

Exercises (For Persons Age 60 and Older)

Exercise builds strong bones and slows the progress of osteoporosis. It also tones your muscles and helps you move about more easily by keeping joints, tendons and ligaments more flexible.

You should engage in weight-bearing exercises such as walking (considered one of the best methods of maintaining bone strength), jogging, hiking, climbing stairs, dancing, weight training, etc.

It is important to tailor your exercise program to fit your own level of ability and special needs. Most older people, even those 85 and over and people with illnesses or disabilities, can take part in moderate exercise programs.

Here are some exercises developed by the President's Council on Physical Fitness and Sports. The exercises are arranged in three levels of difficulty. Once you have successfully completed all the exercises in Level 1, proceed to the next level. Remember, it may take several months to attain the minimal levels of physical fitness identified in Level 1 activities. Some will take less time, others more.

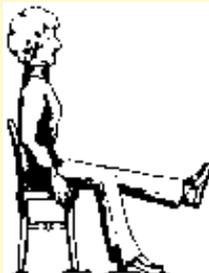
Preparing the body for exercise is important for persons at any age and all fitness levels. Before doing any of these exercises, it is suggested that you warm-up. A warm-up period should begin with slow, rhythmic activity such as walking. Gradually increase the intensity until your pulse rate, respiration rate and body temperature are elevated. It also is advisable to do some easy stretching exercises before moving on to these activities.

Remember before beginning any exercise program, you should discuss the program with your doctor and follow the doctor's advice.

Level 1



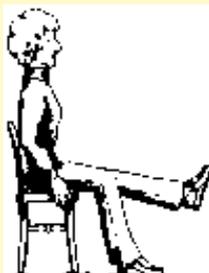
Shoulder Shrug 1. For the upper back, to tone shoulders and relax the muscles at the base of the neck. Lift shoulders way up, then relax them. Suggested repetitions: 8-10



Sitting Single Leg Raises 2. To strengthen hip flexor muscles and tone lower abdominal wall. Sit erect, hands on side of chair seat for balance, legs extended at angle to floor. Raise left leg waist high. Return to starting position. Suggested repetitions: 10-15 each leg.



Knee Lift 3. To strengthen hip flexors and lower abdomen. Stand erect. Raise left knee to chest or as far upward as possible. Return to starting position. Suggested repetitions: 5 each leg.



Leg Extensions 4. To tone the upper leg muscles. Sit upright. Lift left leg off the floor and extend it fully. Lower it very slowly. Suggested repetitions: 10- 15 each leg.



Back Leg Swing 5. To firm buttocks and strengthen the lower back. Stand erect behind chair, feet together, hands on chair back for support. Lift one leg back and up as far as possible keeping knee straight. Return to starting position. Suggested repetitions: 10 each leg.



Quarter Squat 6. To tone and strengthen lower leg muscles. Stand erect behind a chair, hands on chair for balance. Bend knees, then rise to an upright position. Suggested repetitions: 8-12.

Level 2



Arm Curl 1. To strengthen arm muscles. Use a weighted object such as a book or can of vegetables (not more than five pounds). Stand or sit erect with arms at sides, holding weighted object. Bend your arm, raising the weight. Lower it. (Can be done seated.) Suggested repetitions: 10-15 each arm.



Modified Knee Push-Up 2. To strengthen upper back, chest, and back of arms. Start on bent knees, hands on floor under and slightly forward of shoulders. Lower body until chin touches the floor. Return to start. Suggested repetitions: 5-10.



Side Lying Leg Lift 3. To strengthen and tone outside of thigh and hip muscles. Lie on right side, legs extended. Raise left leg as high as possible. Lower to starting position. Suggested repetitions: 10 each side.



Alternate Leg Lunges 4. To strengthen upper thighs and inside of leg. Also stretches back of leg. Take a comfortable stance with hands on hips. Step forward 18" to 24" with right leg, while extending arms straight ahead. Keep left heel on floor. Shove off right leg and resume standing position. Suggested repetitions: 5-10 each leg.

Level 3

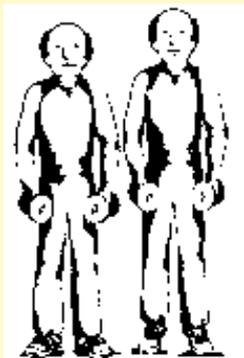
(In Level 3 strength exercises, lightweight resistance equipment, such as a dumbbell, is used. If you do not have a dumbbell available, a number of substitutes can be used. These include a bucket of soil or a heavy household item such as an iron, can of food, stone or brick.)



Seated Alternate Dumbbell Curls 1. To strengthen biceps of upper arms. Sit comfortably on a flat bench with arms at sides. Hold a pair of dumbbells with an underhand grip, so that palms face up. Bending left elbow, raise dumbbell until left arm is fully flexed. Lower left dumbbell while raising right dumbbell from the elbow until right arm is fully flexed. Breathe normally. Suggested repetitions: 1 to 2 sets of 6-10 repetitions each arm.



Alternate Dumbbell Shrug 2. To strengthen muscles in shoulders, upper back and neck. Stand comfortably with dumbbells in each hand. Elevate shoulders as high as possible, rolling them first backward and then down to the starting position. On the second repetition, roll the shoulders forward and down. Alternate first backward and then forward. Exhale as you lower the shoulders. Suggested repetitions: 10 (5 forward, 5 backward).



Dumbbell Calf Raise 3. To strengthen calf muscle and improve range of motion of ankle joint. Stand with feet shoulder-width apart, weights in each hand. Raise up on toes lifting heels as high as possible. Slowly lower heels to starting position. Breathe normally. Suggested repetitions: 5 with heels straight back, 5 with heels turned out, 5 with heels turned in.



Dumbbell Half Squats 4. To strengthen thigh muscles in front. Stand with feet shoulder-width apart and heels on a 2' x 4' block (not necessary, but preferred). Holding weights in each hand, slowly descend to a comfortable position where the tops of the thighs are about at a 45 degree angle to the floor. Inhale on the way down. Ascend to the upright position with knees slightly bent. Exhale on the way up. Suggested repetitions: 10-12.

Walking

A weight-bearing exercise, such as brisk walking, is one of the best all-around activities for you. It helps improve the flow of blood to the heart and strengthens the leg muscles. Choose a comfortable time of day to walk, not too soon after eating or when the air temperature is too high. Start walking 1/4 mile each day the first two weeks, 1/2 mile each day the third week, 3/4 mile the fourth week and 1 mile the fifth week. Start walking five days a week with a target of one mile each day the sixth week. Be careful not to overexert. Stop if you find yourself panting, feeling nauseous, if your breathing does not return to normal within 10 minutes after exercising or if your sleep is affected.

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(For a free brochure on exercise tips call the Academy's public service telephone number (800) 824-BONES or send a stamped, self addressed business size envelope to Prevent Injuries America!-exercise, American Academy of Orthopaedic Surgeons, P.O. Box 2068, Des Plaines, IL. 60017.)

February 2002

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