



**OSTEOPOROSIS
stay active and
exercise
TO STAY STRONG**

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Osteoporosis is a condition that causes your bones to weaken or break more easily. You can keep your bones healthy by getting enough calcium and vitamin D. Regular physical activity and exercise also helps prevent osteoporosis by:

- Improving your strength and posture.
- Building muscle and endurance.

This helps prevent falls and makes it easier for you to do your everyday activities. You need a combination of all these types of exercise to prevent bone loss:

- Weight-bearing activities: walking, hiking, and dancing.
- Overall strengthening exercises: isometrics, weightlifting, and swimming.
- Specific strengthening exercises. Use the postural and core exercises shown in this booklet.
- Balance exercises such as yoga or tai chi. Review the standing balance exercises shown in this booklet.

Tips for Daily Activities

Protect your spine by paying attention to your posture and the way you move. As osteoporosis progresses your posture usually gets worse.

Poor posture:

- Increases compression on the spine, which may lead to spinal fractures.
- May affect your balance, which can lead to falls.

Keep your muscles strong to help prevent poor posture and its consequences.

Use proper posture for all your daily activities, like the examples shown. To do this:

- Keep your back straight (do not twist) when sweeping and vacuuming and when getting in and out of bed.
- Bend at your hips and knees (not your back) when you brush your teeth, tie your shoes, garden, or lift things.

Weight-Bearing Exercises

Weight-bearing exercises help you build bone. Weight bearing means any kind of exercise you do with your feet or arms supporting your body. Walking is the most convenient weight-bearing exercise. We recommend that you:

- Begin with 10 minutes of moderate activity, 3 times a day, 5 days a week.
- Work up to 60 minutes per day, 5 days a week, if you can. Make exercise part of your daily routine.
- Vary your speed and the length of your step.
- Use good posture while doing all weight-bearing exercises.
- Try a variety of weight-bearing activities you enjoy, such as hiking, dancing, or stair climbing.

Overall Strengthening Exercises

Regular strength training with weights can make your muscles stronger. Swimming is another overall strengthening activity. Focus on your posture while exercising.

Exercises to Avoid

Avoid exercise that can strain the front of your spine. These include:

- Forward bending and twisting exercises.
- Seated exercises with bending and twisting.
- Touching your toes or other exercises that require you to bend forward from a standing position.
- Sit-ups or curl-ups.

Postural Strengthening Exercises

Maintaining good posture will keep your spine safe and build strength in the spinal muscles. Here are 3 exercises that can strengthen your posture.

Do these every day. Hold each exercise for 10 seconds.

Sitting: Don't slouch while sitting. Think of growing taller, lift your breastbone, and squeeze your shoulder blades together. Repeat every 30 minutes throughout the day. When this gets easy, bring your fingertips near your ears, press your elbows back, and squeeze your shoulder blades together.



POOR



GOOD



SHOULDER BLADE
SQUEEZE

Standing: Think of growing taller, lift your breastbone. Press your shoulders back and squeeze your shoulder blades together. You may do this exercise with or without a stick. Stand tall and lift your breastbone throughout the exercise. Do not let your chin stick out.



Chair rise: Scoot to the front of the chair. From a seated position, stand up slowly. Keep your back straight and lift your breastbone as you move from sitting to standing. Slowly return to sitting, bending at the hips and knees, keeping your back straight. You can do this several times during the day to strengthen your back and leg muscles. Begin with 5 and work up to 15 to 20 repetitions.



Core Strengthening Exercises

Strengthen your stomach and back muscles by doing the following exercises. Find a comfortable place to lie down. If needed, support your:

- Head and upper back with pillows.
- Legs on pillows or a stool to keep your back in a comfortable position.

Repeat each exercise 3 times and progress to 8 as you get better at the exercise. Hold each exercise for 10 seconds.

Abdominal strengthening

Gently tighten your stomach muscles without letting your back move. Once you can feel your muscles tighten, hold for 10 seconds. Try counting out loud to avoid holding your breath.



Back strengthening

Shoulder press: Do this exercise on the floor or standing against a wall. Gently press the back of your shoulders into the floor or wall. Hold for 10 seconds.



Elbow press: Lie in a comfortable position. Keep both knees bent. Place hands behind your head. If your elbow(s) are not resting on the floor, place a rolled towel under your elbow(s.) Press your elbows into the towel or the floor. Hold for 10 seconds.



Leg press: Lie with one leg straight and one leg bent. Press the straight leg into the floor and tighten your stomach, buttocks, and leg muscles. Hold for 10 seconds. Alternate sides.



Single arm press: Lie in a comfortable position with both knees bent. Raise one arm over your head until your arm is resting on the floor. If you cannot reach the floor, place a rolled towel under your arm. Gently press your arm into the floor or rolled towel. Hold for 10 seconds.



Wall lift-off: Stand close to the wall with your arms overhead. Bend your knees a little, then gently tighten your stomach muscles. Lift your hands off the wall without arching your low back.



START

END

Bridge: Lie on your back with your knees bent and feet flat on the floor, hands by your sides. Gently tighten your stomach muscles. Lift your hips 3 to 5 inches from the floor without arching your back. Hold the bridge for 3 to 5 seconds, and then slowly lower your hips to the floor.



Mini wall squat: Stand with your back to a wall and your feet about 12 inches away. Perform a small squat, making sure your knees stay over your ankles. Hold the position for 5 to 10 seconds. Return to standing and repeat.

Balance exercise

Practice balancing on one leg. For support, you can stand between 2 chairs, near the kitchen or bathroom counter, or in a doorway. Remember to stand tall.



SINGLE HAND SUPPORT

Additional Resources

- For exercises to help ease back pain, go to kp.org/mydoctor and search for “back pain exercises.”
- Contact your Kaiser Permanente Health Education Center or Department for health information, programs, and other resources.
- If you are hit, hurt, or threatened by a partner or spouse, this can seriously affect your health. There is help. Call the National Domestic Violence Hotline at 1-800-799-7233 or connect to ndvh.org.





Consult with your physical therapist or doctor if you experience an increase in your symptoms with recommended exercises, or if you develop new symptoms of numbness, tingling, or a spread of the pain. This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other health care professional. If you have persistent health problems, or if you have additional questions, please consult with your doctor. Some photos may include models and not actual patients.

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