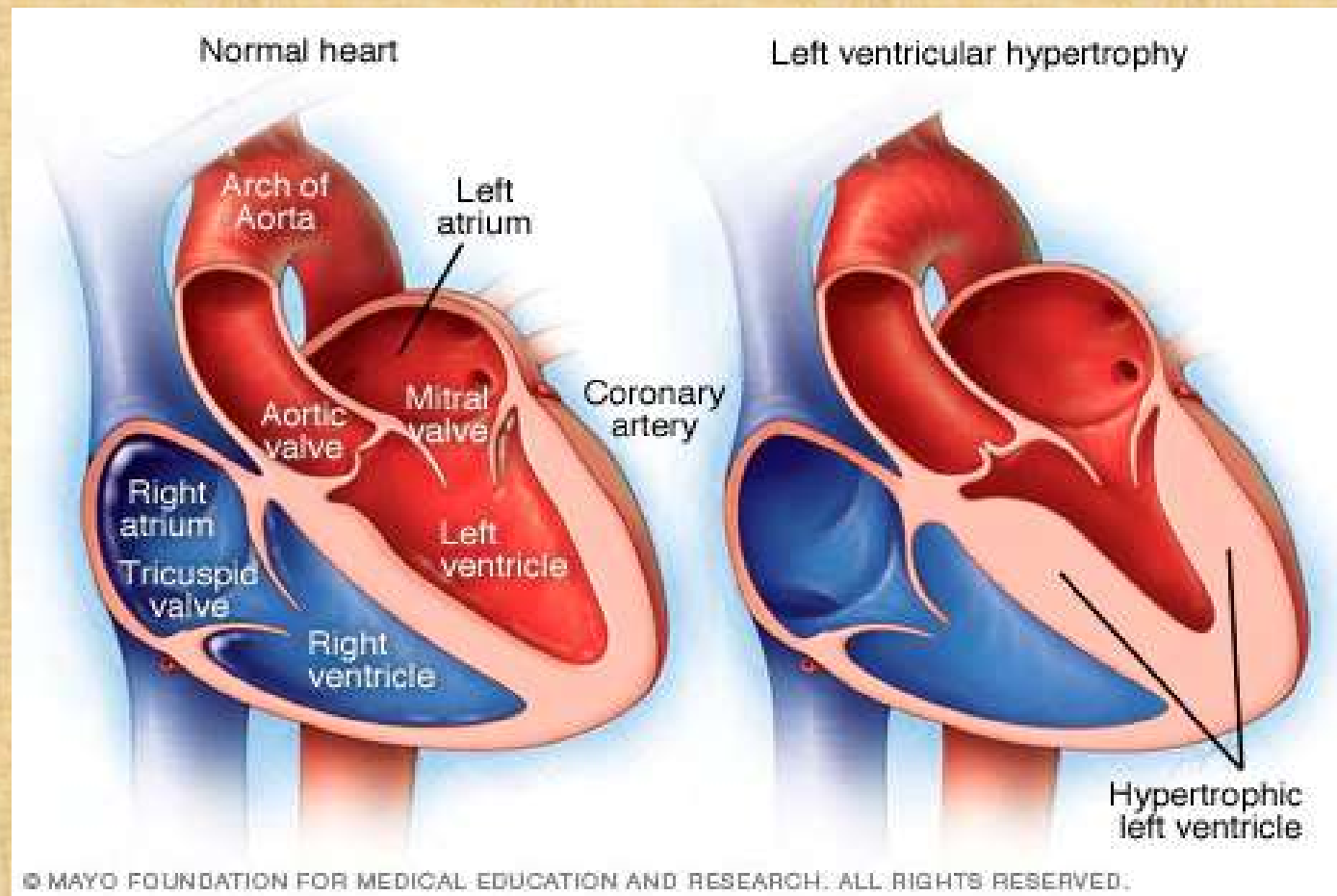
Sign. of Low Ejection Fraction

- Fatigue (feeling tired all the time)
- Shortness of breath
- Swelling in the feet
- Rapid pulse or heart rate
- Abnormal pulse

2. Exercise Delay or prevention Plaque



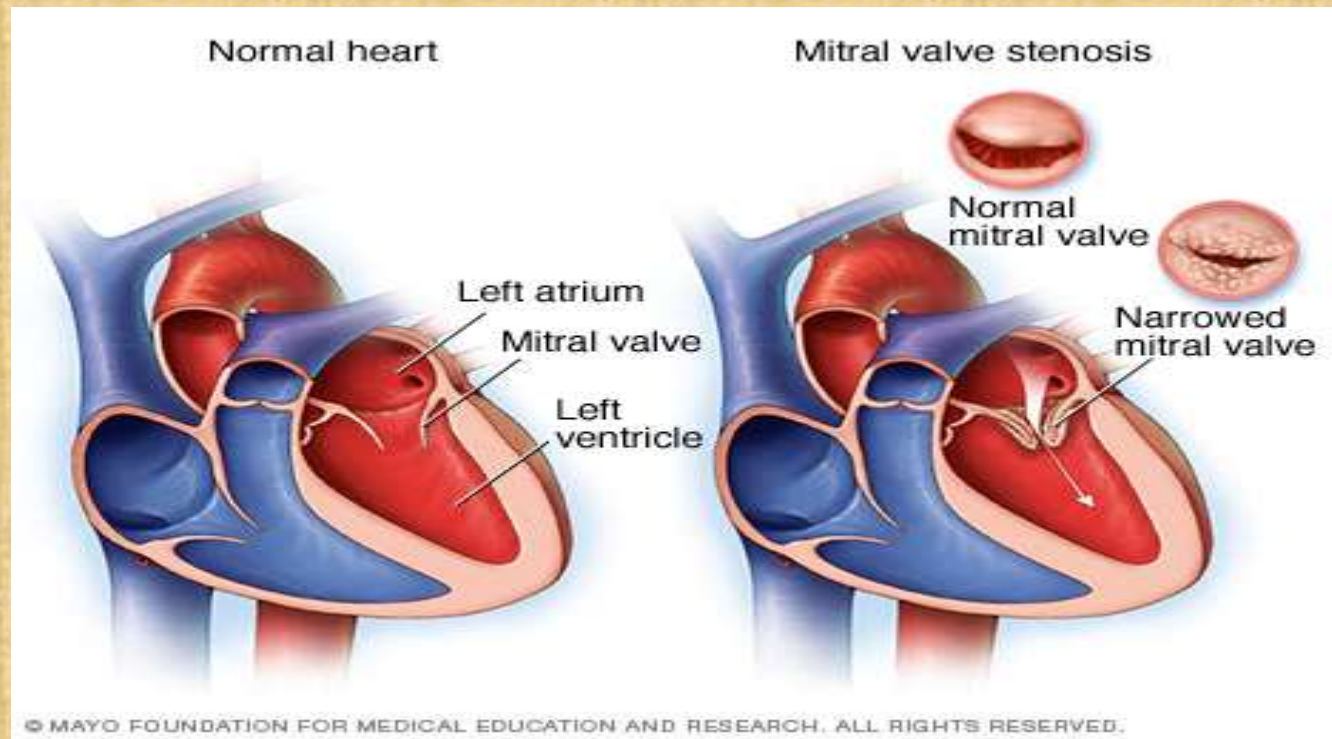
3. Reduce the Risk of Left Ventricular Hypertrophy



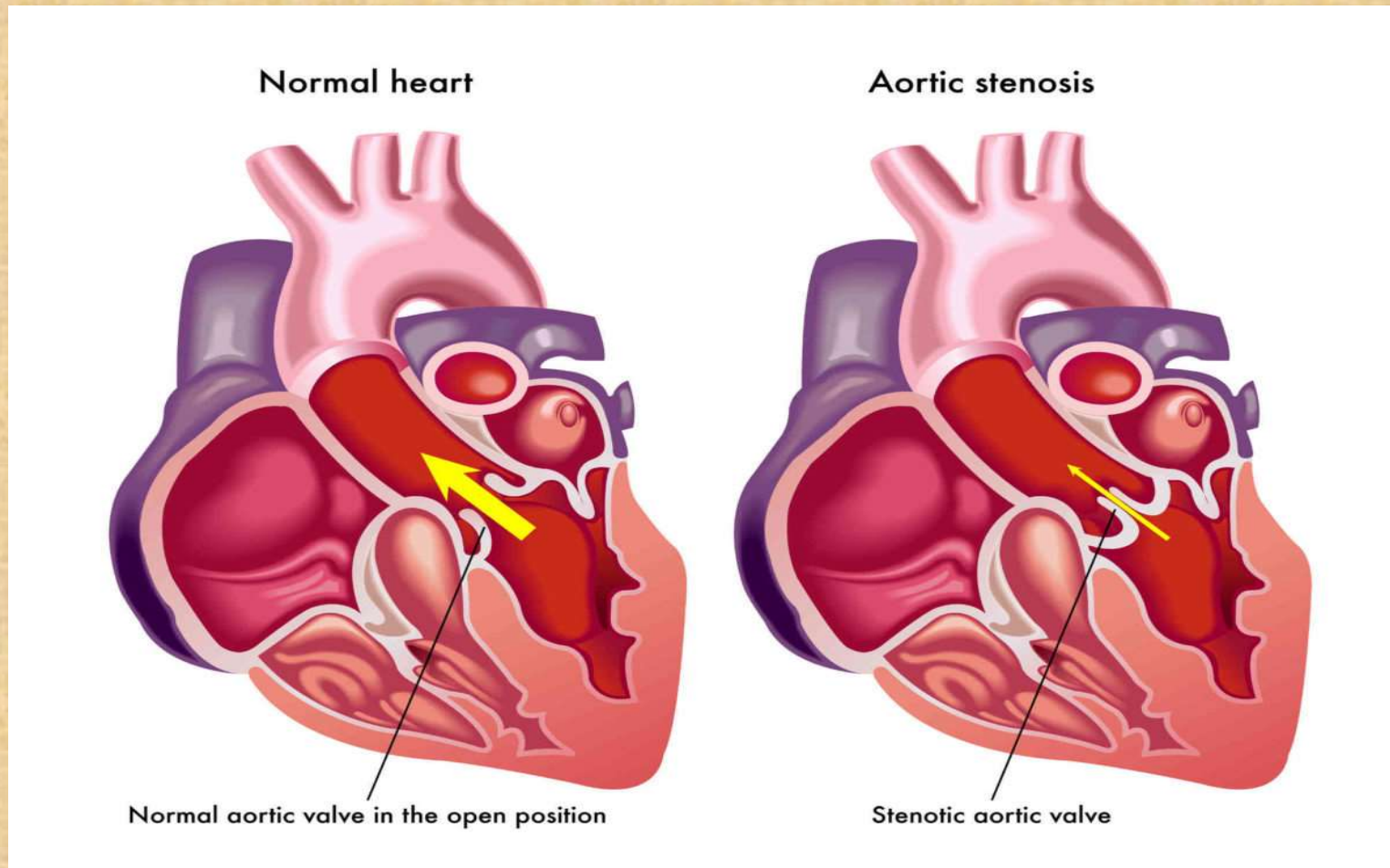
Symptoms of left ventricular hypertrophy

- Shortness of breath
- Fatigue
- Chest pain, often after exercising
- Sensation of rapid, fluttering or pounding heartbeats (palpitations)
- Dizziness or fainting

Exercise Reduce the risk of Stenosis



Exercise Reduce the risk of aortic stenosis



Other benefits of Exercise

1. Vasodilation of Blood Vessels
2. Stroke Volume Increase
3. Cardiac Output Increase
4. Improve Heart rate
5. Maintain Blood Pressure

Prevention of Heart Disease

2. Food or Fruits

Citrus fruits



Garlic

Garlic can help reduce hypertension by increasing the amount of nitric oxide in the body. Nitric oxide helps promote vasodilation, or the widening of arteries, to reduce blood pressure.



Fruits /vegetable



Omega 3 fatty acid



Nuts



Life Saving Loading Dose of Immediate Heart Attack

- Loading Dose' consists of the following combination:-
 1. Sorbitrate – 10 mg – 3 Tablets after 10 min.each (Bylingual)
 2. **Asprin 325 mg - 1 Tablet**
 3. **Atorvastatin 80 mg - 1 Tablet (Rosuvastatin 40 mg)**
 4. **Clopitab 150 mg x 2 - Tablets**

Common Medicine for Heart Disease

1. Anti-clotting (blood-thinning) medicines

e.g. Aspirin.

2. Antiplatelet medicines (stop blood clots forming in your blood vessels)

e.g. clopidogrel, prasugrel and ticagrelor

3. Anticoagulant medicines

e.g. Warfarin

Warfarin helps to prevent blood clots forming and treats existing clots

Blood pressure medicines

1. Angiotensin converting enzyme (ACE) inhibitors

- Lisinopril
- Perindopril (Aceon)
- Quinapril (Accupril)
- Ramipril
- Trandolapril

Blood pressure medicine

2. Angiotensin II receptor blockers (ARB)

- Telmistarn
- Losartan (Cozaar)
- Valsartan (Diovan)

3. Beta - Blockers

- bisoprolol (Zebeta)
- bisoprolol/hydrochlorothiazide (Ziac)
- metoprolol tartrate (Lopressor)
- metoprolol succinate (Toprol-XL)
- **Concor**

Blood pressure medicine

4. Calcium Channel Blockers

e.g. Amlodipine

Asomax

Amtas

Blood pressure Medicine

5. Diuretics

- There are three major types of diuretics:
 - (i)Thiazide, (hydrochlorothiazide,chlorothiazide, chlorthalidone
 - (ii) potassium-sparing, (Amiloride spironolactone triamterene)
 - (iii) loop diuretics (Furosemide , Torsemide)

Statin (Management of Cholesterol)

1. Atravastatin
2. Rosuvaststin

Thanks
