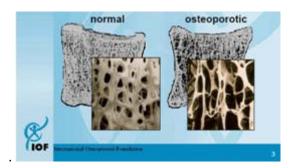
## **Osteoporosis**

- Bone is a living, growing tissue made up of cells, vessels, crystals of calcium compounds
- Bone is remodeled throughout life. Remodeling is the process in which bones are broken down then built back up again through bone formation
- 10% of skeletal bone gets replaced this way each year



## What is osteoporosis?

Osteoporosis comes from Greek name meaning porous bone. It occurs when there is an imbalance between bone breakdown and bone formation causing the bone to become very weak and spongy making it very liable to break and fracture



# How does Osteoporosis affect our life?

Osteoporosis is a major health problem, its complications such as hip, vertebral, and long bone fractures affect more than 9% of the world's population.

Osteoporosis is considered a silent disease, it is only when its complications occur that the patient suffers from pain, loss of independence and diminished daily activity leading to a decreased quality of life.



## How common is Osteoporosis?

According to the International foundation of Osteoporosis 2005

- Osteoporosis affects **200 million** women worldwide.
- Fracture risk in women is **four times higher** then in men.
- Approximately 30% of women over the age of 50 have 1 or 2 vertebral fractures
- Approximately one in five men over the age of 50 will have an osteoporosis-related fracture in their remaining lifetime
- After the **age of 50**, the risk of hip fractures doubles every 5-7 years.

# You are at increased Risk of Osteoporosis if

- There is a family history of osteoporosis
- You are at menopause
- · Aging whether male or female
- Poor diet e.g low calcium food
- Have Vitamin D insufficiency
- Lack of exercise
- Heavy use of tobacco, alcohol or fizzy drinks
- Chronic use of certain drugs e.g steroids
- Suffer from certain diseases e.g Chronic liver disease, Cushing syndrome

### How can you prevent osteoporosis?

- A healthy diet at all stages of life is essential for prevention of osteoporosis.
  - Calcium and Vitamin D are 2 nutrients of particular importance for healthy bone

#### Calcium

- Adult requirement 700mg/day
- Food rich in Calcium e.g fish, dairy products & green leafy vegetables

#### Vitamin D

- Sunlight is the most important source, ageing reduces absorption of sunlight
- Food rich in Vitamin D e.g fish oil, egg yolks, margarines and fortified foods
- Exercise especially weight bearing exercise
- Fall prevention
- Avoidance of Tobacco and alcohol abuse

## Recommendations for Women and Men above 50 years

- Counsel on the risk osteoporosis and related fractures
- Check for secondary causes
- Take adequate amounts of Calcium ( at least 1200mg daily including supplements if necessary) and Vitamin D
- Regular weight-bearing and muscle strengthening exercise to reduce risk of falls and fractures
- Avoid smoking and alcohol
- o Bone mineral density testing is recommended