What Is Osteoporosis?

Osteoporosis or "Silent Disease" is a disease in which bones become fragile and more likely to break. If not prevented or if left untreated, osteoporosis can progress painlessly until a bone breaks. These broken bones, known as fractures, occur typically in the hip, spine, and wrist. It can impair a person's ability to walk unassisted and may cause prolonged or permanent disability or even death. Spinal or vertebral fractures also have serious consequences, including loss of height, severe back pain, and deformity.

Factors that increase the risk of developing osteoporosis:

1. Both men & women are affected, but women are four times more likely than men to develop this condition due to loss of estrogen at menopause which has an effect in blocks or slows down bone loss, especially those from Caucasian or Asian race;
2. Thin and small body frames;
3. Family history of osteoporosis, and personal history of fracture as an adult.
4. Excessive alcohol consumption; and cigarette smoking.
5. Poor nutrition, poor general health, and Diet low in calcium & Vitamin D, and Lack of exercise or immobility.
6. Diseases such as mal-absorption, rheumatoid arthritis and chronic liver diseases); Hyperthyroidism and Hyperparathyroidism, and Vitamin D deficiency.
7. Certain medications such as: long-term use of heparin (a blood thinner), anti-seizure medications phenytoin (Dilantin) and Phenobarbital, and long term use of oral corticosteroids (Prednisone).
8. Absence of menstrual period due to abnormal eating disorder such as anorexia nervosa or bulimia that can cause menstrual periods to stop before menopause, and loss of bone tissue.
9. Post menopause.

Prevention and treatment:

1. Adequate daily dietary intake of calcium from childhood to have strong bones throughout life. Foods rich in calcium include: yogurt, milk and milk products, salmons, spinach, broccoli, almonds, hummus, (3 oranges, 3 tablespoons of Tahine, 4 figs) each provides 200-250 gm calcium.
2. Adequate intake of Vitamin D each day, which helps the body to absorb calcium. You can get Vitamin D through foods like milk and sunlight. You need 10-15 minutes of direct sunlight to the hands, arms, and face, two to three times a week to get enough vitamin D. It is advisable to ensure 400 IU of Vitamin D twice per day as a supplement daily intake if the patient has osteoporosis, most commonly alongside a prescription of osteoporosis medication in case of osteoporosis.
3. Eat a healthy diet rich in vitamin A, C, magnesium, and zinc, as well as protein that help in building strong bones.
4. Be active as activity slow bone loss; improve muscle strength & helps your balance. Exercise should begin in childhood and adolescence for both sexes.
5. Avoid smoking and drinking alcohol which makes it harder for the body to use the calcium, it damages your bones and lowers the amount of estrogen in a women's body.
6. Reduce the chances of falling by making the home safer.
7. Early screening test is important to check for bone density & predict your risk of fracture.
8. Avoid foods and habits that have negative effect on Calcium absorption. Increase foods and habits that have positive effect on Calcium absorption.
9. Hormone therapy prevents bone loss, increases bone density, and prevents bone fractures, but it should be taken with care and under a doctor's supervision.
10. Decrease drinking coffee, tea, and soda beverages.

Foods that have a positive effect on Calcium absorption	***Foods that have a negative effect on Calcium absorption***
1. Vitamin D: direct sunlight, salmon fish, egg yolk.	Excessive animal proteins.
2. Vitamin C: green pepper cauliflower, cabbage, spinach, tomatoes, strawberry, melon, orange and guaffa.	Soda drinks and alcohol.
3. Magnesium: green leafy vegetables, legumes, nuts, whole grain, fish, soya products.	Foods rich in sodium (salt).
4. Use milk in soups, sweets, and try to use milk with biscuits, cake, and corn flakes.	Fibers with meals rich in calcium.
5. Add cheese to salads and sandwiches.	Foods rich in caffeine.
6. Regular exercises.	Immobility and low exercises activity.