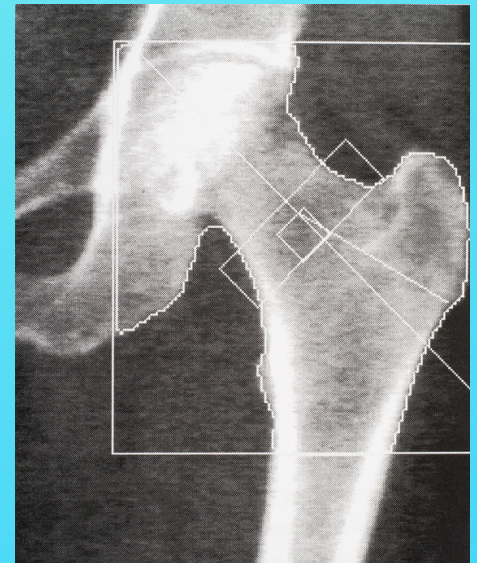# DEXA Scan
(Dual-Energy X-ray Absorptiometry)

DEXA Scan - best method to monitor changes in bone mineral density over time

- Measures bone mineral content (BMC) and bone area (BA) then calculates bone mineral density (BMD) in g/cm2
- **T-score** - value used for diagnosis of osteoporosis
  - calculated by subtracting the mean BMD of a reference population from the patient's BMD and then dividing by the SD of a young adult population

Diagnosis	T-score
Normal	≥ -1.0
Low bone mass (osteopenia)	Between -1.0 and -2.5
Osteoporosis	≤ -2.5
Severe Osteoporosis	≤ -2.5 and fragility fracture

- **Z-score** - used to compare the patient's BMD to a population of peers
  - Interpretation
    - Z-score of -2 or lower --> below the expected range for age