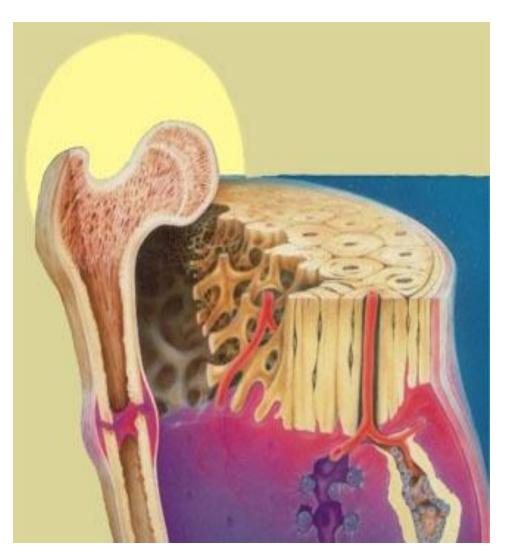
### OSTEOPOROSIS A SILENT KILLER

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### **Understanding Bone**



Bone is a living, growing tissue . . .

Throughout life, constant renewal of the bone takes place by BONE REMODELLING

### **Bone Remodeling**

#### Upto 35 yrs of age...

Bone formation is greater than bone loss Therefore bones are stronger

#### After 35 yrs of age ...

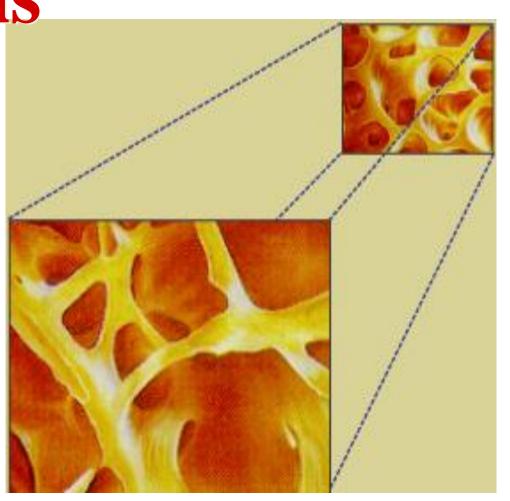
Bone loss is greater than bone formation Therefore bones becomes fragile, more likely to break

Osteoporosis

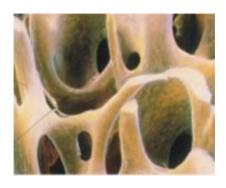
#### **Porous Bones**

A complex disease affecting strength of bones due to

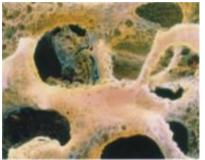
rapid decline in bone mass



### Osteoporosis



Calcium, major building blocks of bone
 & bone tissue is lost

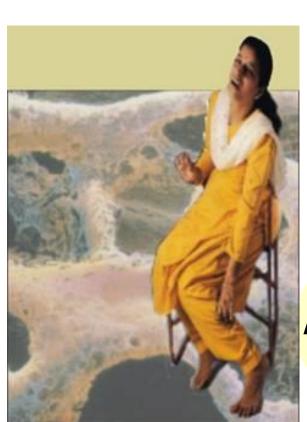


 Outer shell of bones becomes thinner & inner honeycomb develops larger holes



Bone becomes more fragile & are more likely to break

# Osteoporosis Knowing if you are at risk.



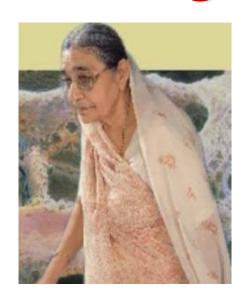
Advancing age

A thin, small boned frame



# Osteoporosis

Knowing if you are at risk...

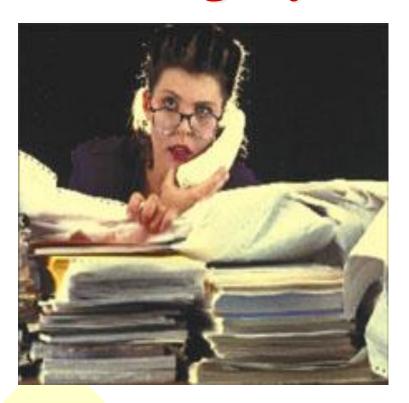


A diet low in calcium

Broken bones or stooped posture in older family members especially in women



# Osteoporosis Knowing if you are at risk



A lifestyle with little or no exercise



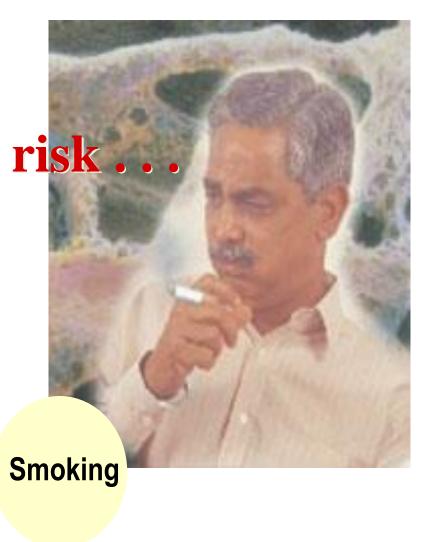
Early estrogen deficiency in women

who experience menopause before

45 years of age, either naturally or resulting from surgical removal of

Osteoporosis
Knowing if you are at risk...

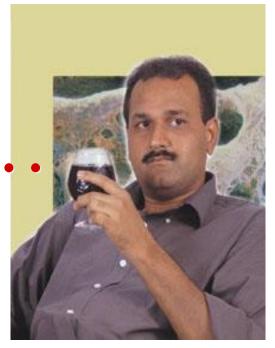




Estrogen deficiency as a result of amenorrhoea (absence of menstruation)

# Osteoporosis Knowing if you are at risk.





Excessive intake of alcohol

Prolonged use of certain medications e.g. glucocorticoids (medicines used to treat asthma)

# Osteoporosis You are at higher risk if...

Menopause

**↓** estrogen production

↑ bone loss

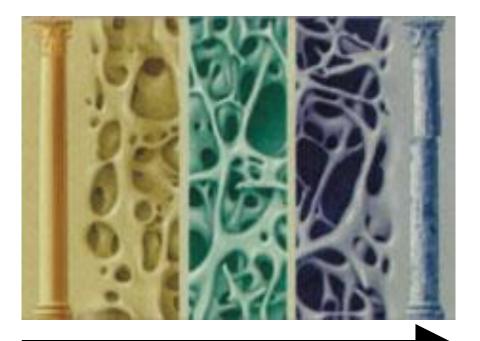
Osteoporosis (Small bone

frama\

Women are 5 times more likely to suffer from Osteoporosis than men



### Osteoporosis

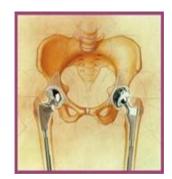


If Osteoporosis is not prevented or is left untreated, it can progress painlessly until a bone breaks i.e. fracture

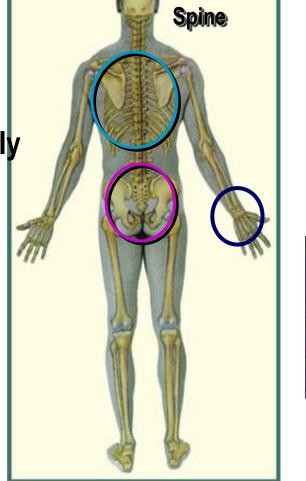
## Consequences of

Osteoporosis - Fractures

Fractures typically occur at



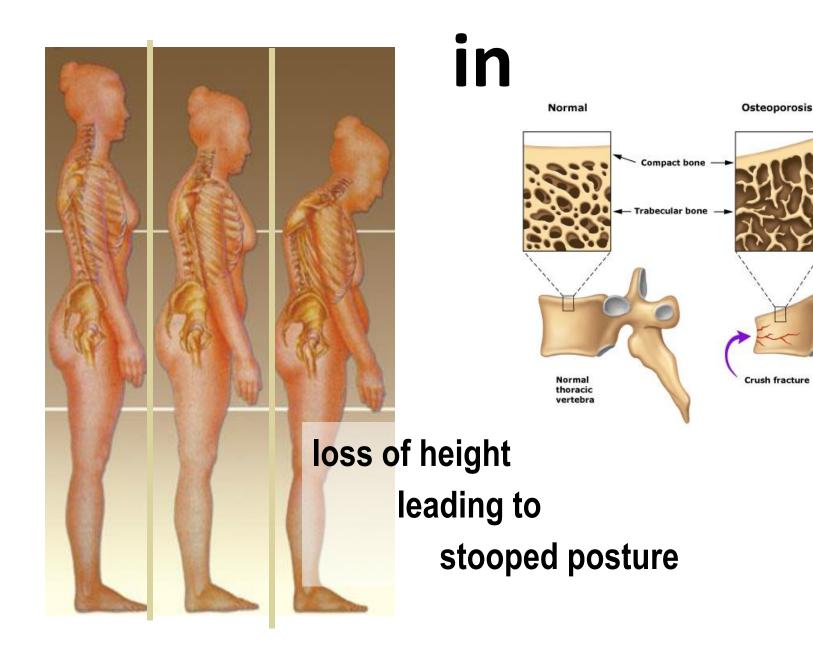
Hip



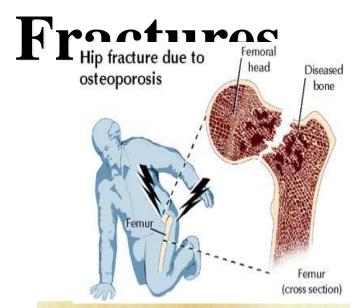


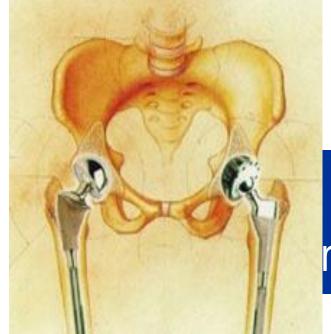
Wrist

#### Osteoporosis can result



### Consequences of Hip

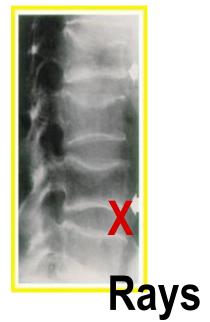


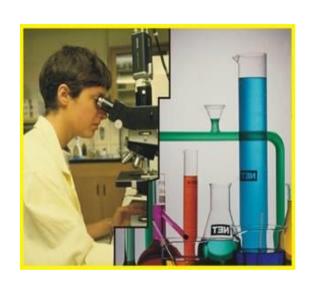




Confinement to bed & nability to move around

# How is Osteoporosis diagnosed?





**Biochemical** 

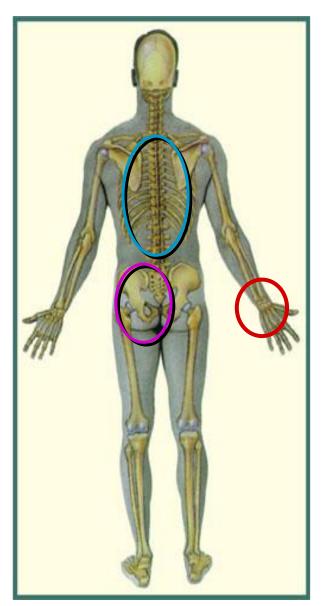


**Bone Densitometry** 

### **DEXA SCAN IS** THE MOST **SENSITIVE** AND **INFORMATIVE** FOR DIAGNOSIS OF **OSTEOPOROSI**



### **Treatment goals**



Stabilize existing skeleton Stimulate bone growth and **Prevent fractures** 



Eat high-calcium foods, exercise regularly and do not smoke at young age to prevent ...

# How to preserve bones in advancing age



Diet rich in calcium



**Exercise** 



# Calcium plays an important role in maintaining bones

Important dietary sources of calcium			
Foodstuffs Ca	lcium content mg/100g	Foodstuffs	Calcium content mg/100g
Milk and milk products:		Cereals	
Milk, cow's	120	Ragi	330
Milk, buffalo	210		
Milk, goat	170	Green leafy vegetables	
Curds	120-210	Carrot leaves	340
Milk powder, whole	1200	Drumstick leaves	s 810
Milk powder, skimmed	1370		
Cheese	790	Fish:	
Khoa (from buffalo milk)	650	Small fish, dried	1800
Oilseeds and nuts:			
Sesame seed	1450		
Sesame seed (without ski	n) 150		

Source: Hand Book of Food and Nutrition, 1997, pp 90.

# IMPORTANT SAFETY MEASURES

Watch out for wet floors, clean up spills immediately

Keep halls, stairs well lighted

Wear sturdy, lowheeled soft-soled shoes





# Big Old Life

