

Cardiovascular Disease

Coronary Heart Disease

Mentoring in Medicine, Inc.

Coronary Heart Disease

Why is it so Important?

- Leading cause of death of men and women in the US
- One in every three deaths is from heart disease and stroke, equal to 2,200 deaths per day

Coronary Heart Disease

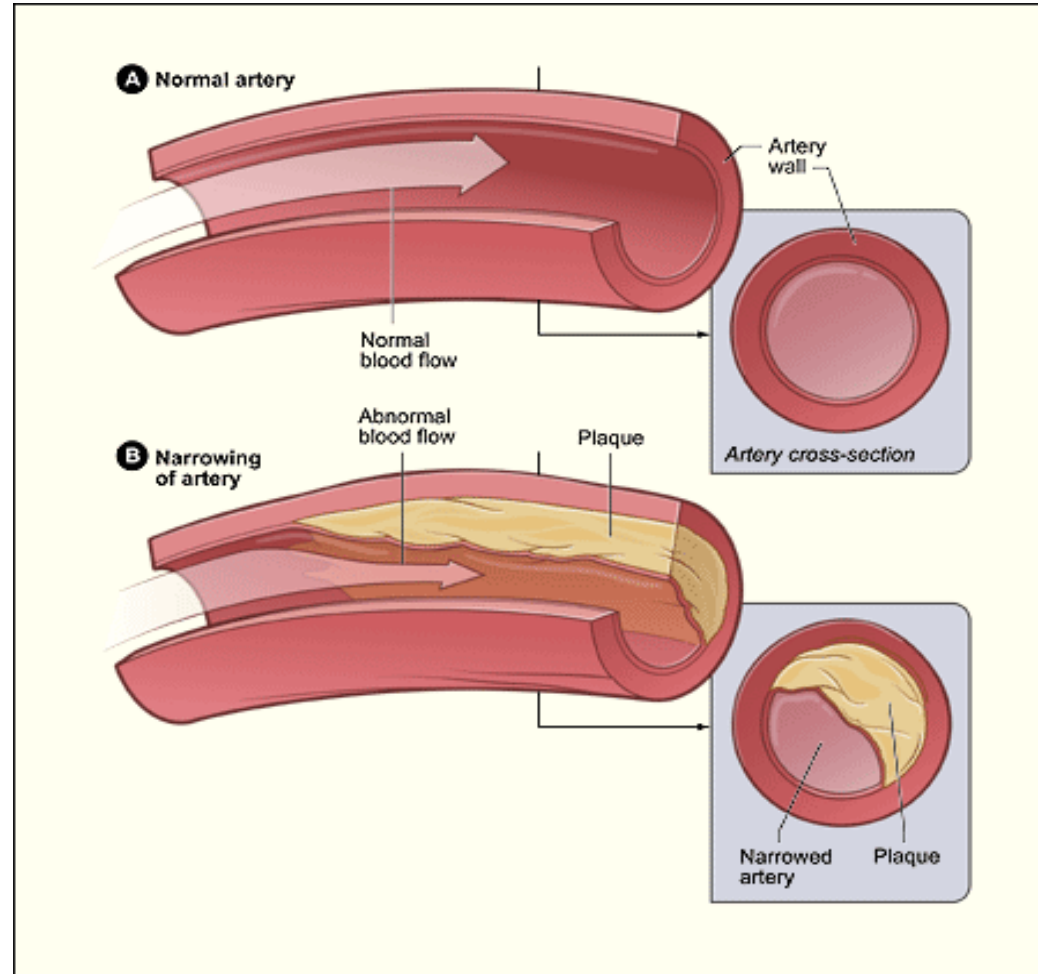
- What is happening in the heart at the level of the coronary arteries
 - **Atherosclerosis**
 - hardening of the coronary arteries
 - **Thrombosis**
 - blood clot occluding vessel
- What the patient may feel
 - **Angina**
 - chest discomfort due to poor blood flow through the coronary arteries to the heart muscle (myocardium)
 - **Heart Attack or Myocardial Infarction-**
 - blood flow to a part of the heart is blocked causing damage or death of the heart muscle

Video

- **What Causes a Heart Attack?**

Coronary Heart Disease

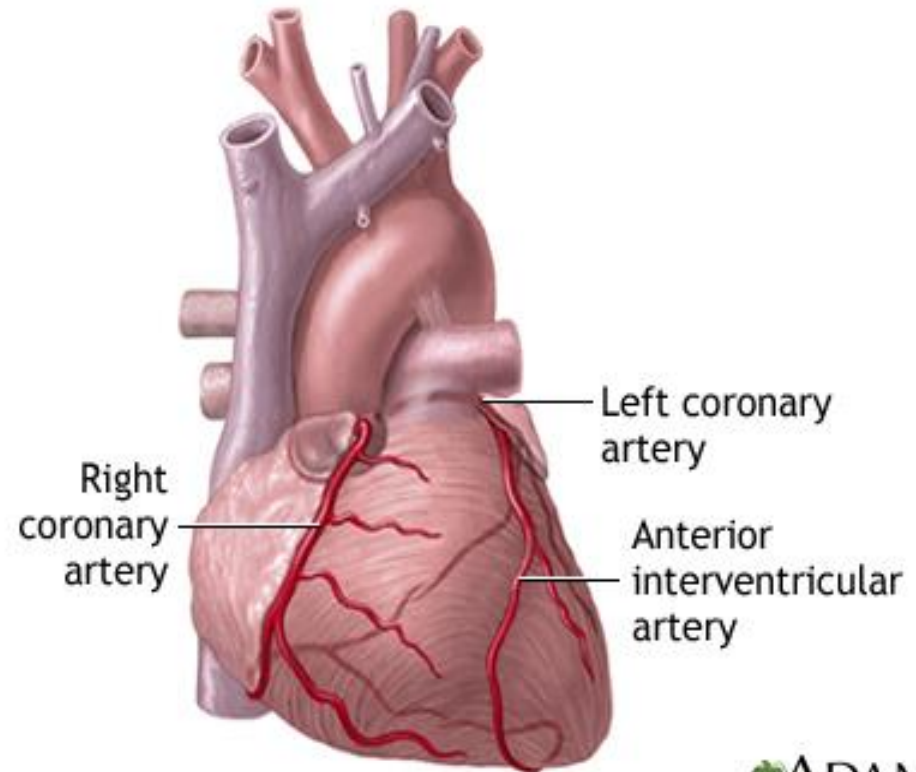
- Caused by the build up of plaque in the arteries
- Also called **coronary artery disease**
- Can lead to a **heart attack**



Coronary Blood Flow

Two Main Blood Vessels

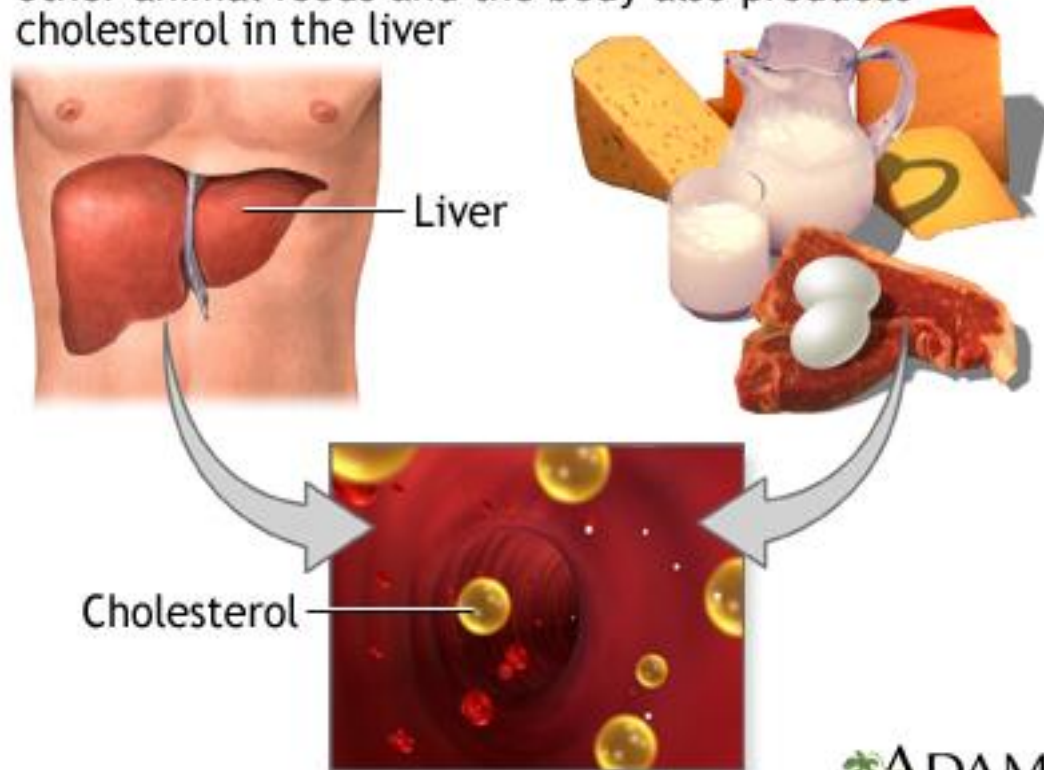
- Right Coronary Artery
 - Branches supply the right ventricle, 25%-25% of the left ventricle, 60% of the SA node
- Left Main Coronary Artery
 - Branches supply right and left ventricles, left atrium



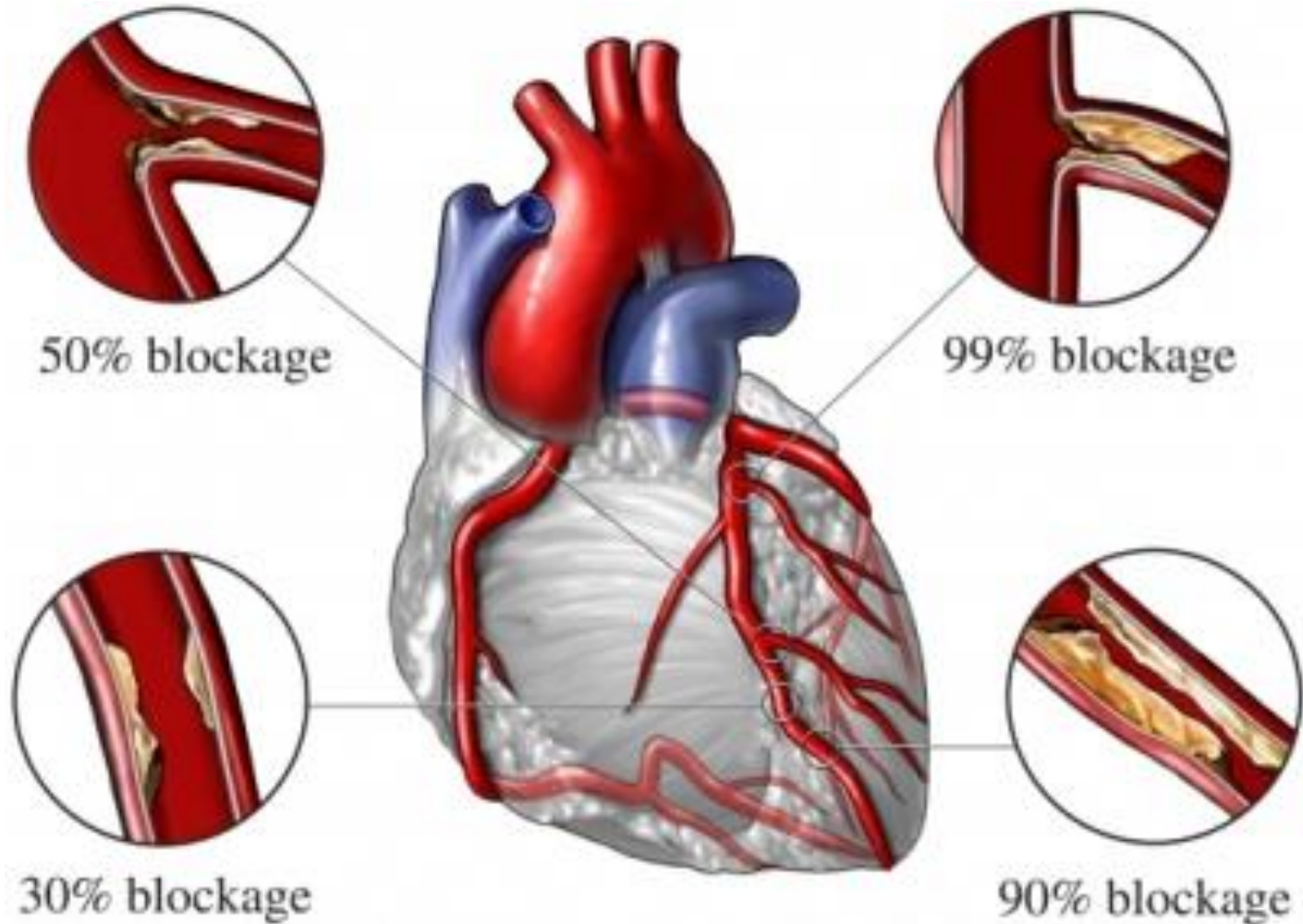
Coronary Heart Disease

Effect of Cholesterol on the Arteries

We absorb cholesterol from meat, dairy products and other animal foods and the body also produces cholesterol in the liver



Coronary Heart Disease Inside the Arteries



Coronary Heart Disease

Symptoms

- May have disease and no symptoms
- Women, people with diabetes and the elderly have symptoms other than chest pain.
- Symptoms
 - Chest pain or discomfort
 - Discomfort in the jaw, neck, left arm
 - Shortness of breath
 - Nausea
 - Fatigue
 - Weakness

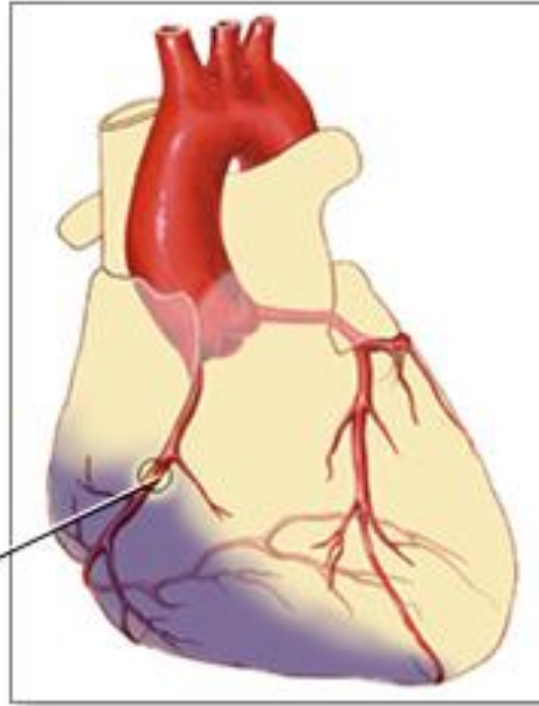
Coronary Artery Disease

How a Myocardial Infarction Occurs



Plaque build up in the coronary artery blocking blood flow and oxygen to the heart

Damage and death to heart tissue shown in purple



Video

- Myocardial Infarction

Myocardial Infarction Symptoms

Chest discomfort



Arm or back discomfort



Neck or jaw discomfort



Trouble breathing,
with or without
chest discomfort



Feeling light-headed or breaking
into a cold sweat



Feeling sick or
discomfort in
your stomach

Video

- **Women's Heart Attacks Misunderstood**

Coronary Artery Disease

Know Your Risk Factors

- **CANNOT** Change
 - Age
 - Gender
 - Genes
 - Race
- **CAN** Change
 - Diet
 - Sedentary Lifestyle
 - Smoking
 - Drug Use
 - Control Other Diseases
 - Diabetes
 - Hypertension
 - Stress

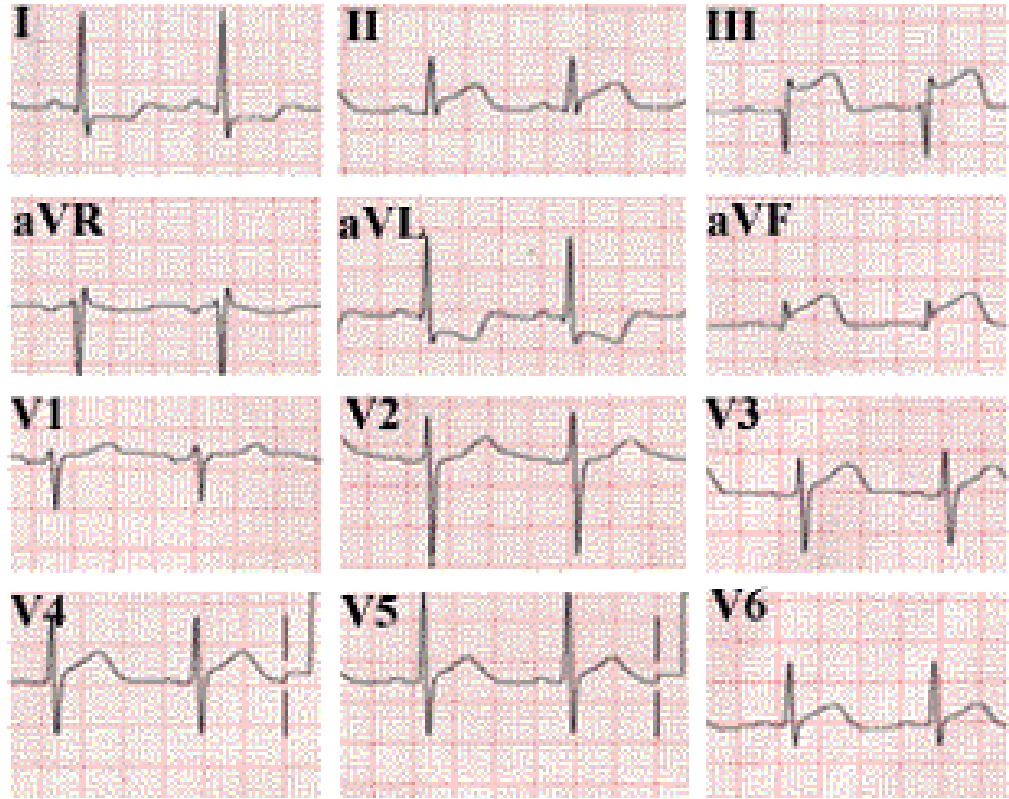
Coronary Heart Disease Prevention

Healthy Eating Tips

- Choose a diet rich in fruits, vegetables, and whole grains.
- Choose lean proteins, such as chicken, fish, beans, and legumes.
- Eat low-fat dairy products, such as 1% milk and low-fat yogurt.
- Avoid sodium (salt) and fats found in fried foods, processed foods, and baked goods.
- Read labels, and stay away from "saturated fat".

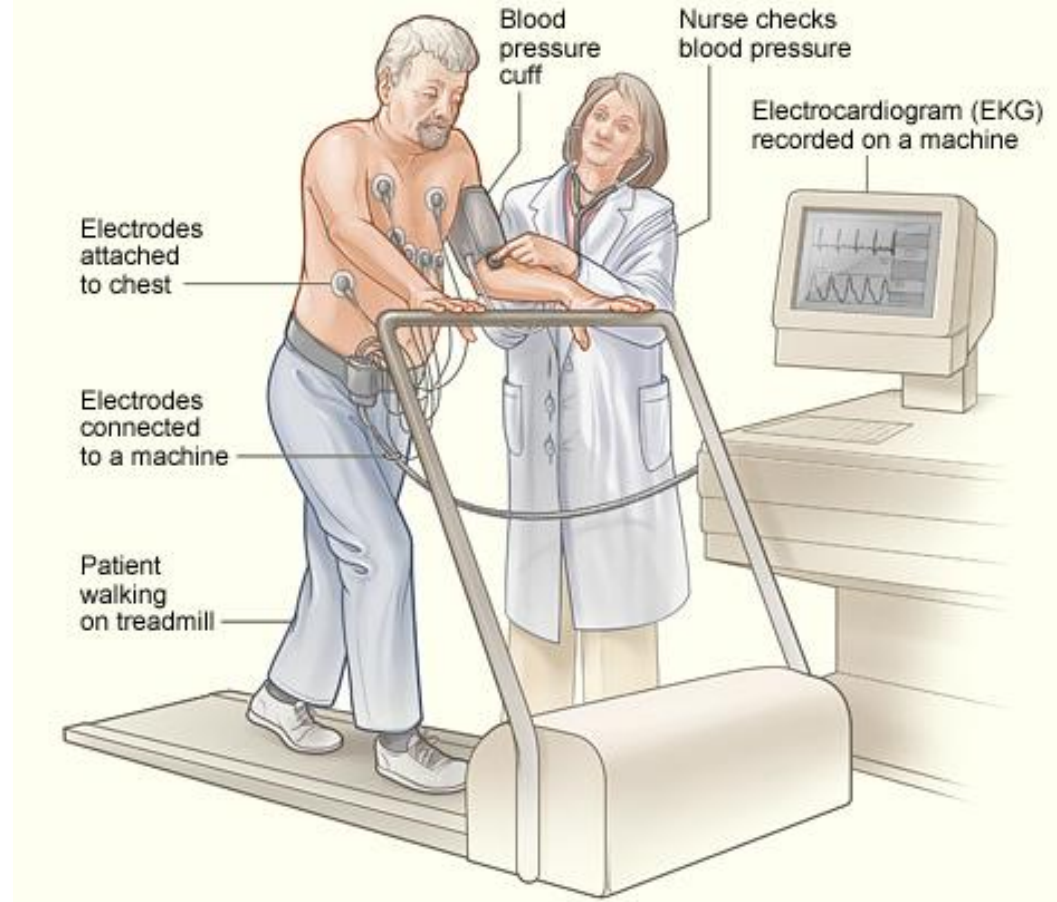
Coronary Heart Disease Diagnosis

- Electrocardiogram
- Blood Tests



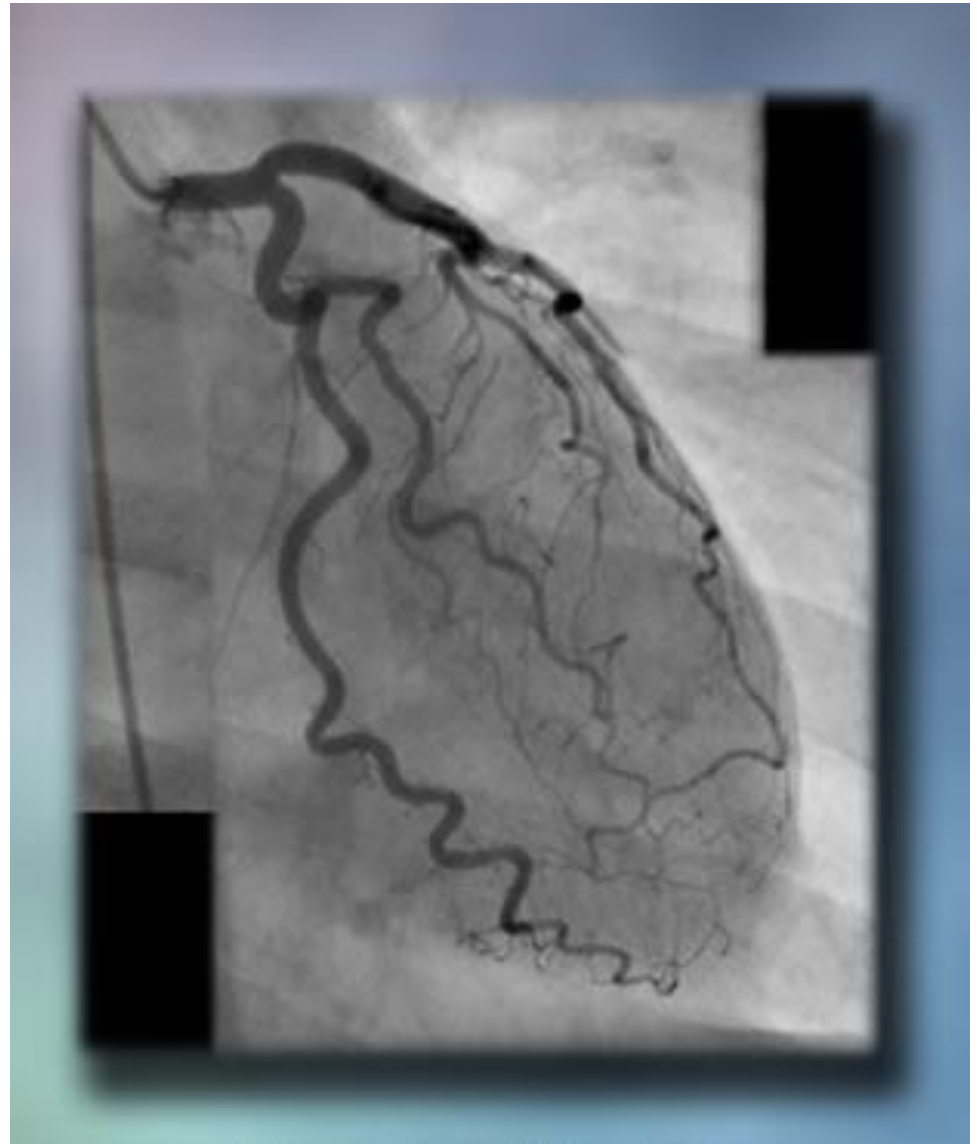
Coronary Heart Disease Diagnosis

- Nuclear Stress Testing



Coronary Heart Disease Diagnosis

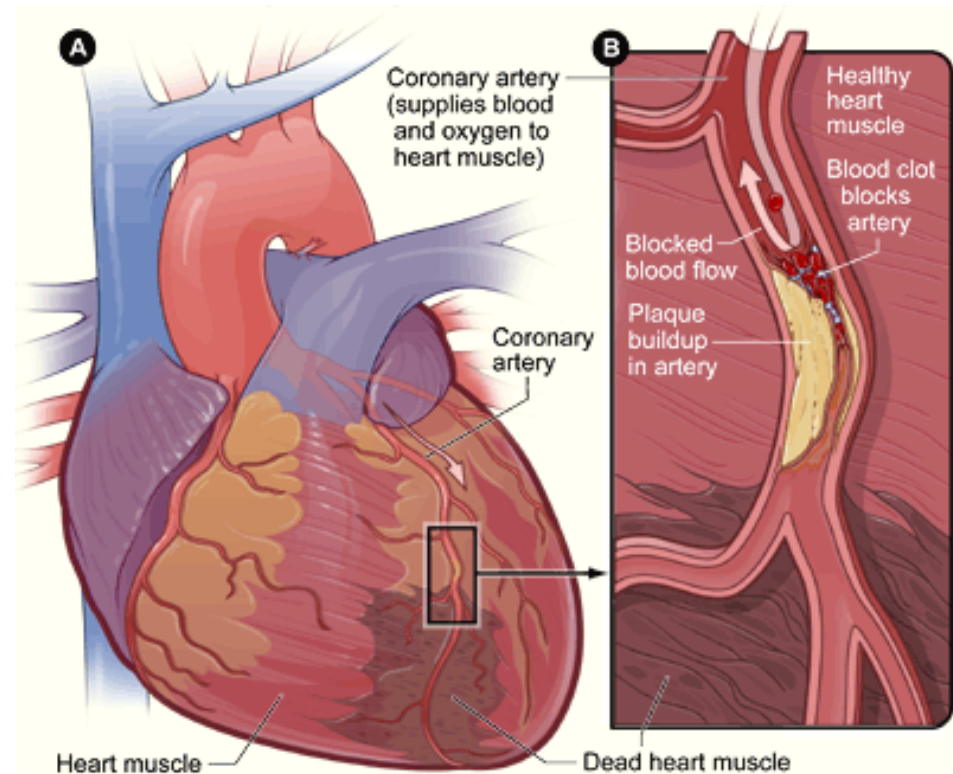
- Cardiac Catherization
- Coronary Angiogram



Coronary Artery Disease

Three Different Treatments

- Treatment-
 - Medication
 - Keep vessel open
 - Create a new path for blood to flow



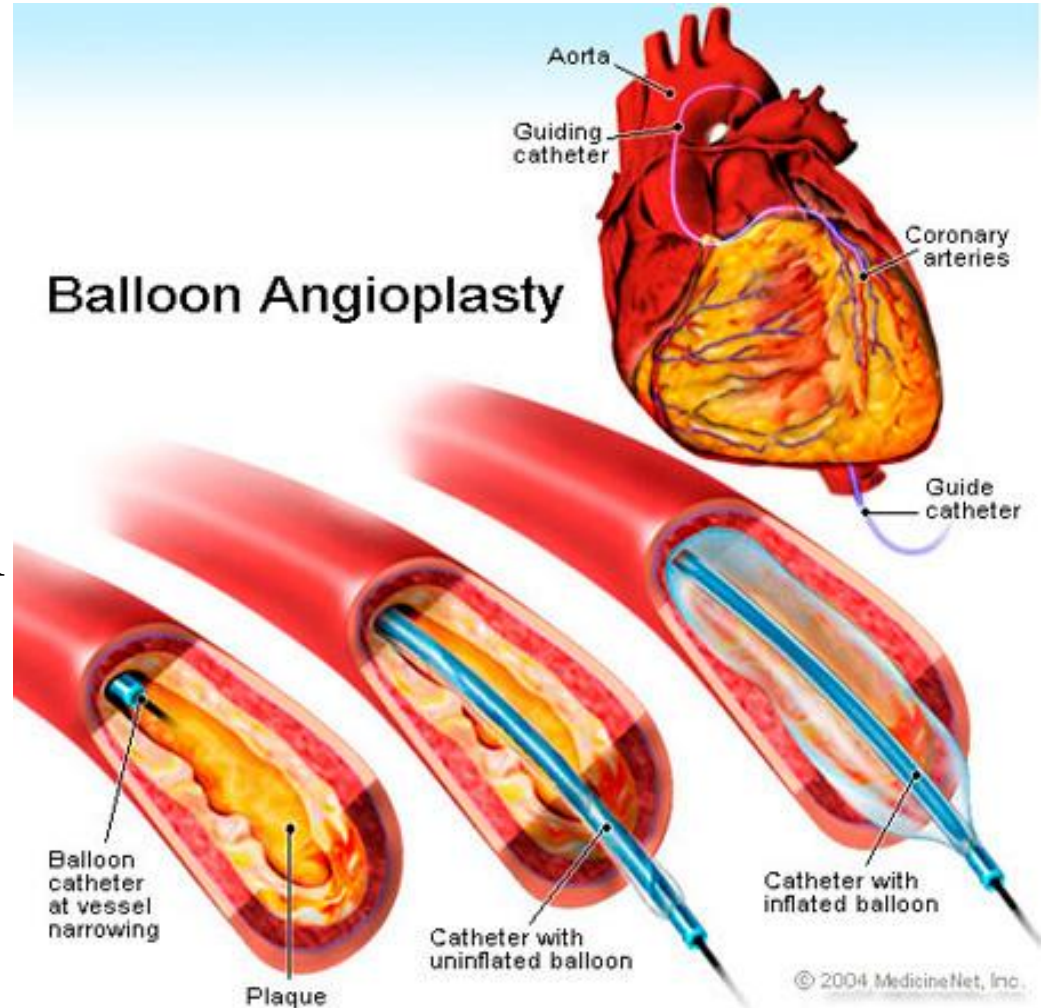
Coronary Heart Disease Treatment

- Treatment-
 - Medication
 - Clot busters also called thrombolytic medication



Coronary Heart Disease Treatment

- Treatment-
 - Keep vessel open
 - Balloon angioplasty
 - Stent insertion

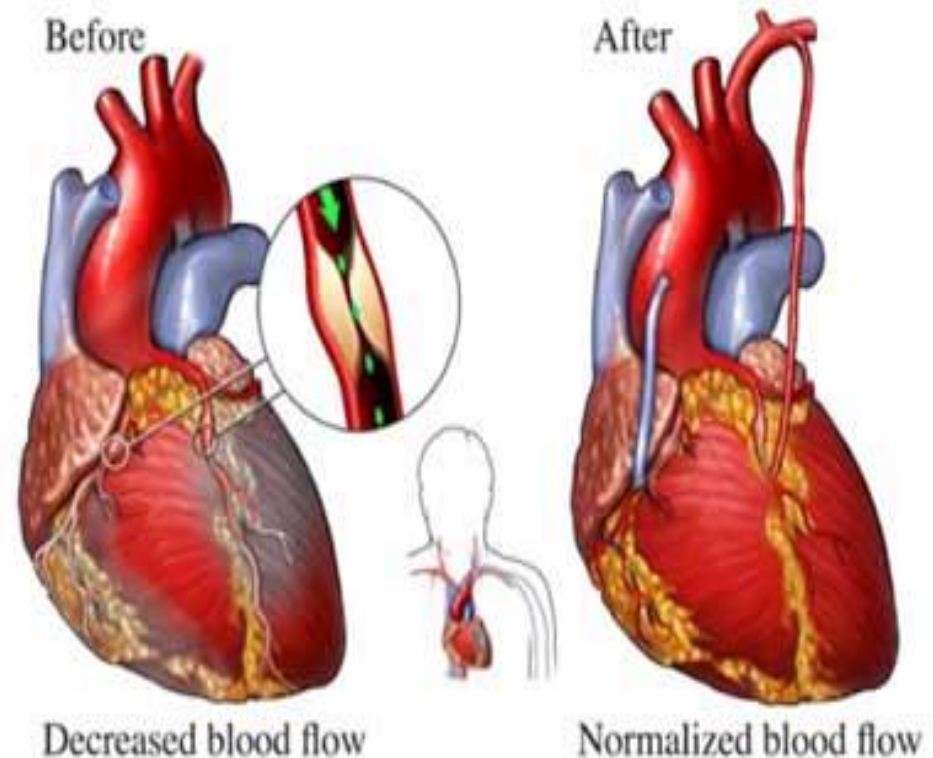


Video

- **Percutaneous Coronary Intervention Stenting**

Coronary Heart Disease Treatment

- Treatment-
 - Create a new path for blood to flow
 - **Coronary Artery Bypass Surgery (CABG)**
 - Blood vessel from leg, chest or arm is used to bypass the obstruction



Video

- Heart Bypass Surgery Explained

Video

- NCH Make the Call Dance