



PHYSICAL ACTIVITY RECOMMENDATIONS FOR OLDER ADULTS



**AMERICAN COLLEGE
of SPORTS MEDICINE®**

POSITION STAND

Exercise and Physical Activity for Older Adults

This pronouncement was written for the American College of Sports Medicine by Wojtek J. Chodzko-Zajko, Ph.D., FACSM, (Co-Chair); David N. Proctor, Ph.D., FACSM, (Co-Chair); Maria A. Fiatarone Singh, M.D.; Christopher T. Minson, Ph.D., FACSM; Claudio R. Nigg, Ph.D.; George J. Salem, Ph.D., FACSM; and James S. Skinner, Ph.D., FACSM.

ACSM/AHA PHYSICAL ACTIVITY RECOMMENDATIONS FOR OLDER ADULTS



Resistance exercise for older adults:

Frequency: At least 2 days per week

Intensity: Between moderate (5-6) and vigorous (7-8) intensity on a scale of 0-10

Type: Progressive weight training program or weight bearing calisthenics (8-10 exercises involving the major muscle groups of 8-12 repetitions each), stair climbing, and other strengthening activities that use major muscle groups.

ACSM/AHA Guidelines currently recommend balance exercise for individuals who are frequent fallers or individuals with mobility problems.

PROGRESSIVE STRENGTH TRAINING RECOMMENDATIONS: OLDER ADULTS

For further improvements in strength and hypertrophy in older adults: the use of both **multiple and single joint exercises** with **slow-to-moderate lifting velocity**, for 1-3 sets per exercise with **60-80% of 1RM** for **8-12 repetitions** with 1-3 minutes of rest in between sets for 2-3 days/week is recommended

For increasing power in healthy older adults:

1. Training to improve muscular strength
2. The performance of both **single and multiple joint exercises** for 1-3 sets per exercise using light to moderate loading (**30-60% of 1RM**) for **6-10 repetitions** with **high repetition velocity**.



The ACSM/AHA Guidelines recommend the following special considerations when prescribing exercise and physical activity for older adults:

The intensity and duration of physical activity should be low at the outset for older adults who are highly deconditioned, functionally limited, or have chronic conditions that affect their ability to perform physical tasks.

The progression of activities should be individual and tailored to tolerance and preference; a conservative approach may be necessary for the most deconditioned and physically limited older adults.

Muscle strengthening activities and/or balance training may need to precede aerobic training activities among very frail individuals.

Older adults should exceed the recommended minimum amounts of physical activity if they desire to improve their fitness.

If chronic conditions preclude activity at the recommended minimum amount, older adults should perform physical activities as tolerated so as to avoid being sedentary.

RECOMMENDATION FOR THE INITIAL PRESCRIPTION OF STRENGTH TRAINING



Resistance training should be performed

In a rhythmical manner at a moderate to slow controlled speed

Through a full range of motion, avoiding breathholding and straining (Valsalva maneuver) by exhaling during the contraction or exertion phase of the lift and inhaling during the relaxation phase

Alternating between upper- and lower-body work to allow for adequate rest between exercises

The initial resistance or weight load should

Allow for and be limited to 8–12 repetitions per set for healthy sedentary adults or 10–15 repetitions at a low level of resistance, for example, <40% of 1-RM, for older (>50–60 y of age), more frail persons, or cardiac patients

Be limited to a single set performed 2 d/wk

Involve the major muscle groups of the upper and lower extremities, eg, chest press, shoulder press, triceps extension, biceps curl, pull-down (upper back), lower-back extension, abdominal crunch/curl-up, quadriceps extension or leg press, leg curls (hamstrings), and calf raise
