

This resource is intended for senior athletes who exercise regularly and may not be appropriate for all older adults. Talk to your physician or physical therapist if you're interested in starting an exercise program.

Bone Health and Fracture Prevention for Athletes Over 50

Adults who exercise regularly are more likely to have healthy bones. The right exercises and good habits can reduce age-related bone loss and risk of fracture. Both muscle strengthening and weight-bearing exercise have proven to be effective at maintaining a healthy skeleton.

How does bone health change with aging?

Bone loss is a common concern with aging. Hormone changes during menopause promote less bone growth in women but men can also be at risk. Vitamin D is a key nutrient in keeping bones healthy, though levels can often decrease with age. People deficient in Vitamin D are at a greater risk of fractures and falls. The trend toward decreased activity levels with advancing age has also been shown to contribute to poor bone health.

What can I do?

- **Lift Weights:** Strength training stimulates bone while it improves muscle strength. Resistance exercises should be done 1-2 times per week for a total of 60 minutes each week.
- **Make an Impact:** Weight bearing activities such as step aerobics, stair climbing, hiking and jumping have all been shown to improve bone density. Variety is best!
- **Straighten Up:** Exercises that strengthen the back and core have been found to help prevent spine fractures. Upright posture helps protect the spine from compression.
- **Stay Balanced:** Exercises that improve muscle strength, core stability, balance and coordination all help prevent falls and ultimately fractures.
- **Get Screened:** The National Osteoporosis Foundation recommends screening for (1) women 65 & older, (2) men 70 & older, (3) those over 50 who have broken a bone without significant trauma or, (4) those who have lost height of more than 1 ½ inches. Talk to your healthcare provider about the risks of low Vitamin D and visit <https://www.nof.org/> to learn more.

POSTURE STRETCH: To open your chest and promote more upright posture, lie on your back with your knees bent. Rest your arms out to the side in a 'T' position. If this is easy, try resting your arms up in a 'Y' position. Use pillows to support your arms as needed. Hold 1 minute. Repeat x 4.



BACK STRENGTH TRAINING (I,T,Y)



Palms Ups



Palms Down



Thumbs Up

Lie on your stomach with a towel roll under your forehead for support. Place a pillow under your stomach if this position places strain on your low back. For each of the above positions (I,T,Y) raise your arms off the ground while squeezing your shoulder blades together. Hold for 5 seconds and repeat until you're tired. If you can do more than 15, add small hand weights.

If you have osteoporosis or osteopenia there are more guidelines for strength training safely. Do not start an exercise program without first consulting your healthcare provider and a physical therapist.



WEIGHT LIFTING: Lifting weights will help to build muscle AND bone. Lifting a weight over your head can help to strengthen the bones in your arms AND your spine. Be sure to keep your posture upright.

Slowly work up to weights that make you tired after 10-15 repetitions. Once you can do 15, increase the weight.

Do not perform this exercise if you already have bone loss (osteoporosis or osteopenia).

For more ideas, visit *Stepping Out Strong*; <https://americanbonehealth.org>

To receive an exercise program specifically for you, find a local physical therapist.

www.moveforwardpt.com



Keeping you in the game!