



# Exercise Recommendations for the Geriatric Population

# Why is this important?

- American Physical Therapy Association states “Health and wellness promotion and preventive programs should be supported for the older adult to prevent or delay the development of many chronic problems which often result in the utilization of more costly services.”
- A study by Williamson JD, et al showed improvements in cognitive function after 1 year of introducing physical activity to previously sedentary geriatric participants.
- According to a study performed by Walston J, et al exercise, especially strength training, is the most robust intervention to improve components of frailty, including muscle strength and physical functioning.
- American Physical Therapy Association states that the benefits of physical activity and exercise are that they reduce fear of falling, improve cardiovascular health, decrease depression, and reduce sleep disorders.

# Additional Benefits

- Prevent occurrences of cardiac events
- Reduce incidence of stroke, hypertension, type II diabetes mellitus, colon and breast cancers, osteoporotic fractures, gallbladder disease, obesity, depression, and anxiety.
- Reduce risk of falls and injuries from falls.
- Prevents or decreases functional limitations.
- Substantial therapeutic role for coronary heart disease, peripheral vascular disease, elevated cholesterol, and osteoarthritis.
- May assist with management of depression and anxiety disorders, dementia, pain, congestive heart failure, syncope, stroke, back pain, and constipation.
- May prevent or delay cognitive impairment and improve sleep.

•Nelson ME, Rejeski WJ, Blair SN, Duncan PW, Judge JG, King AC, Macera CA, Castaneda-Sceppa C. Physical activity and public health in older adults: recommendations from the American College of Sports Medicine and the American Heart Association. *Official J of ACSM* 1435-1445, 2007.

•Armstrong L, Balady GJ, Berry MJ, et al. *ACSM's Guidelines for Exercise Testing and Prescription*. 7<sup>th</sup> ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2006.

# Recommendations

- Older adults who are not active at recommended levels should plan to include a gradual approach to increase physical activity over time.
- Develop an activity plan that includes a description of how you will meet recommended levels of exercise. Older adults should develop an activity plan in consultation with a health care provider.
- All exercise recommendations are in addition to routine activities of daily living of light intensity or moderate intensity lasting less than 10 minutes. Examples include self care, cooking, and walking from the parking lot.

# Guidelines for Safe Activity

- Understand the risks.
- Choose types of physical activity that are appropriate for the current fitness level and health goals, some activities are safer than others.
- Inactive people should “start low and go slow” by gradually increasing how often and how long activities are done.
- Older adults should protect themselves by using appropriate gear and sports equipment, looking for safe environments, following rules and policies, and making sensible choices about when, where, and how to be active.
- It is important for older adults to be under the care of a health-care provider if they have chronic conditions or symptoms. People with chronic conditions and symptoms should consult their health-care provider about the types and amounts of activity appropriate for them.

# Guidelines for Exercising When It's Hot

- Exercise in the cool of early morning as opposed to mid-day heat.
- Switch to indoor activities (playing basketball in the gym rather than on the playground).
- Change the type of activity (swimming rather than playing soccer).
- Lower the intensity of activity (walking rather than running).
- Pay close attention to rest, shade, drinking enough fluids, and other ways to minimize effects of heat.

# Gradual

- Older adults should increase their amount of physical activity gradually.
- It can take months for those with a low level of fitness to gradually meet their activity goals.
- To reduce injury risk, inactive or insufficiently active adults should avoid vigorous aerobic activity at first. Rather, they should gradually increase the number of days a week and duration of moderate-intensity aerobic activity.
- Adults with a very low level of fitness can start out with episodes of activity less than 10 minutes and slowly increase the minutes of light-intensity aerobic activity, such as light-intensity walking.

# Components of an exercise program

- Make it fun
  - If the exercise is fun then the participant is more likely to continue.
- Endurance/Aerobic
- Strength
- Balance
- Flexibility

# Components of an exercise program

- Frequency-number of times per week
- Intensity-amount of exertion
- Duration-length of exercise
- Number of exercises
- Sets- consists of several reps
- Repetitions-number of times the exercise is performed

# Endurance/Aerobic

- Brisk walking
- Yard work
- Dancing
- Jogging
- Swimming
- Biking
- Climbing stairs or hills
- Water aerobics
- Golf without a cart
- Push your grandchildren on the swing

# Endurance/Aerobic

- All older adults should avoid inactivity. Some physical activity is better than none, and older adults who participate in any amount of physical activity gain some health benefits. (US Dept of Health & Human Services)
- Frequency: A minimum of 5 days/week for moderate intensity, or a minimum of 3 days/week for vigorous intensity.

# Endurance/Aerobic

- 30 minutes of moderate-intensity (3/10) in bouts of at least 10 minutes each. (ACSM)
  - 10 Point Borg Scale
    - 0 - Nothing at all
    - 1 - Very light
    - 2 - Fairly light
    - 3 - Moderate
    - 4 - Some what hard
    - 5 - Hard
    - 6
    - 7 - Very hard
    - 8
    - 9
    - 10 - Very, very hard

# Strength

- Carry a full laundry basket
- Carry your smaller grandchildren
- Lift bags of mulch
- Carrying groceries
- Start out lifting no weight at all, then increase to 1 or 2 pound weights. Gradually add more weight.
- When they can do 2 sets of 10-15 repetitions easily, increase the amount of weight at the next session.

# Strength

- Frequency: At least 2 days/week
- Number of exercises: 8-10 exercises involving the major muscle groups.
- 10-15 repetitions

# Balance

- Standing on one foot
- Heel-to-toe walk
- Tai-chi
- Dancing
- Riding horses
- Frequency: At least 2 days/  
week

# Flexibility

- Yoga
- Make the bed
- Tai-Chi
- Frequency: At least 2 days/  
week

# Brochure information provided by:

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