

Strong Bones for Life

Written by Katherine Coffee
info@katherinecoffee.com
Last Updated: 2007-03-26

US Statistics (US Census Bureau, 2002)

- 44 million (55%) of US women and men aged 50 and older have some degree of low bone mass or osteoporosis
- Over 10 million people have osteoporosis
- 80% are women
- As Baby Boomers age, prediction is for 12 million by 2010 and 14 million by 2020

Did You Know?

- An American woman's risk of a hip fracture exceeds her combined risk for breast cancer, uterine cancer and ovarian cancer?
- The number one cause of frailty is muscle mass?

Modifiable Risk Factors:

- Smoking
- Alcohol abuse
- Excessive caffeine consumption (4 plus cups per day)
- Excessive dietary protein consumption
- Lack of dietary calcium
- Lack of sunlight exposure (to generate vitamin D)

Types of Osteoporosis:

- Type I – onset age is 50-75 years and typical fracture sites are vertebrae and wrist
- Type II – onset age is 70 plus years and typical fracture sites are vertebrae and hip

Actions to Avoid for Advanced Osteoporosis:

- Forward Flexion
- Spinal Rotations
- Hyper Extension

Two Types of Programs:

- 1.) Functional for the older woman with diagnosed osteoporosis whose goal is to maintain function and reduce the risk of falling.
- 2.) Preventative for the younger woman whose goal is to maintain bone density and reduce the risk of osteoporosis.

Functional Program Training Goals: Stop further bone loss, Improve balance, Improve posture, Improve muscle strength, Improve risk factors for coronary artery disease

Suggested Functional Exercises:

- Sit to Stand (modified squat)
- Front & Side Lunge (for someone with a knee condition, a lunge will be more difficult than a squat)
- Modified Hip Hinge (keep spine neutral and shoulder blades together with no forward flexion)
- Standing Hip Flexion & Extension
- Step Ups & Hip Abduction
- Pelvic Tilts (not a crunch) and Dead Bug
- Transverse Abdominis Activator and Back Extensions

Preventative Program Training Goals:

- Increase bone mass
- Increase lean mass
- Increase strength increase cardio capacity
- Improve self confidence

Suggested Preventative Exercises:

- Upright Row
- Squats or Lunges
- Overhead Press with Free Weights

- Lat Pull Down
- Heel Drop (rise up on toes and land hard on heels)

How Often?

- Train at least 2 to 3 days per week with free weights if possible.

How Many?

- Aim for 2 to 3 sets of 8 to 10 repetitions.

References

Dr. Ginger Patterson, PhD with Exercise Etc.

National Osteoporosis Foundation

<<http://www.nof.org>>