

# Exercising with Frailty

**Older people are the least active of all adult age groups. Also, 20 to 30 percent of people over 75 years of age are frail. These two facts are related.**



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What is frailty? Frailty includes muscle weakness, reduced activity, and slow walking. Fatigue and unintended weight loss also are part of frailty. It usually follows other chronic diseases and aging problems.

What can be done? Evidence shows that regular physical activity does the following.

- It slows the changes of aging that impair the ability to exercise.
- It optimizes age-related changes in the body, such as loss of muscle and bone and an increase in body fat.
- It promotes psychological and cognitive well-being.
- It helps manage many chronic diseases.
- It reduces the risk of physical disability.
- It increases longevity.
- It allows greater independence.
- It increases quality of life.

The benefits of regular exercise are clear. Exercise improves your function and health. It also offers economic and psychosocial benefits. Exercise should be a part of your lifestyle at any age.

As you age, one of the best ways to reduce frailty and maintain independence is to stay active. This helps you maintain cardiovascular fitness, muscle strength and endurance, balance, and flexibility. A good exercise program emphasizes these factors. The goal is to improve your well-being and your ability to care for yourself.

Combining aerobic and strength exercise is more effective than either form alone. Remember, you can improve at any age. A number of studies show that people in their 80s and 90s can improve their strength, cardiovascular fitness, and balance. When older people increase their strength, they also increase their overall level of activity.

## Getting Started

- Talk with your health care provider before you start. Ask for specific suggestions for your exercise program.
- Take all medicines prescribed by your physician.
- Your goal should be to improve your overall fitness. That includes mobility and the ability to perform daily activities.
- However, being self-sufficient and able to move with relative ease are most important. They will help with daily living more than a high level of fitness will.
- Choose activities you enjoy. This will help you exercise regularly. If walking is too difficult, try biking, swimming, or chair activities.
- Perform low-level strength-training exercises using light weights. Wrist and ankle weights work well. Also seek to improve your flexibility, eye-hand coordination, reflex training, and fall prevention.
- Start slowly. Over time, increase the intensity and duration of your workouts. Make sure you warm up properly first.
- Invite others to join you. Exercising together is more fun. It also increases the chance you will continue. Consider joining an exercise class.
- Look for programs available in your community. Contact an appropriately credentialed exercise professional\* to help you. All you really need, though, is a good pair of shoes to get started walking.
- The most important thing? Be physically and mentally active every day!

## Aerobic Exercise Programs

The American College of Sports Medicine and the American Heart Association recommend at least 150 minutes per week of moderate-intensity aerobic activity, 75 minutes of vigorous aerobic activity, or a combination of both for adults over age 65. They also suggest strength exercises two or three times a week. If you are frail, start with only moderate-intensity exercises.

Balance exercises also will help reduce your risk of falling. Follow the FITT principle to design a safe, effective, and enjoyable program. F = frequency, I = intensity, T = time, and T = type.

- Frequency – Be active on most days of the week but at least three to five days.
- Intensity – Exercise at a moderate level. Use the “talk test” to help you monitor. For example, even though you may notice a slight rise in your heart rate and breathing, you should be able to carry on a conversation while walking at a moderate pace. As you walk faster, you will begin to breathe faster and have difficulty talking. At that point, you’ve achieved moderate intensity or “somewhat hard.” Vigorous exercise causes a large rise in heart rate and breathing. At this intensity it would become difficult to talk. Most people would rate this as “hard to very hard.”
- Time – Exercise at least 30 minutes per day. Work your way up to 60 minutes per day. You can do it all at once or break it up into a few sessions of at least 10 minutes each.
- Type – Do rhythmic, weight-bearing exercises using the large muscle groups. Also, choose activities with a low risk of falling. Walking is a great choice. Swimming and water exercises are also good. Chair activities work for those with degenerative joint problems, difficulty walking and hip or knee replacements. Choose activities you enjoy and will do regularly in your new, more active lifestyle. Add variety depending on the day or the season to keep your program more enjoyable.

### Aerobic Exercise Cautions

- Older adults should consult a health professional to develop an activity plan. This allows you to take into account therapeutic needs and manage risk. This will boost the benefits of physical activity. It will also enhance your safety.
- If you have been inactive for a long time, start with shorter sessions (10 to 15 minutes). Add five minutes to each session, increasing every two to four weeks. Over time, build up to being active at least 30 minutes a day on most days of the week.
- Older adults take more time to adapt to changes in their workload. Small increments in your program are better.
- If you can exceed the minimum guidelines, do it! Just realize it may take time.

### Resistance Exercise Programs

Strength tends to drop about 15 percent each decade from age 50 to 70. It drops by 30 percent per decade in later life. This leads to more falls and reduced independence. Moderate-intensity strength training is necessary to improve or maintain your health and independence. Follow the FITT principle when creating a resistance exercise program, too.

- Frequency – Do resistance training at least two to three days per week. Plan a day of rest between sessions.
- Intensity – Moderate (10 to 15 repetitions).

- Time – Two sets of repetitions of all major muscle groups.
- Type – Try to increase the strength of your lower body first. This will lower your risk of falling. Do not neglect your upper body, though. At first, try using weight machines. These will help if you have balance problems. As your strength and balance improve, add free weights. Don’t belong to a gym or health club? No problem. You can do the same exercises at home using free weights and resistance bands.

### Resistance Exercise Cautions

- Avoid holding your breath when lifting. This can cause large changes in blood pressure. That change may increase the risk of passing out or developing abnormal heart rhythms. This is especially true if you also have high blood pressure.
- If you have joint problems or other health problems, do only one set for all major muscle groups. Start with 10 to 15 repetitions. Build up to 15 to 20 repetitions before you add another set.

### Other Types of Exercise

- Poor balance and reduced muscle mass and strength are all independent risk factors for fractures and falling. Fifty percent of older adults have problems with balance.
- Exercises to improve balance are easy to do and can help a lot. Stand on one foot or climb stairs to improve leg strength and balance.
- If you have balance problems, use support. Try sitting, standing near a wall or chair, or having someone nearby to assist you. Exercise in warm water to reduce your fear of falling.
- Being flexible also is important. Each time you exercise, take an extra 10 minutes to stretch the major muscle and tendon groups. Each stretch should last 10 to 30 seconds and be repeated 3 to 4 times.
- Tai chi and yoga are good programs for balance and flexibility.

Design your exercise program for the most benefit and the fewest risks to your health or physical condition. Contact an appropriately credentialed exercise professional\* to work with you and your doctor. They can help you establish realistic goals. And together, you can design a safe, effective, and enjoyable program to meet your needs and goals.

For more information, visit [www.exerciseismedicine.org](http://www.exerciseismedicine.org) or e-mail [eim@acsm.org](mailto:eim@acsm.org).

*Pescatello, L., Arena, R., Riebe, D., & Thompson, P. (2013). General Principles of Exercise Prescription. In ACSM's Guidelines for Exercise Testing and Prescription (9th ed., pp. 166-177). Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins.*

\*A listing of exercise professionals can be found at [www.usreps.org](http://www.usreps.org) and EIM Credentialed professionals can be found through the ACSM ProFinder (<http://bit.ly/1Mq6ldN>).

### Referral Instructions