Bending Over Backwards in Yoga Might Help Treat Osteoporosis

By ACSH Staff — December 23, 2015

Osteoporosis, or weak bones, is a greatly feared consequence of aging especially for thin, white women. Bone density normally increases in young people as they grow, up to their mid-to-late twenties, and starts to decrease thereafter.

If a person's bones are not sufficiently strong by the end of the growth period, they may later become thin to the point of fragility, and lead to fractures from a fall or other trauma. Indeed, fractures in the femoral neck (upper thigh bone) often described as a "broken hip" are leading causes of disability in the elderly.

There are, however, drugs to treat the condition that act to increase bone density. These do have some side effects and are not suitable for everyone. But there may be an alternative.

A report in *Topics in Geriatric Rehabilitation* described a study of the effects of repeated yoga exercises on bone density in older women. Led by Dr. Y-Hsueh Lu of the Rockefeller University in New York City, the investigators recruited 741 volunteers via the Internet to examine the effects of 12 minutes of yoga daily on bone density.

In the rationale for their study, the authors explained, "By pitting one group of muscles against another, yoga exposes bones to greater forces and, therefore, might enhance bone mineral density (BMD) more than other means." Thus they produced a 12-minute DVD of 12 yoga poses designed to stimulate increasing BMD in the lumbar vertebrae, the hip, and the femoral neck.

They gave the DVDs to 227 volunteers who were compliant with their instructions, 202 of whom were women whose average age was 68 years. All these participants had had Dual-energy x-ray (DXA) scans that evaluated their BMD within the six months preceding their entry into the study, and agreed to follow the yoga regimen for two years, at which point another DXA scan would be conducted.

Of the 227 compliant participants, 174 had had DXA scans indicating osteoporosis, or a lesser decrease in bone density at the start of the study. After two years, the investigators found no
evidence that there had been any bone fractures in the yoga participants who had had abnormal DXA scans. By contrast, there had been over 100 fractures seen in pre-study scans.

Overall, the yoga poses used in this study appeared to "be a safe and effective means to reverse bone loss in the spine and the femur and have weaker indications of positive effects on the total hip measurement of the DXA scan."

In their discussion, the authors noted that over 200 million people worldwide have osteoporosis or osteopenia, many of whom have no access to effective pharmaceutical treatment. If these results can be further documented, they may present a safe and effective means of dealing with the effects of aging on bones.