

Weight-bearing Yoga Practice – A Blessing to Preventing Osteoporosis

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Rosie, a 50-year old menopausal woman who had been practicing Iyengar yoga for more than 20 years in my ongoing classes, recently had some exciting news to share with our class. She had just taken a bone-density test (analysis of strength, density, and health of her bones) and was informed by the medical clinic that the test results showed her bone density to be that of a 20 year old, rather than a 50 year old!

Losing bone density is a natural part of the aging process, and Rosie wanted to check on her bone density during her recent annual exam. Her immediate relief and gratitude to her regular yoga practice was the first thought she had and shared with us. Peak bone density normally occurs during our twenties; in our thirties bone density starts to decline; and yet here was the miracle and the testimony to a regular yoga practice as preventing the deleterious effects of osteoporosis.

Osteoporosis occurs when there is a loss of calcium and mineral in the bones that weakens them, causing them to break more easily. The most common place of a fracture is a vertebrae in the spine, the second area is the hips, and thirdly, in the wrist. Diet, weight-bearing exercise, and movement are prescribed for osteoporosis. Exercise cannot replace bone that's already been lost, but it can help maintain strength in the bones. Simple movement can bring softness and agility to the joints. Agility helps us to maintain balance to prevent falling as we age.

To maintain the health of the spine, we must practice poses that demand the back muscles to elongate and lift against the pull of gravity. This eccentric contraction strengthens the vertebral column, and the long muscles supporting the spine as well. Full or Half-Arm Balance, Sirsasana (Headstand), and many back bending poses and twists help to strengthen the bones and muscles of the back as we challenge our bones to lift up and our muscles to lengthen in that lift.

Seated postures do wonders for the hip joints because they require a wide range of rotation in the hip joints, which increase mobility. Sitting poses such as Virasana (Hero Pose), Baddha Konasana (Bound Angle Pose), Janu Sirsasana (Head-to-Knee Forward Bend), Upavistha Konasana (Wide Angle Pose), and simple squatting help to keep the hip joints mobile and fluid.. Also preparations for Padmasana (Lotus Pose) will help to create space in the hip joints and allow healthy blood to circulate and nourish the ligaments of the hip joints.

Standing poses are extremely beneficial because they are weight bearing on the large bones of the legs and hips and they promote flexibility. Trikonasana (Triangle Pose), Virabhadrasana I, II, & III (Warrior Poses), Parsvakonasana, (Side-Angle Pose) and Ardha Chandrasana (Half-Moon Pose) are extremely beneficial to the bones of the legs as they require us to be steady and strong as we hold our weight in the legs. These poses are weight bearing on the legs and feet, primarily, but also on the arms, wrists, and hands. They also encourage mobility in the hips and a lengthening to the spine, rather than rounding.

Conventional medical wisdom leads many women afflicted with osteoporosis to begin hormone replacement therapy, which carries an increased risk of developing certain cancers. In *Yoga Builds Bones*, Jan Maddern, a yoga teacher who specializes in working with postmenopausal women in the US, argues that weight-bearing asanas (and other yogic techniques such as breathing exercises and meditation) provide the best hope of minimizing the deleterious effects of the disease or even avoiding it altogether.

According to physician and yoga expert Mary Schatz, M.D., yoga can stimulate the bones to retain calcium, provided the body gets enough calcium in the first place. Again, it does this through weight-bearing poses (like arm balances, inversions, and standing poses) that affect the whole spine, arms, shoulders, elbows, legs, knees, ankles, and feet, while encouraging full range of motion. B.K.S. Iyengar, master of yoga's therapeutic applications, explains the benefits of yoga by means of what he calls its "squeezing and soaking" actions. He contends that through the process of squeezing out the old, stale blood or lymphatic fluids and soaking the area with fresh, oxygenated blood or fluids, yoga helps the body to utilize the nutrients it needs.