



HEALTHY HEART HAPPY LIFE

Presented by

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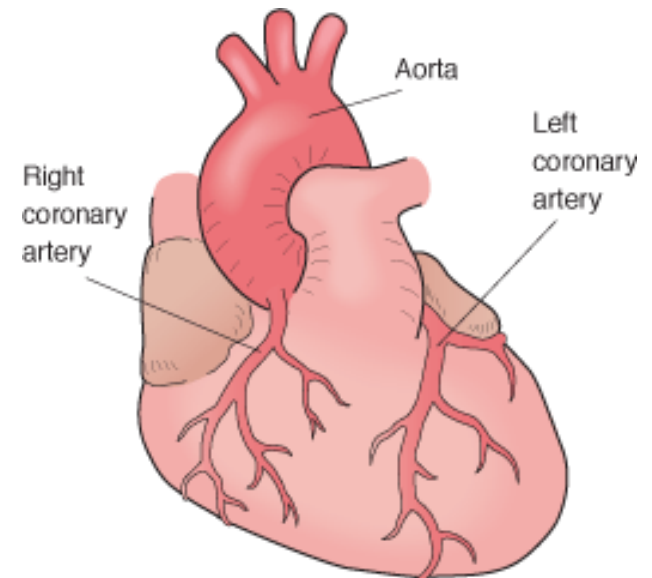
MBBS | MD | DM (Cardiology)

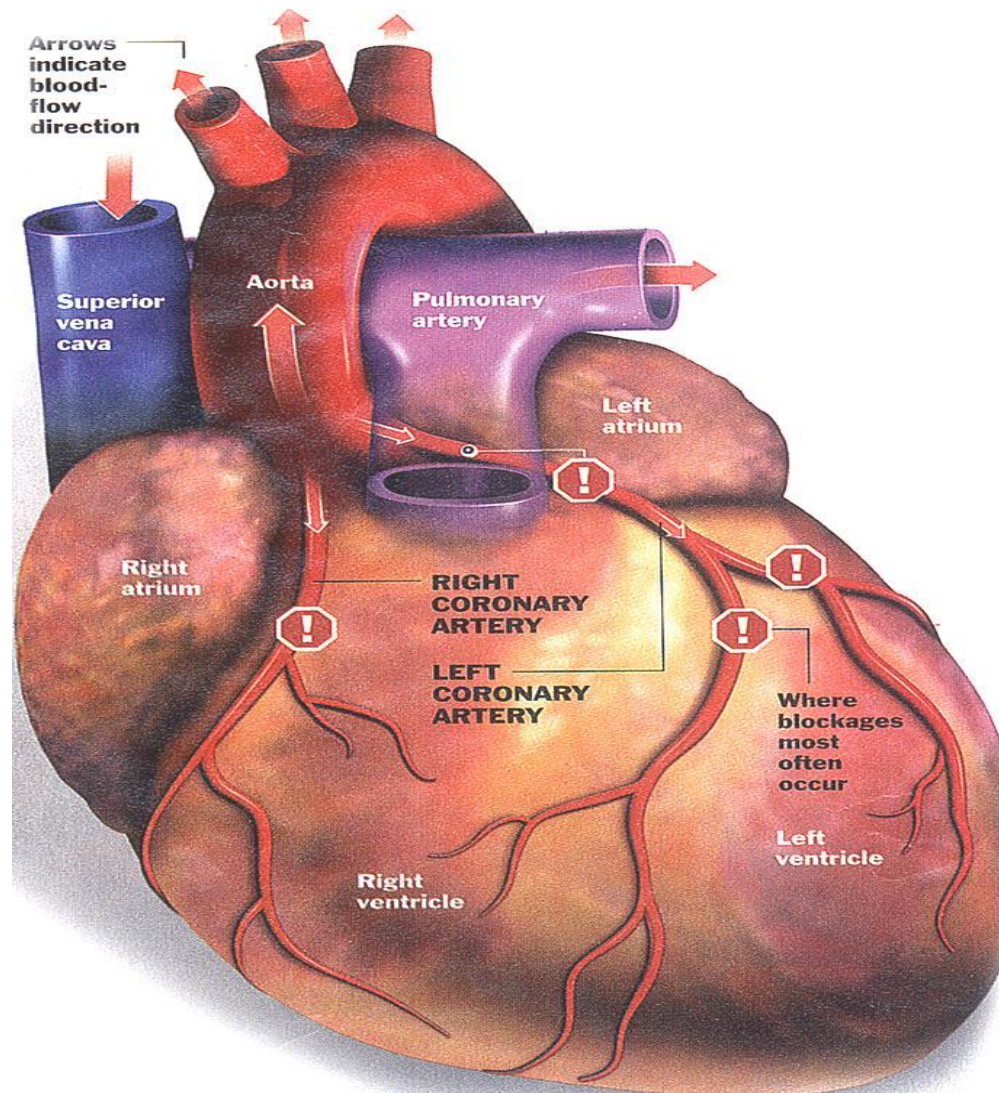
CARE HOSPITALS



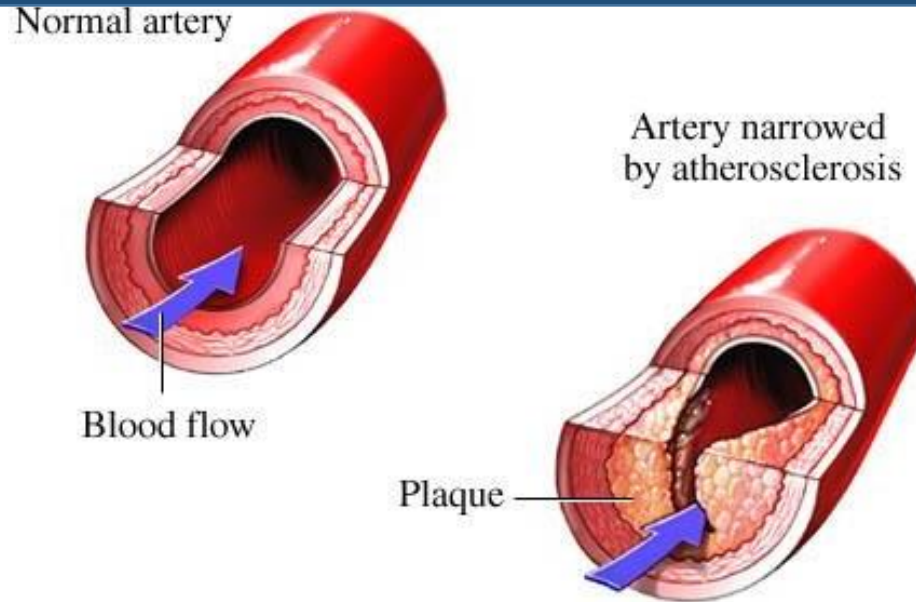
How the heart works

- **Heart :**
 - The most hard-working muscle of our body
 - beats more than 1,00,000 times per day
 - pumps 4-5 litres of blood every minute during rest
 - Supplies nutrients and oxygen rich blood to all body parts, including *itself*
- **Coronary arteries- 3 in number**



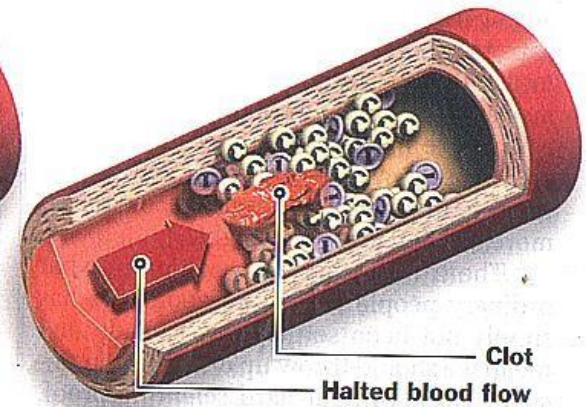
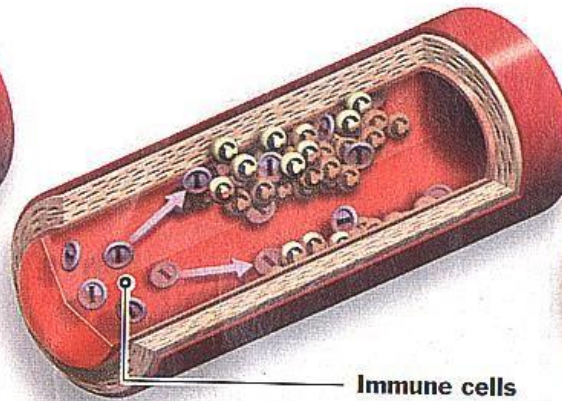
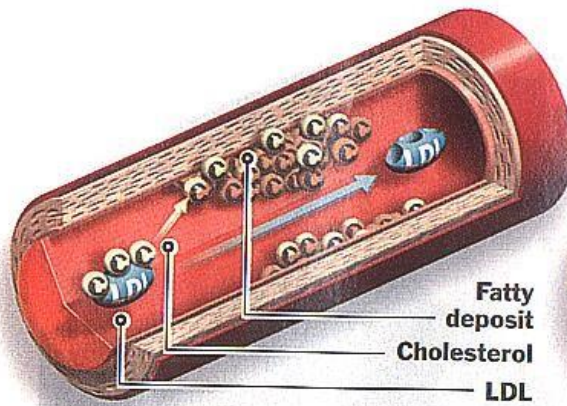
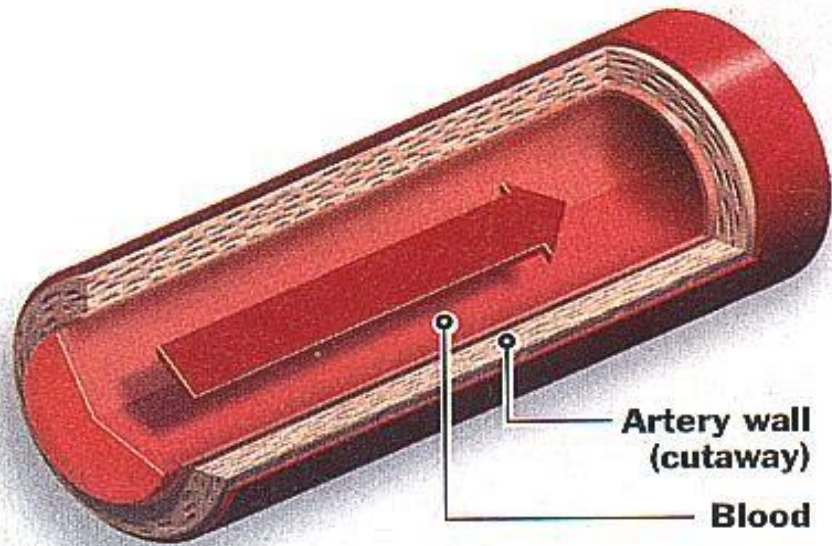


What is Atherosclerosis what is coronary artery disease?

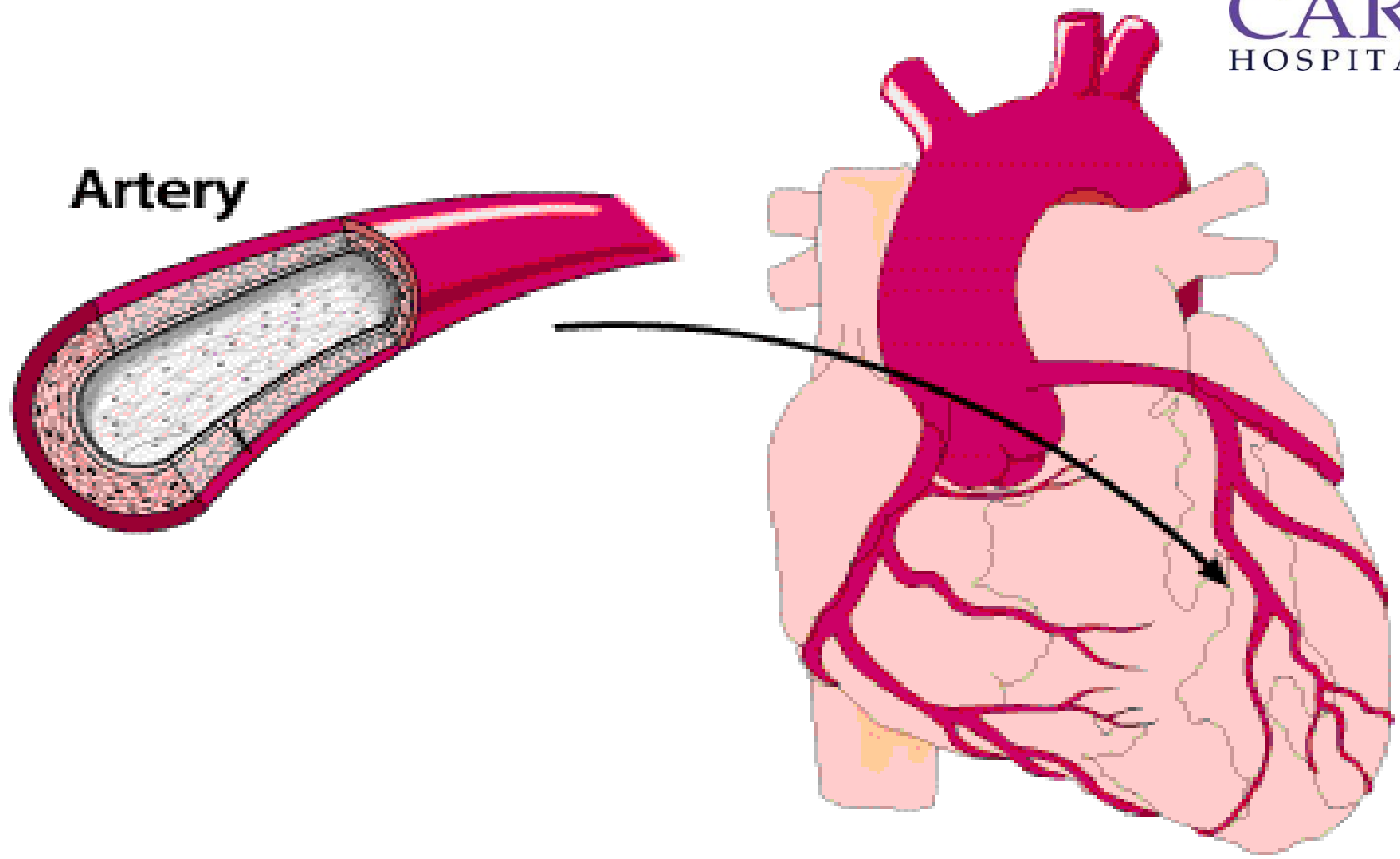


- Over time, fatty deposits called **plaque** build up within the artery walls. The artery becomes narrow. This is atherosclerosis
- When this occurs in the coronary arteries, heart does not get sufficient blood, the condition is called **coronary artery disease**, or **coronary heart disease**

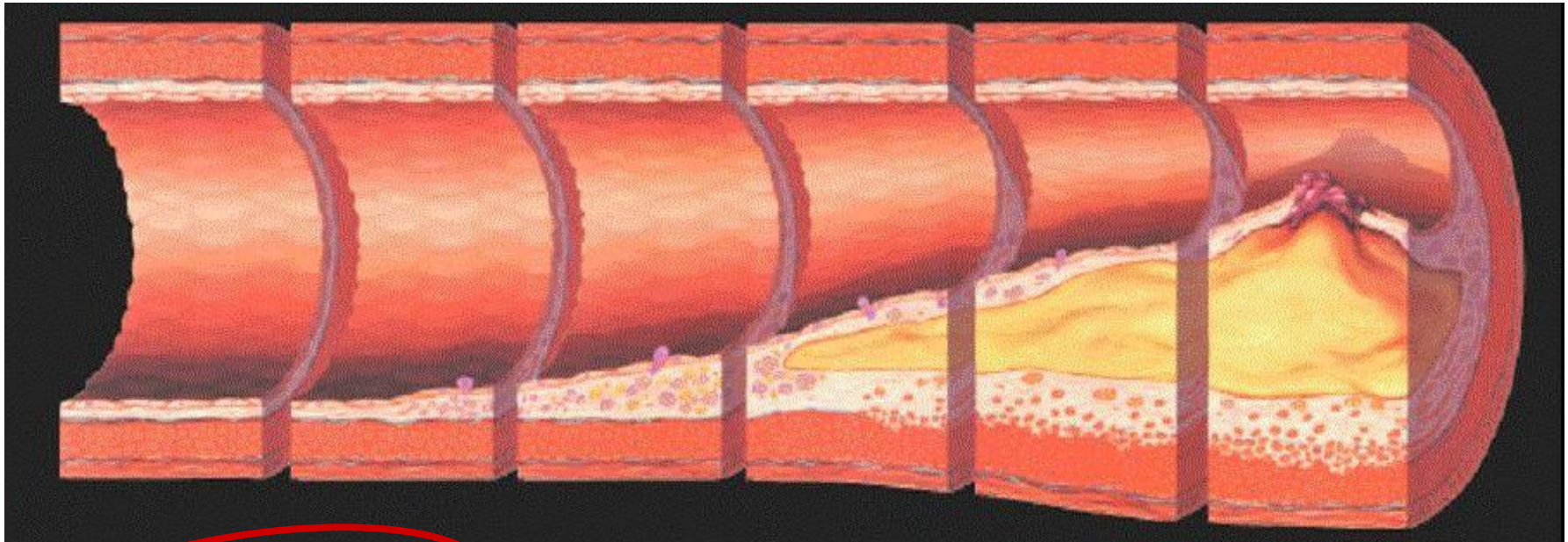




Artery



Myth : fat deposits at old age! It starts from 2 years of age



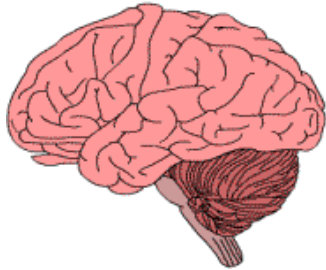
**From First
Decade**

**From Third
Decade**

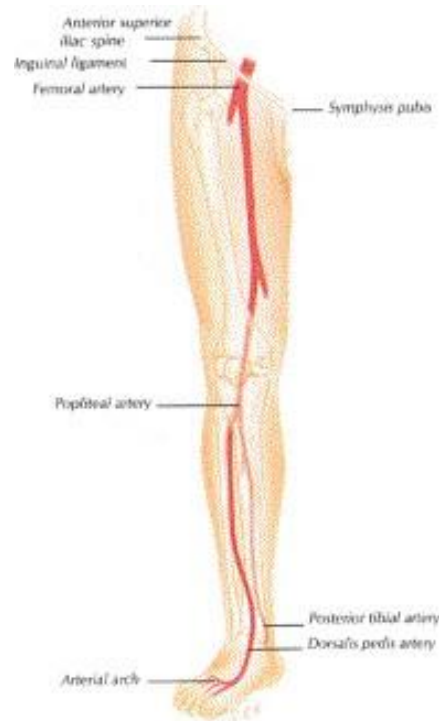
**From Fourth
Decade**



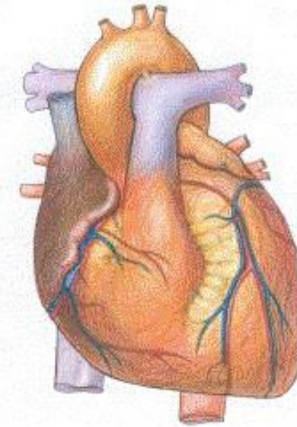
Are Other organs Affected?



Ischemic Stroke



Peripheral Vascular
Disease



Coronary Heart Disease

- Angina
- MI (Heart Attack)
- Sudden Cardiac Death

Why we talk about heart attack so seriously ?

- **No. 1 killer disease worldwide**
 - 12 Million deaths annually
- **For every 36 seconds** , one person dies due heart related problem
- **For every 40 seconds** ,one person develops major heart attack
- **About One in 5 heart attacks is SILENT**
- During last 30 years large declines in developed countries - rising health awareness and government programmes
- Alarming increase in developing countries especially India



Why Should I (Indian) be Worried ?

- Indians **More susceptible** than any other ethnic group
 - 3.4 times more than Americans
 - 6 times more than Chinese
 - 20 times more than Japanese
 - Occurs at lower cholesterol
- Get the disease at much **younger** age
 - 5-10 years earlier than other communities
- Disease follows **more severe** and malignant course
 - 3 times higher rate of second heart attack and two times higher mortality than whites



Why Me at this young age?

- Genetic predisposition
- Poor handling of fats and metabolic syndrome
 - Diabetes, obesity, high BP, Coronary artery disease

Environmental insults

- Urbanization
- Sudden change in lifestyle
- Poor dietary habits



What Increases Risk?

You can't help it !

- Age:
Men \geq 45;
Women \geq 55
- Sex
- Race
- Family History

You can !!

- Smoking
- High Blood Pressure
- Diabetes
- High Cholesterol
- Poor dietary habites
- Obesity
- Alcohol
- Physical Inactivity
- Stress



SMOKING

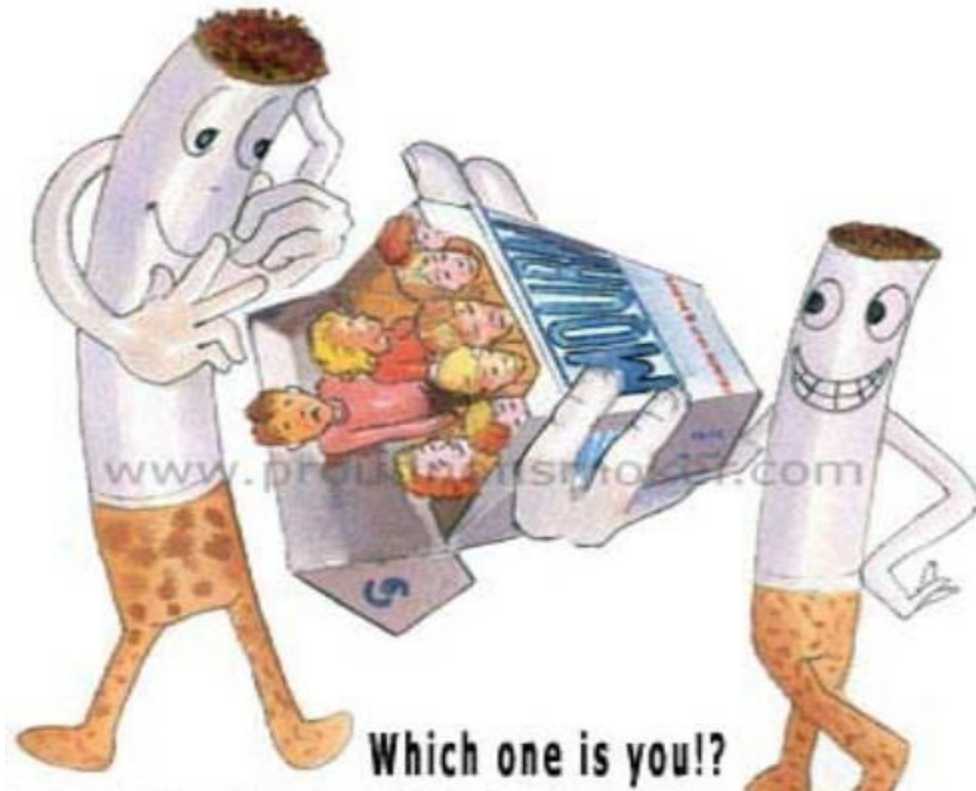
Cigarette smoke contains more than 4,000 chemicals, and 200 of these chemicals are poisonous

- Increases blood pressure
- Decreases HDL
- Damages arteries
- Increases the thickness of blood
- Increases heart attacks



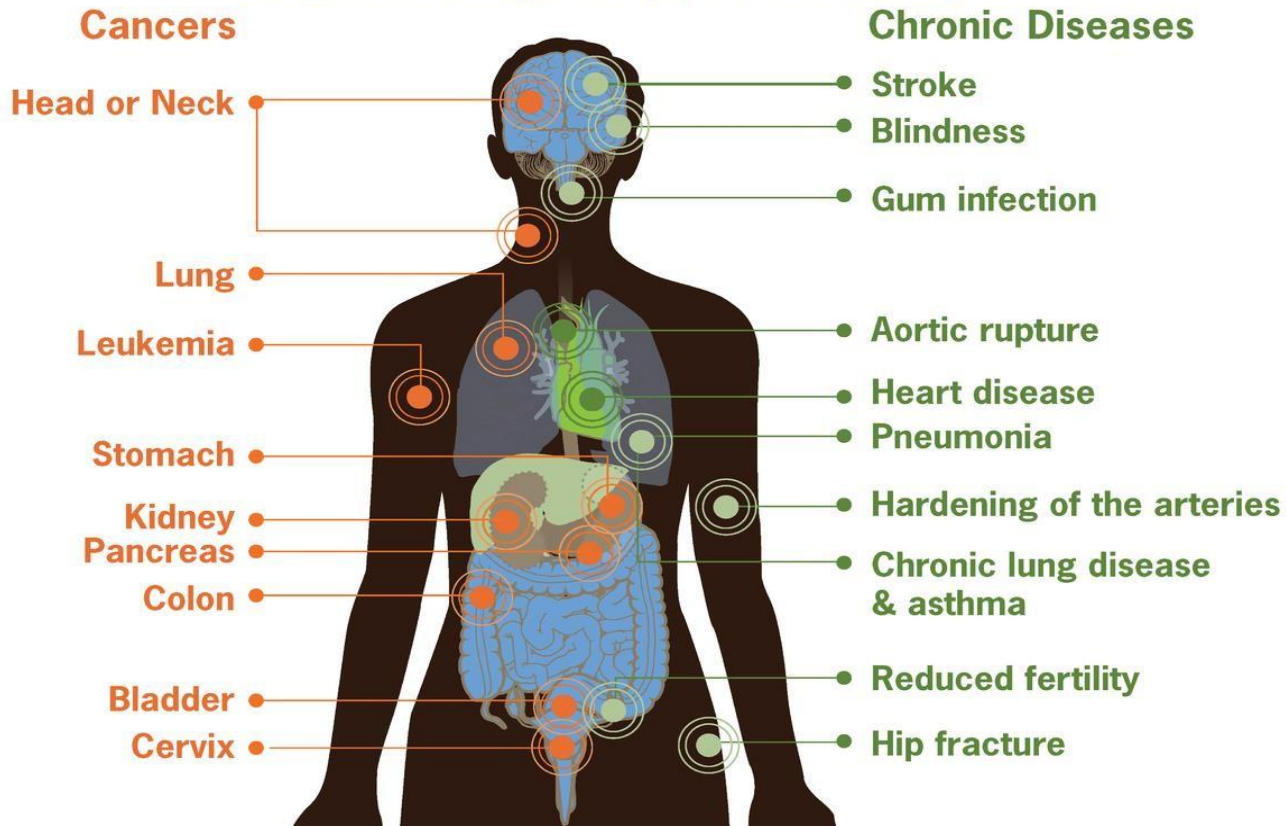
Cigarette Smoking

**If you think YOU are smoking the cigarette, you are mistaken...
It's the other way round !**



Risks from Smoking

Smoking can damage every part of the body



DIABETES

-
- India is the diabetic capital of the world
 - 70-75 million diabetics are there in india
 - At any given cholesterol level, diabetic persons have a 2 or 3 x higher risk of heart attack or stroke
 - A diabetic is more likely to die of a heart attack than a non-diabetic
 - ~80% Diabetics die from heart disease



HYPERTENSION

- 30% of Indians have hypertension

- **RULE HALVES:**

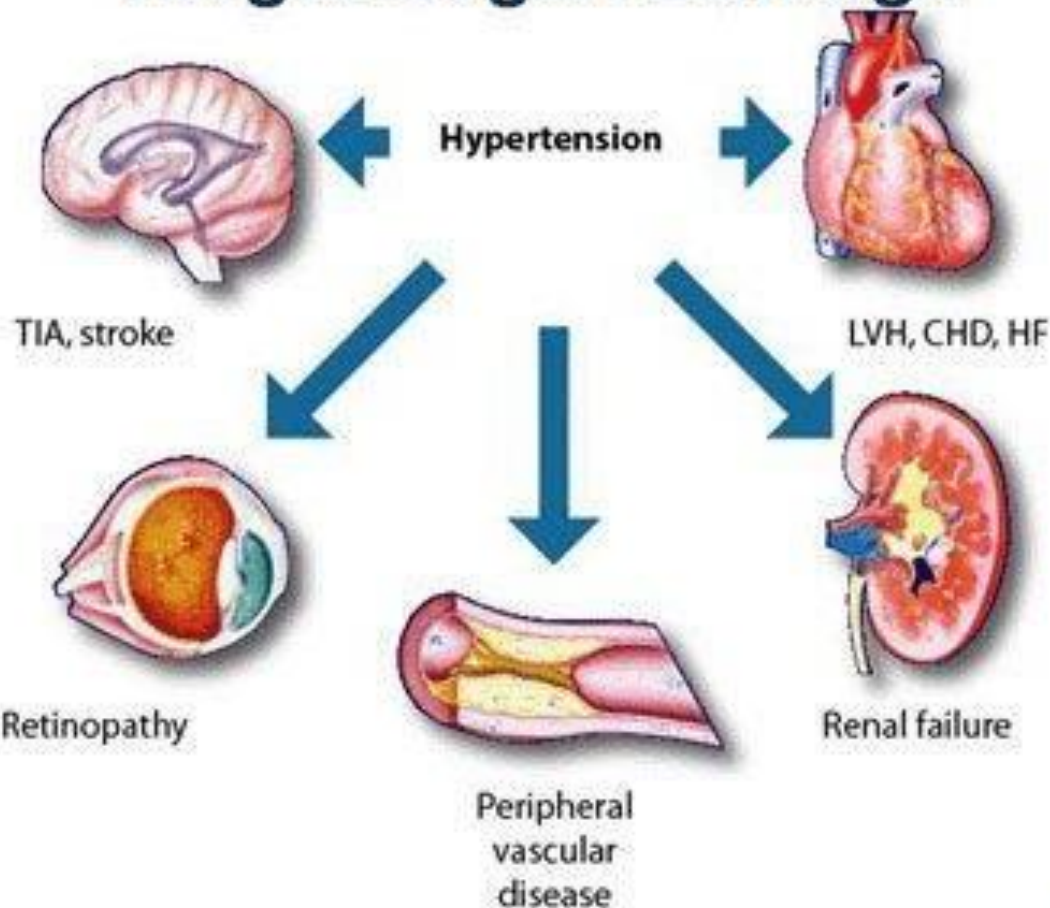
ONLY HALF(50%) OF THE BP PATIENTS KNOW THAT THEY HAVE HIGH BP

IN THAT ONLY HALF (50%) OF THEM TAKE MEDICATIONS

IN THAT ONLY HALF (50%) OF THEM TAKE CORRECT DOSAGE OF MEDICATIONS AND KEEP THE BP UNDER CONTROL



Complications of Hypertension: Target-Organ Damage



TIA, transient ischemic attack; LVH, left ventricular hypertrophy; CHD, coronary heart disease; HF, heart failure



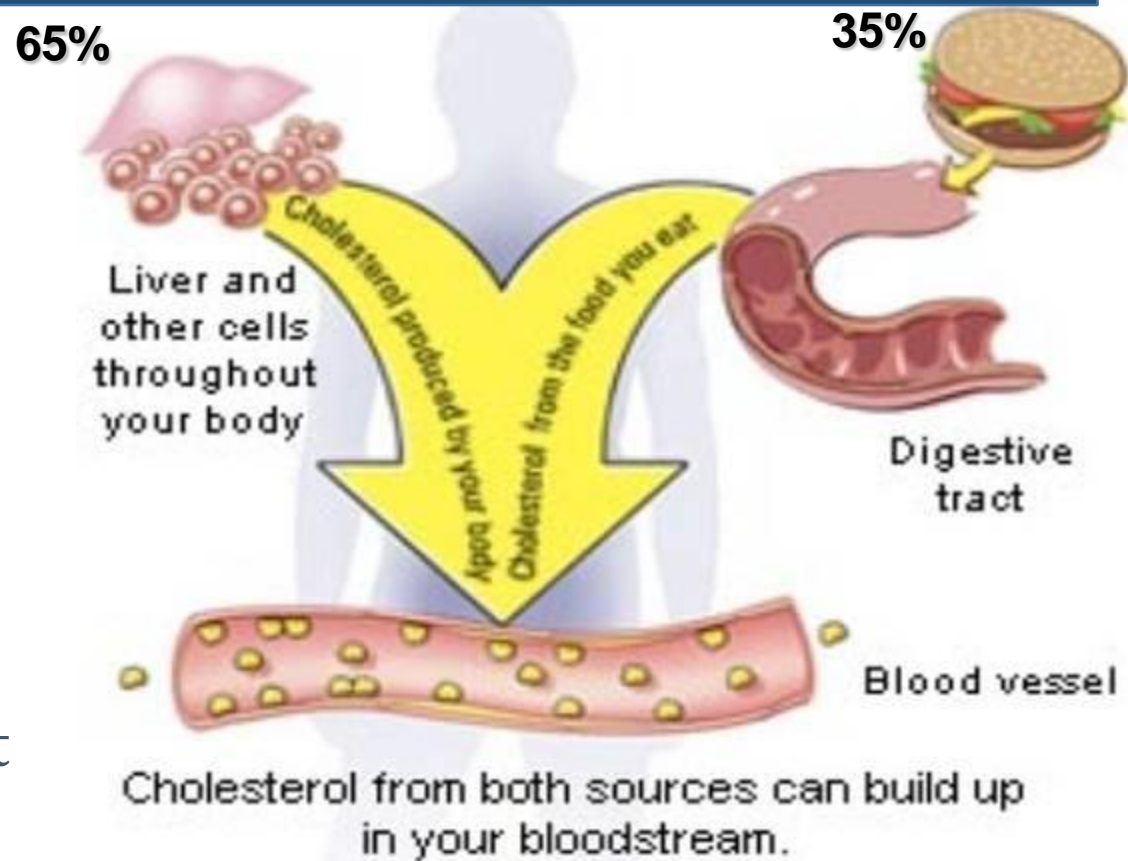
CHOLESTEROL

- Everybody needs cholesterol, it serves a vital function in the body.
- It circulates in the blood.
- Too much cholesterol can deposit in the arteries in the form of plaque and block them



Where does it come from ?

- Two sources of cholesterol: Food & made in your body
- Food sources: All foods containing animal fat and meat products



Good vs. BAD Cholesterol

- **LDL cholesterol** is known as bad cholesterol. It has a tendency to increase risk of heart disease
- LDL cholesterol is a major component of the plaque that clogs arteries
- **HDL cholesterol** is known as the good cholesterol. Higher in women, increases with exercise
- HDL cholesterol helps carry some of the bad cholesterol out of arteries.



Obesity

- Obese people are those who are overweight by 10-30 % than their normal body weight
- Obese have **72% higher risk** of developing CAD
- **Pear-shaped paunch** store fat on the hips and thighs, just below the surface of the skin
- **Apple-shaped paunch** store body fat around the abdomen and chest, surrounding internal organs
- **Apple-shaped paunch obese are at a higher risk**

- People who are overweight (10-30 % more than their normal body weight)
- Obese have 2 to 6 times the risk of developing heart disease
- Normal Waist-Hip Ratio
 - < 0.85 for women;
 - < 0.95 for men
- Pears or apples?



Physical Inactivity



**Every morning my brain
tells me to exercise...**

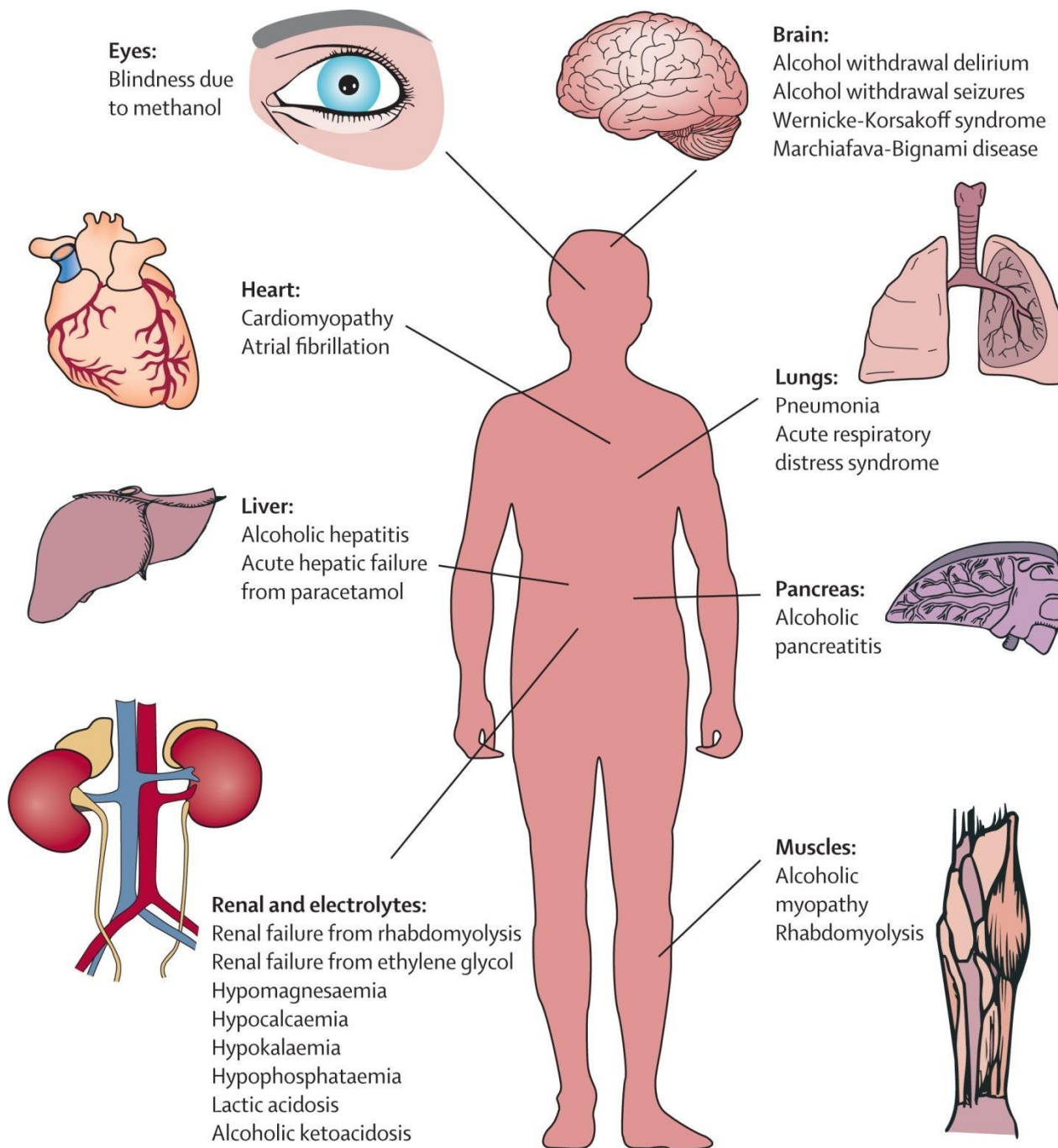
**..... and my body
laughs at the idea**



Alcohol Consumption

- In small amounts it is beneficial: 1-2 drinks
- In large amounts it adds fat and calories & raises BP!
- 4 drinks per day. You end up with gastroenterologist instead of cardiologist
- This is a very fine line! Finer for women as they are at higher risk





Misfortunes always come in by a
door that has been left open for
them.

Czechoslovakian proverb



Aggregation of risk factors

- Risk operates across a continuum-
no clear-cut line
(Blood Pressure; Cholesterol;
overweight; Smoking)
- The risk is multiplicative when
many risk factors co-exist; risk
factors often cluster together
- Majority of events arise in
individuals with modest
elevations of many risk factors
than from marked elevation of a
single risk factor



HEART ATTACK – HOW TO DIAGNOSE ?

- Symptoms
- ECG
- ECHO
- Cardiac enzymes
- Coronary angiogram



What are the symptoms of Coronary artery disease?

DURING MAJOR HEART ATTACK:

1. Chest discomfort or heaviness or pain in the centre or left side or thoracic pain for more than 20-30 min with left arm or right arm radiation
2. May be associated with sweating or vomiting or tiredness or giddiness
3. Sudden onset of breathing difficulty
4. Silent heart attack-usually in diabetics and females
5. Sudden cardiac death

BLOCK WITHOUT HEART ATTACK

1. Chest pain while walking or climbing upstairs and comes down with rest or after food intake
2. Breathing difficulty

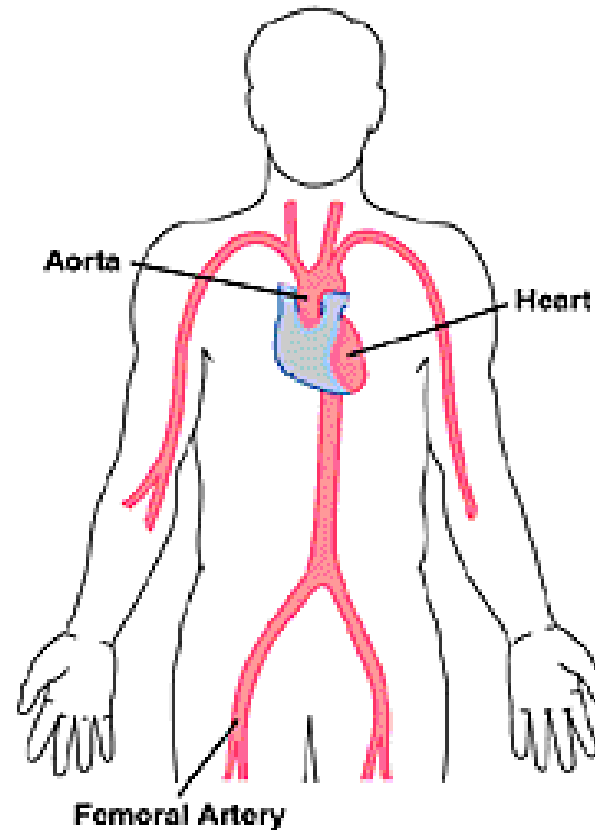


TREATMENT OF HEART ATTACK

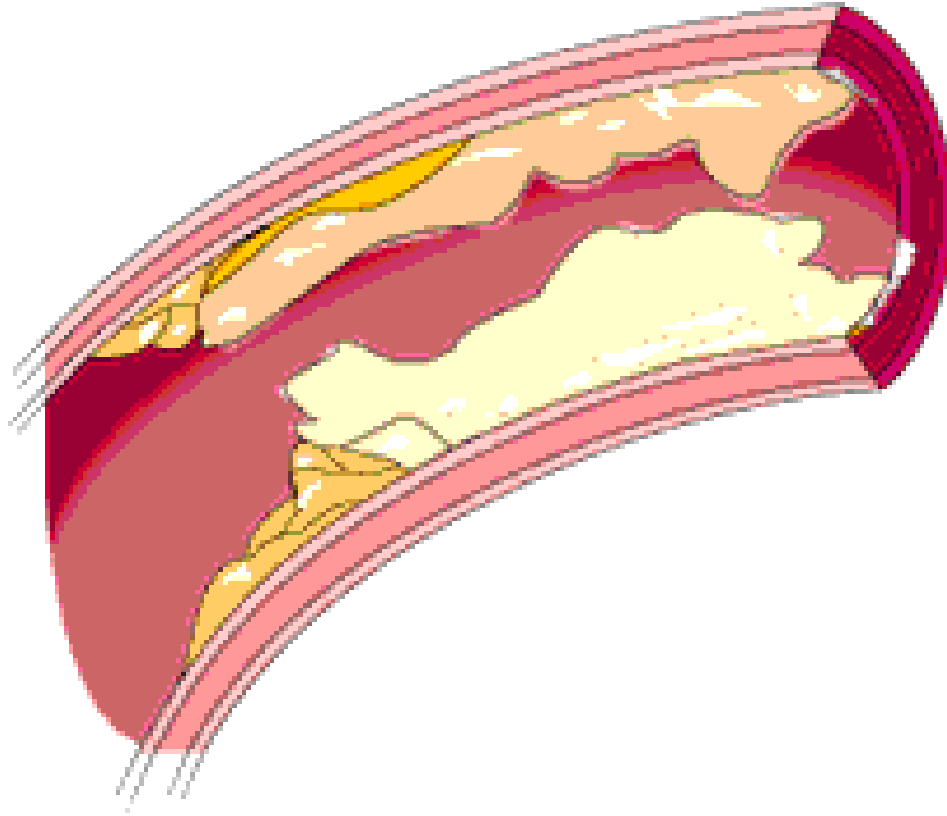
- GOLDEN HOUR
- THROMBOLYSIS
- PRIMARY ANGIOPLASTY



CORONARY ANGIOGRAM



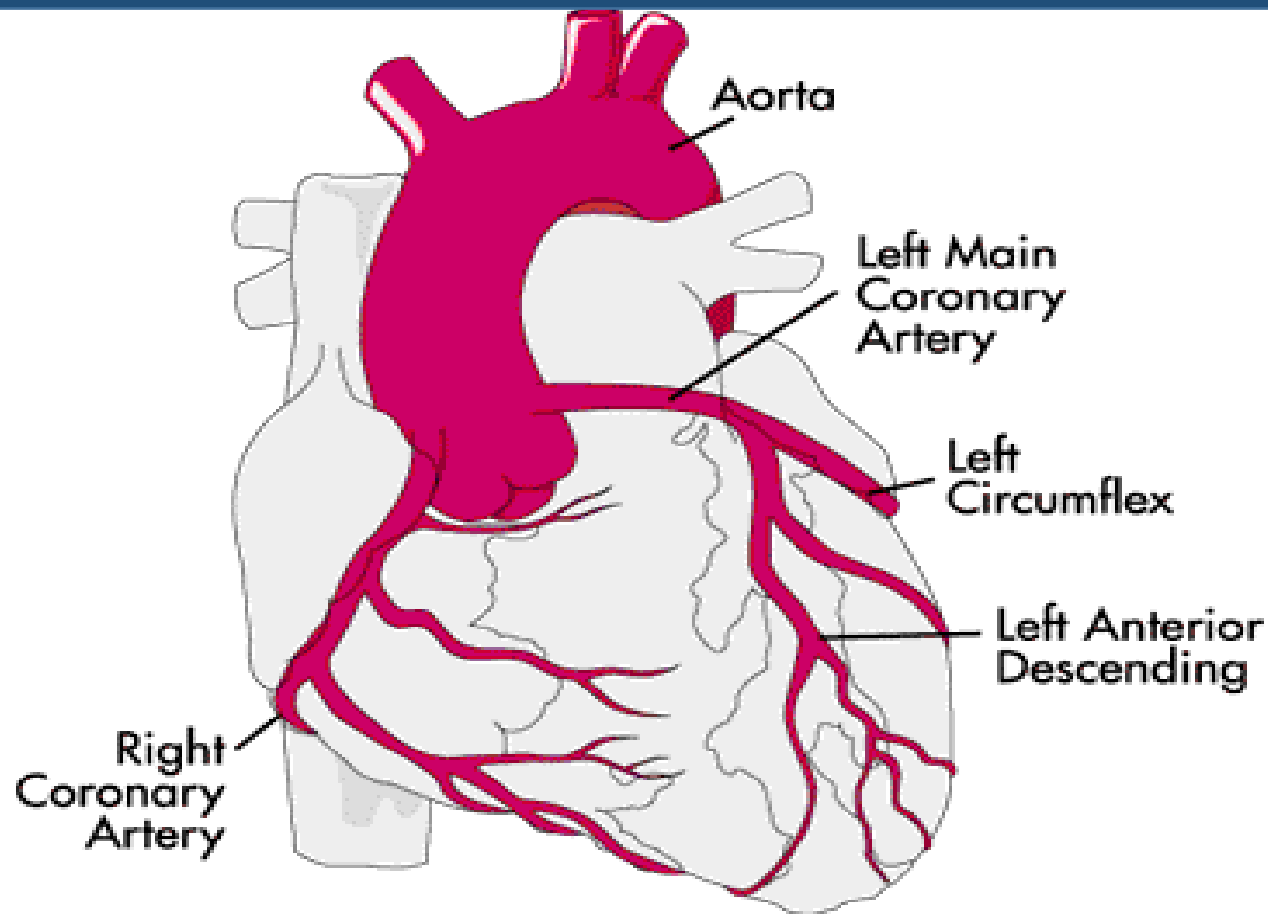
ANGIOPLASTY





BYPASS SURGERY (CABG)

CARE
HOSPITALS



Preventing Heart Disease

Rule #1 Look before you eat

- Eat a variety of fruits and vegetables every day. (5 servings - they are naturally low in fat and high in vitamins and minerals and anti oxidants). Eat colored vegetables and fruits
- Whole grains and high fiber diet
- High quality vegetable proteins
- Sea fish and lean meat



Consume more fruits & vegetables

- Eat a variety of fruits and vegetables every day
 - 5 servings a day
 - They are naturally low in fat and high in vitamins and minerals and anti oxidants
 - Eat colored vegetables and fruits
- Eat a variety of grain products



Sources of dietary fiber

- Soluble fiber
 - fruits(, plums,berries,banana,apple,pears
 - root tubers (sweet potato, onions)
 - Certain vegetables (broccoli, carrot)
 - Legumes (peas,soybean)
- Insoluble fiber
 - Whole grain foods
 - Wheat and corn bran
 - Legumes such as bean and peas
 - Nuts and seeds



HIGH FIBER FRUITS



Avocado



Peach



Pear



Strawberries



Apple



Papaya, paw paw



Grapes



Prune



Pineapple



Banana

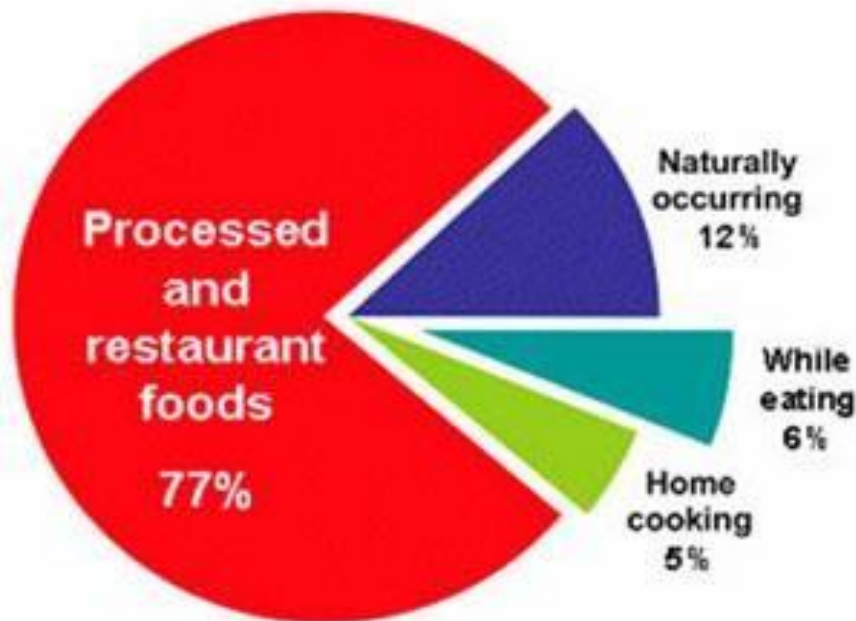


Orange



Reduce sodium intake-
Less than 4-5 gms/day(1 TEA SPOON)

Sodium Chart



Cooking Oils: The mystery of PUFA / MUFA

RESTRICT-Coconut oil ,ghee

AVOID - Vanaspathi and palm oil

WHAT OIL?

- Monounsaturated Fats (MUFA): Heart healthy
 - Olive oil, Groundnut oil, Canola oil, Mustard oil
- Polyunsaturated Fats (PUFA): Heart healthy
 - Sunflower oil, Soybean oil

HOW MUCH OIL: 2 TABLE SPOONS or 30ml per person per day



Limit / Avoid

- Foods rich in Cholesterol and Saturated fats:
 - Fatty meat & organ meat(Liver)
 - Butter chicken / Batter fried fish !
 - Milk fat – Desi Ghee, Butter, Cheese, Malai, Rabri, Khurchan, Doda, Ice Cream, full cream milk,
 - Hidden trans Fats like Bakery biscuits, Patties (!), cookies,Cakes, Pastries,soft drinks and sports drinks



Preventing Heart Disease

Rule #2 Exercise

- Maintain a level of physical activity that keeps you fit and matches the calories you eat
- Serves several functions in preventing and treating those at high risk
- Reduces incidence of obesity
- Increases HDL
- Lowers LDL and total cholesterol
- Helps control diabetes and hypertension



Exercise and Heart Disease

Moderate to intense physical activity for 30-45 minutes on most days of the week is recommended

Walking for a healthy heart

- Complicated exercise machines or sweating it out in the gym not essential

JUST WALK!





Rule # 3 Stop Smoking NOW!

- The risk of heart attack starts decreasing within 24 hours of quitting smoking. Within 1 year of quitting, CHD risk decreases by 50% and it takes 15 years for the risk to reach to the level of a nonsmoker
- Smell and taste improve within days
- It can add upto 10 years of healthy life
- Within three months of quitting, the smokers' cough disappears in most people

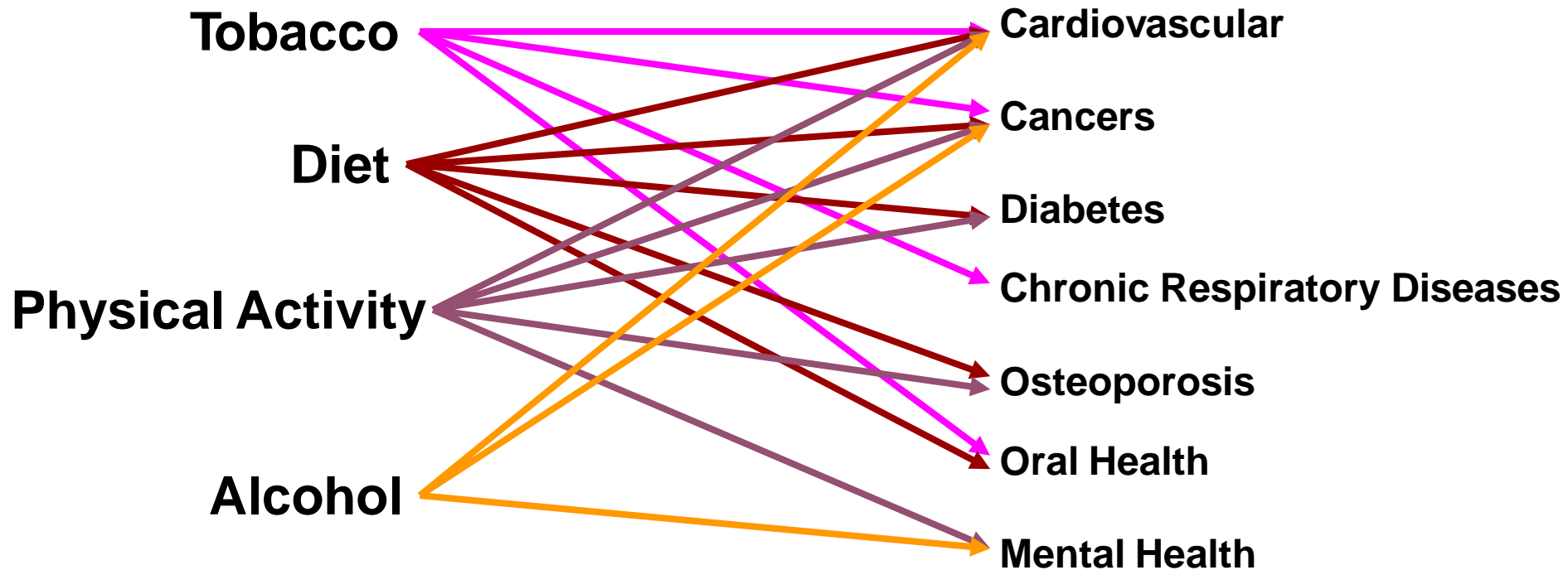


Rule # 3 Stop Smoking NOW!



“I’m prescribing a patch to help you quit smoking. Wear it over your mouth.”

Benefits much beyond Heart Disease



Rule # 4 Know your Number!

And that's not your Mobile Number!

Desirable numbers

- Total cholesterol < 200;
- LDL < 100
- HDL > 40
- triglycerides < 200
- *Get the levels tested routinely and keep them under control*
- *Target levels of cholesterol –differ from person to person according the family history and and other risk factors*



**10% reduction of blood
cholesterol produces 20-30%
decline in CHD deaths**

**All Adults >20 yrs must get tested- if normal test again
after 5 years, if elevated, work towards normalizing the
levels with lifestyle modification and drugs as needed**



Controlling Blood Pressure

- Adults should have their blood pressure checked at least once every two years, as there are no symptoms to tell if you have high blood pressure
- Optimal levels : 120 /80 mm Hg
- If high
 - Modify your lifestyle – Diet, Weight, Exercise, Salt restriction
 - Adhere to the prescribed medication without fail, to decrease chances of getting heart disease – *Do not stop your medicines without consulting your doctor, even if the blood pressure becomes normal*



Controlling Blood Sugar

- All adults should have their blood sugar checked regularly, as there are no early symptoms of diabetes
 - Normal blood sugar:
 - Fasting < 100; post meals <140
 - If high
 - Modify your lifestyle – Diet, Weight, Exercise
 - Adhere to the prescribed medication without fail, to decrease chances of getting heart disease
- *Do not stop your medicines without consulting your doctor, even if the blood sugar becomes normal*



If you or someone in your family already diagnosed with heart disease

- **Don't get disheartened** – science has made significant progress

TAKE CARE OF YOUR HEALTH AND **PREVENT FROM UNEXPECTED DISASTER**
in the family

- STOP smoking
- After the age of 40Yrs:
 - Regular BP, sugar and cholesterol checkup
- Regular physical exercise
- Keep your weight under control
- Regular and timely intake of medications
- Keeping all your medical records with your Gold and other valuable things
- Take all your old records whenever you visit the doctor



For my car, I want the best mechanic.

But for my own body, I follow hearsay and advice from friends, kitty party, local
quacks....

Just anyone
And decide for the worst

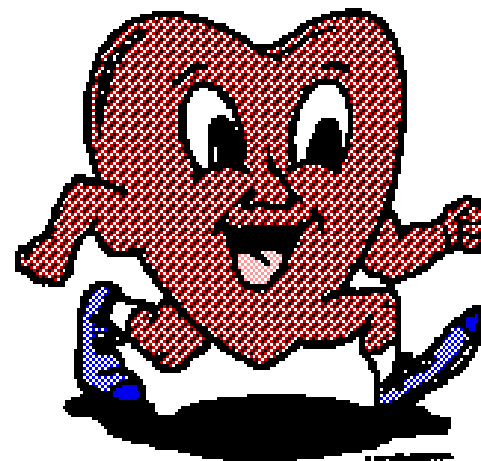




**SO THE DECISION TO
PREVENT**

**A HEART ATTACK IS IN
YOUR HANDS**

START TODAY !!



**WISH YOU A VERY HAPPY AND
HEALTHY LIFE ON THIS WORLD
HEART DAY**





connect & heal

Ambulance Health Screenings
Tele Medicine

Captive Clinics Coordinated Care

Thank You

Email us : engagement@connectandheal.com

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