

DO IT RIGHT! AND PREVENT FRACTURES!

The Bone-Healthy Way of Life and Exercise



AMERICAN
BONE HEALTH™

Acknowledgments

American Bone Health would like to acknowledge the hard work and determination of the author Sherri Betz, PT, GCS, in bringing this important information to the public. We thank the models Jan and Lee Prawitz, Sue Walters and Joan White, who donated their time to show others how to keep their bones fracture free. We recognize and thank Nancy Abodeely, PT, OCS, for reviewing the final content to ensure we communicated safe and effective activities and exercises.

American Bone Health is proud to have the endorsement of the Bone Health Special Interest Group of the Section on Geriatrics, American Physical Therapy Association, for this work.

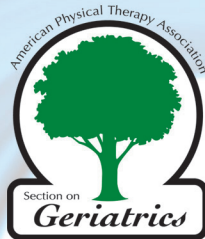


Table of Contents

Preventing Fractures	4
Everyday Activities	5
General lifting	7
Getting groceries out of the trunk	8
Lifting a pet	9
Brushing your teeth	10
Loading the dishwasher	11
Using the oven	12
Washing the dishes	13
Making the bed	14
Gardening	15
Driving	16
Exercising	17
Core strengthening	18
Spinal twisting	19
Spinal stretching	20
Postural strengthening	21
Spinal strengthening	22
Abdominal strengthening	23

DO IT RIGHT!

The Bone-healthy Way of Life and Exercise

Staying fit and protecting your bones is part of healthy aging. Exercise and activity can be a natural part of your daily routine. So choose the right exercises for you and enjoy the benefits. If you have osteoporosis or are at high risk for a fracture, there are a few things to consider:

- Strengthening and weight bearing exercises may reduce bone loss and fractures related to aging and menopause.
- It is recommended that older adults include aerobic and balance exercises in their daily activity routine.
- Good posture and safe movements are needed to protect the spine.

You can reduce the chance of a fracture by following a few simple guidelines:

Spine Protection

Keep the back straight during exercise and in daily activity. Avoid rounding the back and try to hinge forward from the hip crease when bending forward. Avoid rapid twisting of the spine or lifting heavy objects with a rounded back. Learn to lift objects with a neutral spine posture (straight back). Avoid abdominal crunches, curl-ups, oblique rotations, roll ups, rollovers and the yoga Plough pose. *Perform exercises that lengthen and strengthen the back.*

And Prevent Fractures!

Hip Protection

Hip fractures occur when you have a fall. So one good way to prevent hip fractures is to improve your balance. Stand on one leg every day, when you are waiting in line at the grocery store or brushing your teeth. Make sure you have something sturdy to hold onto if you feel unsteady. Avoid planting your feet and twisting in place or doing rotation stretches like the pigeon pose in yoga. *Choose exercises that strengthen the buttocks and thigh muscles.*

Wrist Protection

The wrist often fractures with falls onto outstretched arms. Practice single leg standing balance and sidestepping. Doing quadruped, “all fours” hands and knees exercises, will help to strengthen the wrists.

Now you are on the road to better bone health!

Resources

For information on specific exercise programs, consult a qualified exercise practitioner. Practitioners who have been trained to work with clients who have osteoporosis can be found on a United States map at www.americanbonehealth.org.

If you have osteoporosis, have fallen, or have had a fracture, consult a licensed Physical Therapist with expertise in working with bone health and osteoporosis before starting an exercise program.

For information on how to calculate your fracture risk, see www.americanbonehealth.org.

Everyday Activities

Keep Your Back Straight.

Many daily activities involve lifting and reaching. Proper posture is crucial for these movements when you have low bone density.

When you find yourself:

- Lifting from the floor
- Making the bed
- Tying your shoes
- Getting groceries out of the trunk
- Backing up in the car
- Washing your face and brushing your teeth

AVOID ROUNDING your SPINE and SHOULDERS.

General Lifting

Stand with your feet a little wider than your hips, keep knees in line with your middle toes as you squat to lift an object. Hinge at the hips, keep the chest lifted, shoulder blades back and down and bring the object as close as possible to you.



This Way



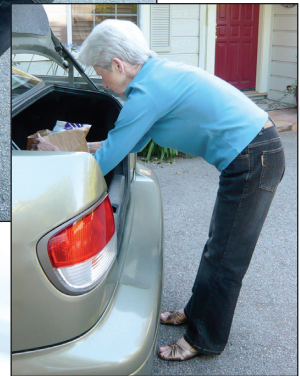
Not This Way

Unpacking Groceries

Keep spine lengthened and straight, chest lifted and knees bent. Allow the knees to rest gently against the bumper to brace your body. Hinge at the hips instead of rounding the back to reach into the trunk. Lift one bag at a time, keeping shoulders back and be sure to watch where you are going to carry the groceries into the house.



This Way



Not This Way

Lifting a Pet

Stand with your feet a little wider than your hips, keep knees in line with your middle toes as you squat to lift a pet or child. Hinge at the hips, keep the chest lifted, shoulder blades back and down and bring the pet or child as close as possible to you. Avoid lifting children who can walk!



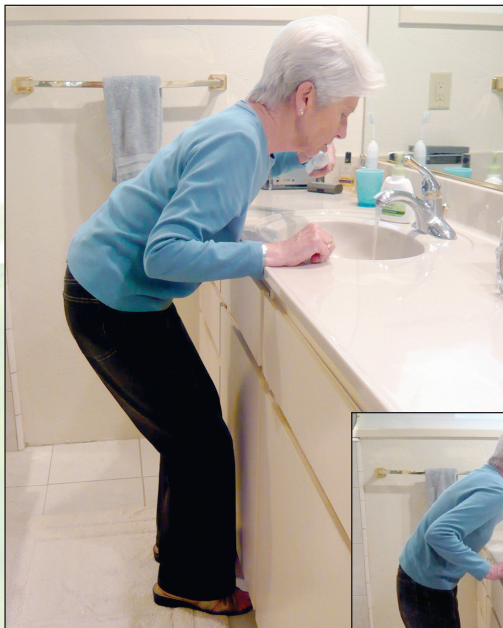
This Way



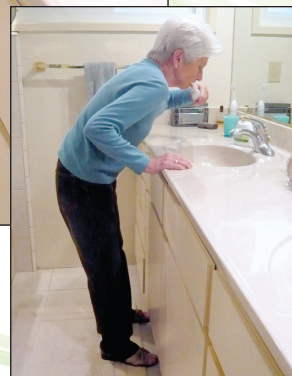
Not This Way

Brushing Teeth

Keep spine lengthened and straight, chest lifted and knees bent. Hinge at the hips instead of rounding the back to bend towards the sink.



This Way



Not This Way

The Dishwasher

Stand to the side of the dishwasher with knees and chest aiming in the same direction to avoid twisting the spine. Keep chest lifted, shoulder blades back and down, and knees bent.



This Way



Not This Way

The Oven

Keep spine lengthened and straight, chest lifted and knees bent. Hinge at the hips instead of rounding the back to reach into the oven. Use oven mitts for better control of a heavy dish. Drag the dish or pan close to the edge. “Setting” the shoulder blades down and back, draw the object out of the oven.



This Way



Not This Way

Washing the Dishes

Open the door of the cabinet under your sink and place your foot on the edge of the cabinet floor. Lean against the sink keeping your spine straight to avoid rounding your back over the dishes.



This Way



Not This Way

Making the Bed

Keep chest lifted,
tailbone lifted
and brace knees
against bed.



This Way



Not This Way

Gardening

Use a pad or sit on a small stool to garden. Hinge at the hips, keeping the chest lifted and the spine straight to reach the ground. When standing, avoid locking the knees and also avoid bending forward at the waist rounding your back to work in your garden.



This Way



Not This Way

Driving

When checking behind, reach right hand behind passenger headrest to brace yourself and keep chest lifted as you rotate.



This Way



Not This Way

Exercising

Considerations for Exercise.

Many exercises involve movements that could cause fractures to the spine or hip. Avoid or modify exercises that involve rounding the spine such as:

- Crunches
 - Curl ups
 - Oblique abdominals
 - Touching toes
(seated or standing)
- Yoga:
- Spine twists
 - Forward folds
 - Ploughs
 - Shoulder stands
- Pilates:
- Rollups
 - Rollovers
 - Short spine

AVOID ROUNDING and TWISTING your SPINE.

Core Strengthening

Avoid all forms of crunches. Instead, practice core control by drawing in abdominals as you bring one leg at a time to a 90° angle and press lower back down. Alternate touching toes to the floor.



This Way



Not This Way

Spinal Twisting

Avoid seated or supine extreme spinal twists. Gently rotate the pelvis and legs keeping shoulder blades on the floor.



This Way



Not This Way

Spinal Stretching

Avoid yoga Forward Fold and Pilates Spine Stretch. Instead do seated chest stretch supported by arms.



This Way



Not This Way

Postural Strengthening

Avoid yoga Cat Stretch and all rounded back stretches. Instead practice “All 4s” opposite arm and leg raises to strengthen upper back and hips.



This Way



Not This Way

Spine Strengthening

Avoid yoga Plough,
Shoulder Stand, Pilates
Rollover and Jackknife.
Instead do yoga Cobra,
Pilates Swan or Pilates
Modified Double
Leg Kick.



This Way



Not This Way

Abdominal Strengthening

Avoid Pilates Rollup and Hundred. Instead do Pilates Single Leg Kick with lower abdominals supporting the back.



This Way



Not This Way

American Bone Health is a non-profit organization providing education, resources, and tools to help you understand bone disease and bone health. Educating and supporting communities and families like yours is our priority.

**Join us as we spread the word about healthy bones
one community at a time.**

www.americanbonehealth.org
1_888_266_3015



**AMERICAN
BONE HEALTH™**