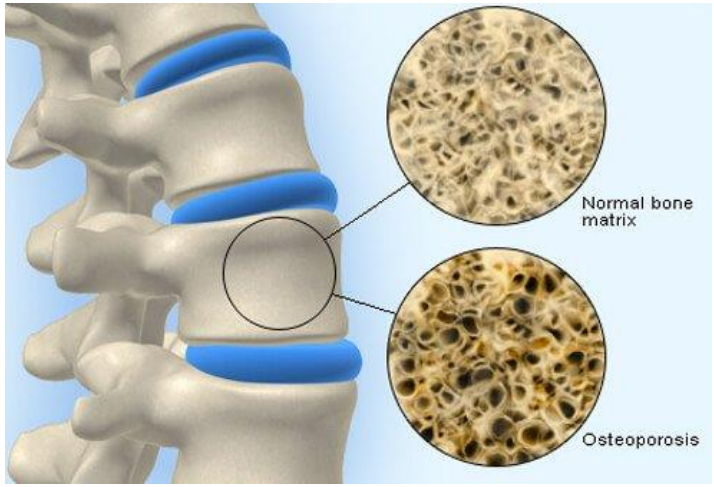
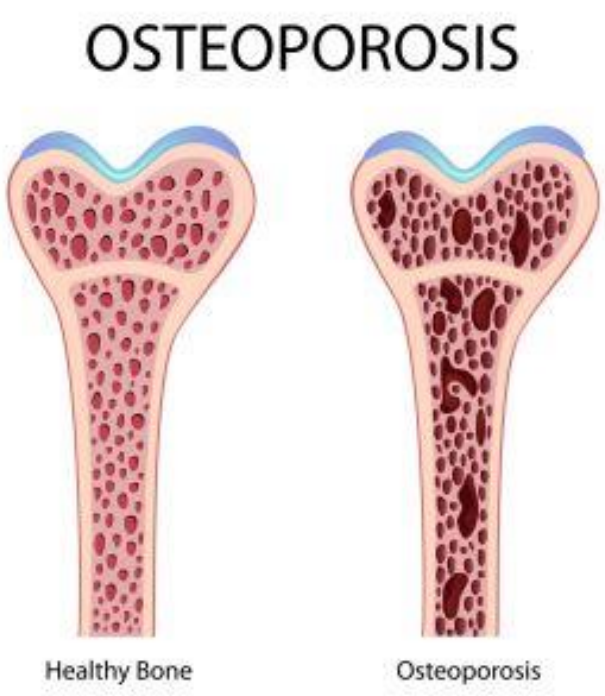
OSTEOPOROSIS

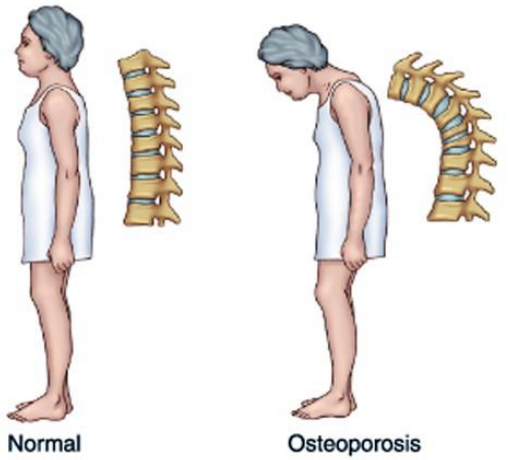
BY: CYNTHIA VALENZUELA

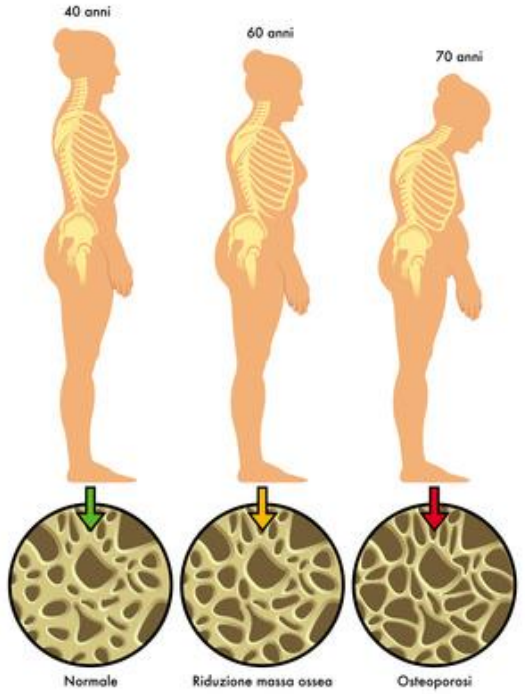




OSTEOPOROSIS

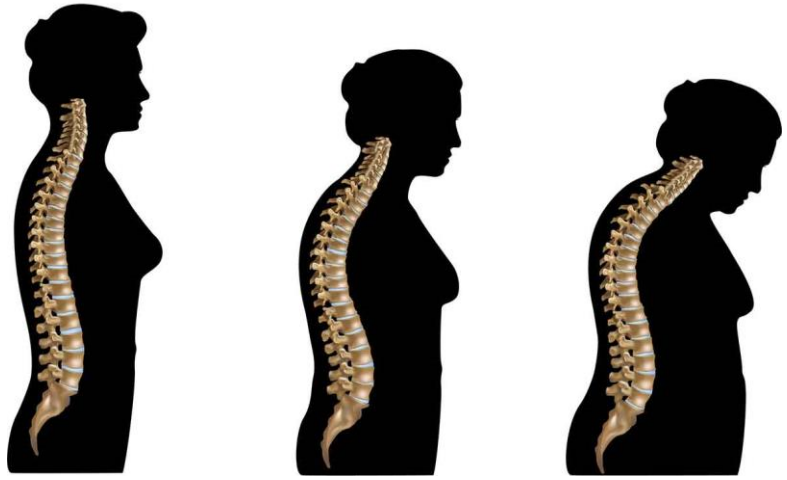
- Osteoporosis means “porous bones,” causes bones to become weak and brittle, so brittle that even mild stresses like bending over, lifting a vacuum cleaner or coughing can cause a fracture.
- In most cases, bones weaken when low levels of calcium, phosphorus and other minerals in the bones and results as low bone density.





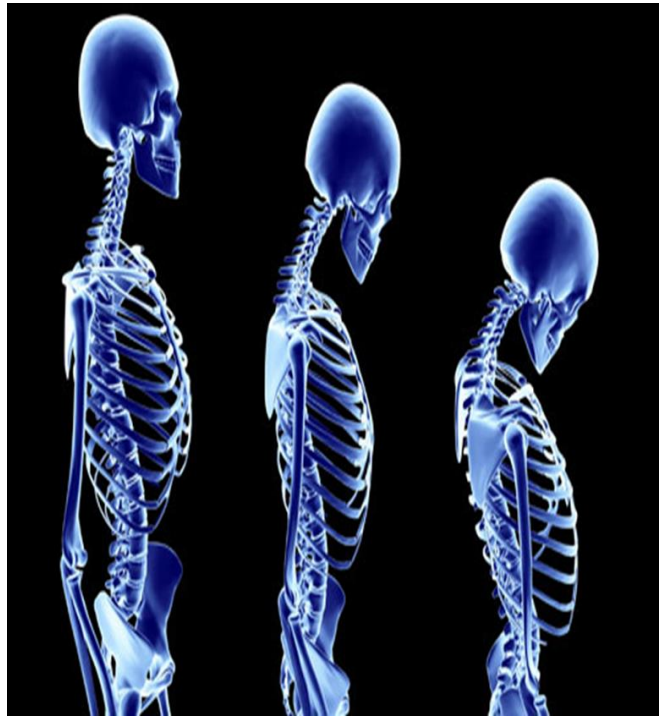
SYMPTOMS

- Back pain, which can be severe if fractured or collapsed vertebra
- Loss of height over time, with an accompanying stooped posture.
- Fracture of the vertebrae, wrists, hips or other bones.



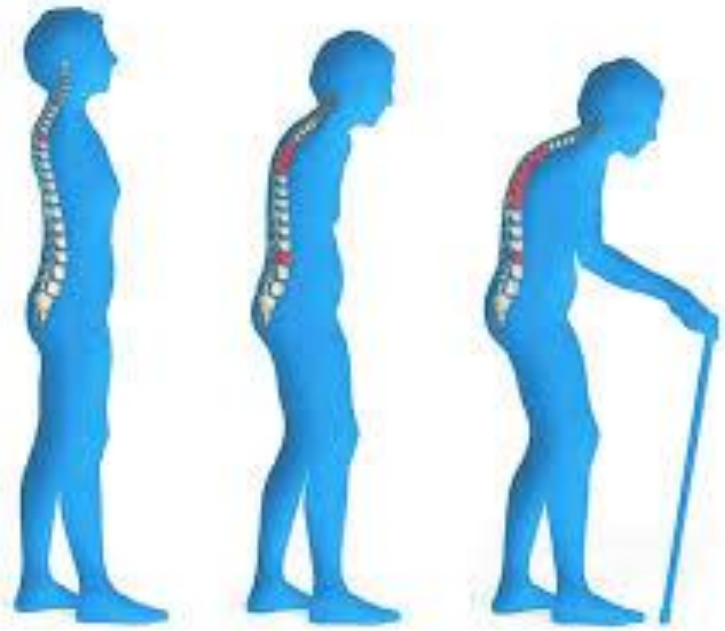
CAUSES

- The strength of the bones depends on their size and density; bone density depends in part on the amount of calcium, phosphorus and other minerals bones contain.
- When the bones contain fewer minerals than normal, they’re less strong and eventually lose their internal supporting structure.



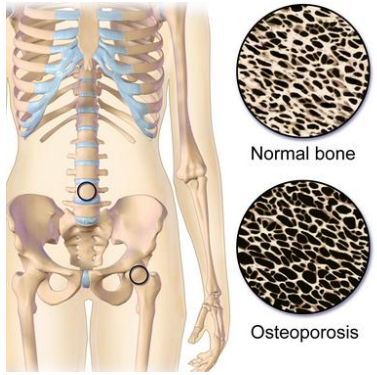
RISK FACTORS

- ***SEX***: Fractures from osteoporosis are about twice more in women than in men. Risk in women at menopause (45 yrs.) that accelerates bone loss. Risk in men is greater than age 75.
- ***AGE:*** The older, the higher risk of osteoporosis. Bone become weaker as ages.
- ***RACE:*** Greatest risk, white or Southeast Asian descent. Black and Hispanic men and women have a lower, but still significant risk.



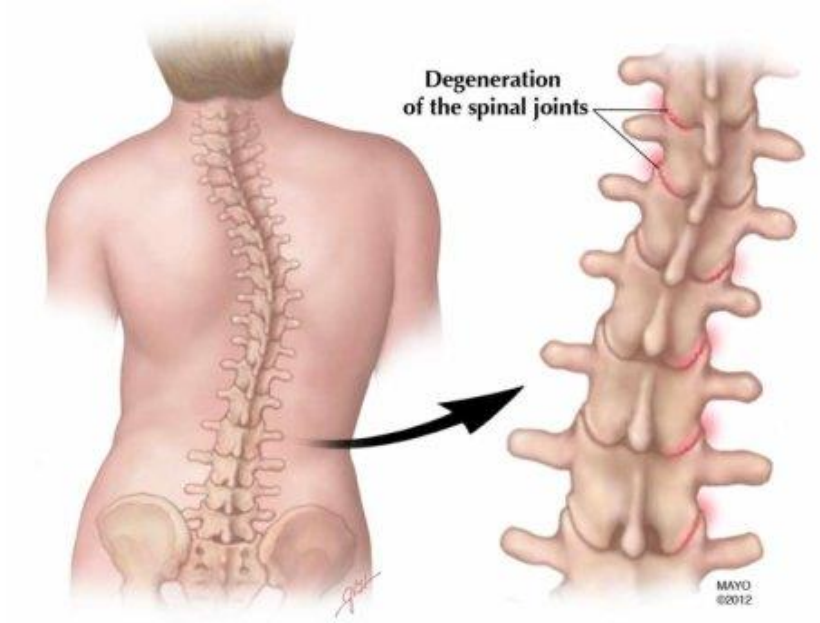
RISK FACTORS

- **FAMILY HISTORY:** Osteoporosis runs in families. Parent or sibling with osteoporosis puts at greater risk, especially if having a family history of fractures.
- **EATING DISORDERS:** Women and men with anorexia nervosa or bulimia are at higher risk of lower bone density in their lower backs and hips.
- **Excess Soda Consumption:** The link between osteoporosis and caffeinated sodas isn't clear, but caffeine may interfere with calcium absorption and its diuretic effect may increase mineral loss. In addition, the phosphoric acid in soda may contribute to bone loss by changing the acid balance in the blood.



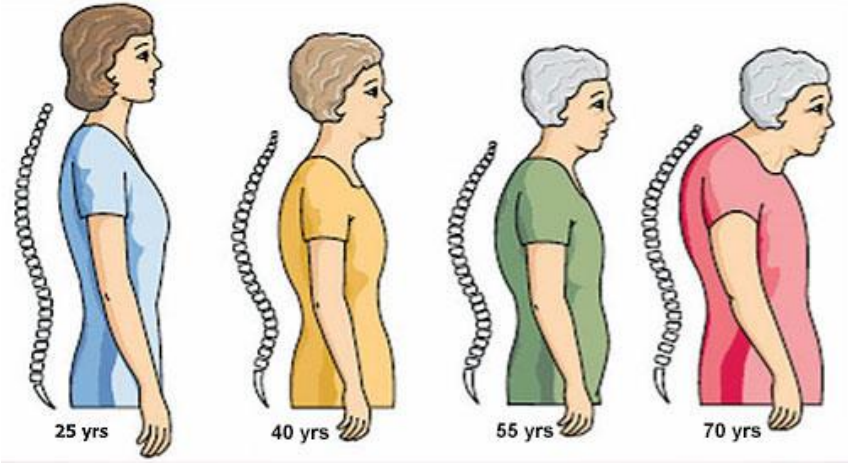
TESTS

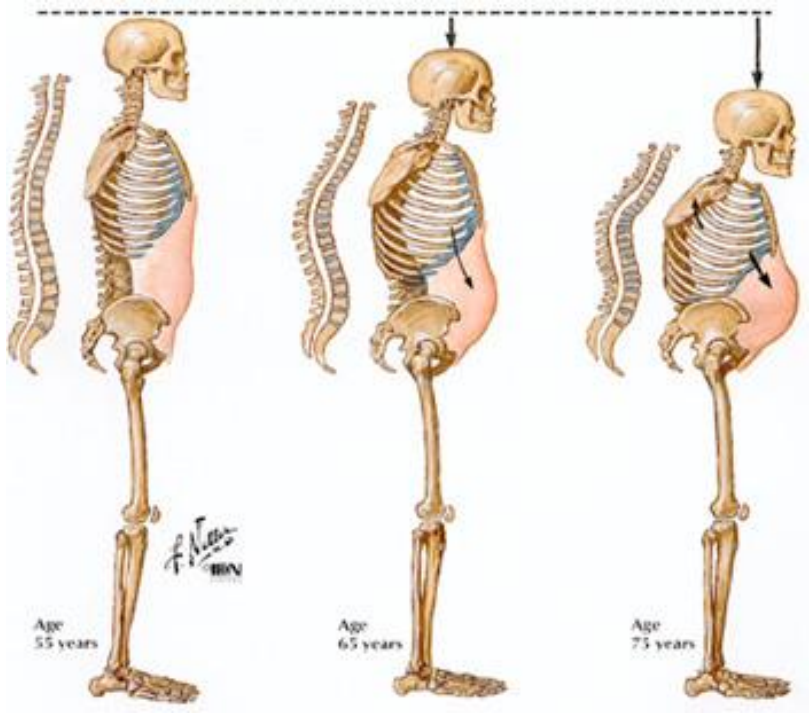
- Osteopenia refers to mild bone loss that isn’t severe enough to be called osteoporosis, but that increases the risk of osteoporosis.
- **Dual energy X-ray absorptiometry**
- The best screening test is dual energy X-ray absorptiometry (DEXA), measures the density of bones in the spine, hip and wrist and it’s used to accurately follow changes in these bones over time.



COMPLICATIONS

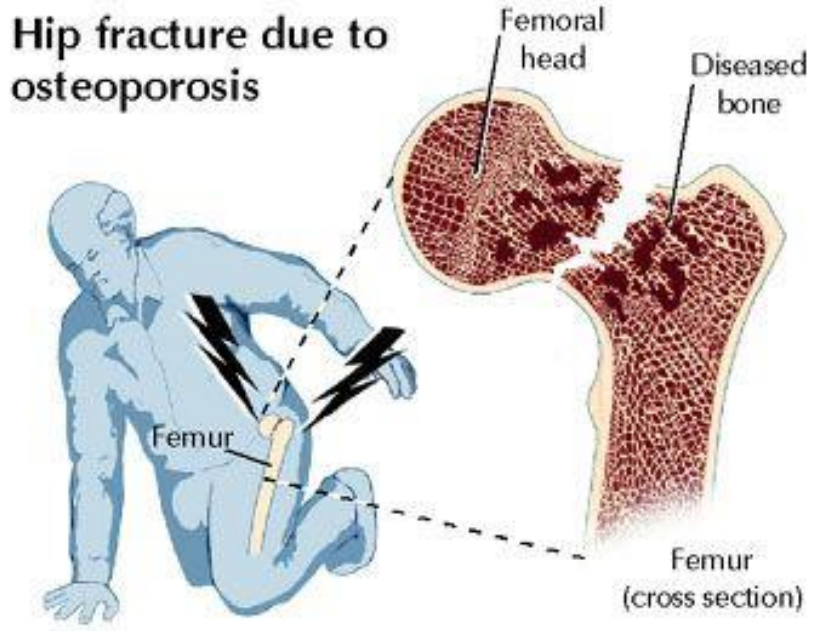
- Fractures are the most frequent and serious complication of osteoporosis.
- Often occurs in spine or hips, bones that directly support your weight.
- Hip fractures and wrist fractures from falls are common.
- Compression fractures can cause severe pain and require a long recovery. If many such fractures, can lose several inches of height as the posture becomes stooped.





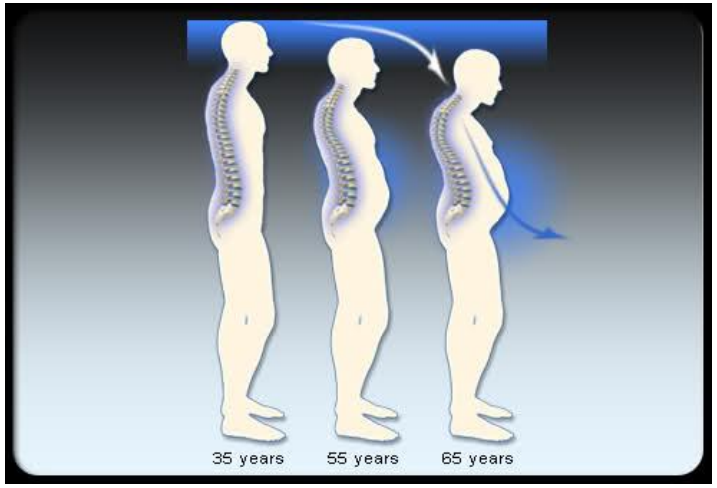
TREATMENTS AND DRUGS

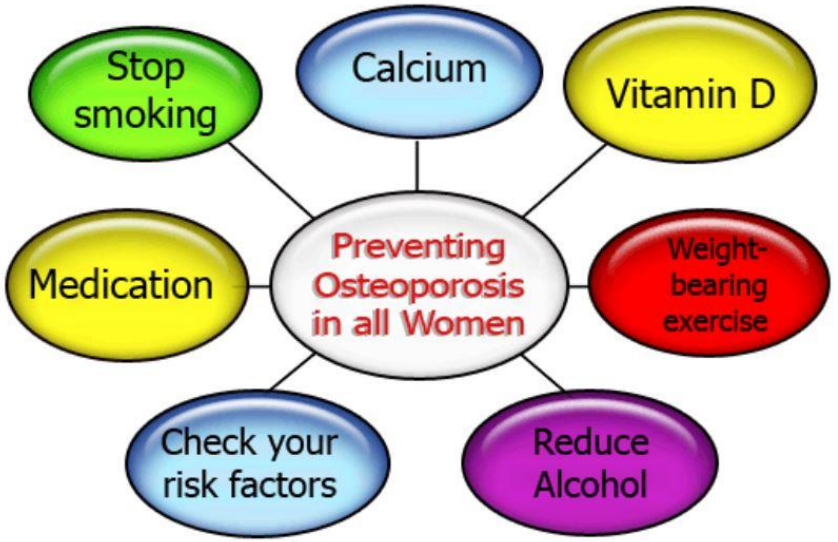
- Hormone therapy (HT)
- ***Prescription medications:*** Bisphosphonates, Raloxifene (Evista) /selective estrogen receptor modulators (SERMs), Calcitonin, Teriparatide.
- ***Emerging therapies:*** New physical therapy program combines the use of a device called a spinal weighted kyphos-orthosis



PREVENTION

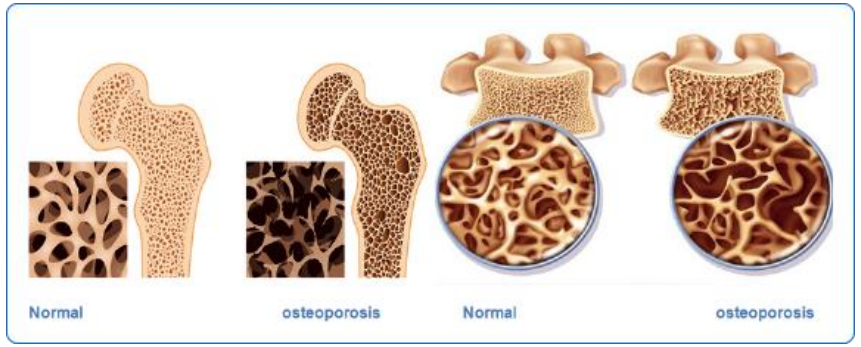
- Do exercise such as walking, running, skipping rope, jogging regularly.
- Add soy in diet- plant estrogens found in soy helps to maintain bone density and reduce the risk of fractures.
- Avoid smoking, it can reduce the levels of estrogen and increase bone loss.

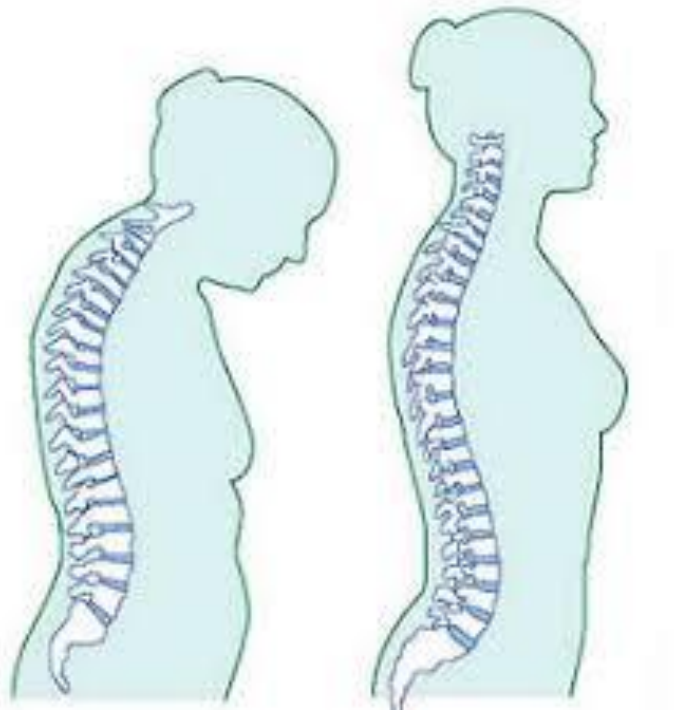




HOME REMEDIES

- Maintain good posture: Good posture which involves keeping the head held high, chin in, shoulders back, upper back flat and lower spine arched, helps to avoid stress on the spine. When sit or drive, place a rolled towel in the small of the back. Don’t lean over while reading or doing handwork. When lifting, bend at the knees, not the waist, and lift with the legs, keeping the upper back straight.





HOME REMEDIES

- Prevent falls.
- Manage pain. Don’t ignore chronic pain.