

Healthy, Active Aging

Physical Activity Guidelines for Older Adults

Based on recommendations from the American College of Sports Medicine and the American Heart Association



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Who are you calling an Older Adult?

- Men and women aged ≥ 65 years
- Adults age 50 to 64 with chronic conditions that require medical care and/or limit daily life.



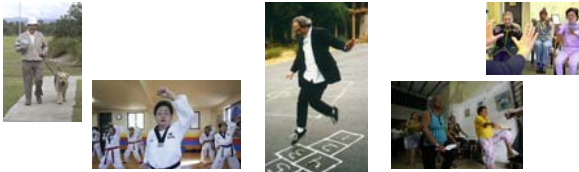
That's who



Photos by Rita Clark from the book: "Older Adults, Not Frail" by 1999

What is "Physical Activity?"

- Any body movement that takes energy to accomplish.
 - Walking, dancing, gardening and carrying grandchildren are a few examples!

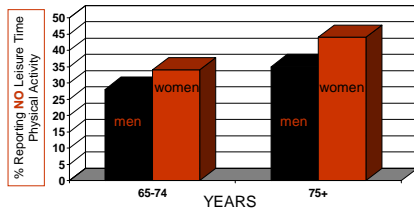


Benefits of Physically Active Aging

- Longer life
- Better heart, muscle and bone health
- Stay independent
- Prevent obesity
- Less anxiety and depression
- Higher self-esteem



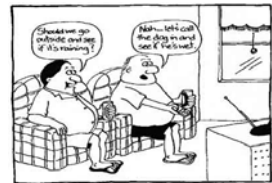
Inactive Older Adults



1 in 3 older adults doesn't engage in energy-burning physical activity!

Why Aren't Older Adults More Active?

- Lack of knowledge
 - Benefits of physical activity
 - How much and what kind of physical activity
 - Safety issues
 - Can I exercise with disease?
 - Fear of falling
- Time
- Access to opportunities
- Social support



Defining the Dose

How do we determine the appropriate exercise prescription?

How Much is Enough?

- It depends on the TYPE of activity
 - ♥ Aerobic
 - 🏋️ Muscle strengthening
 - 🧘 Flexibility
 - 🦵 Balance
- It depends on the overall goals of the individual
 - Independence
 - Health
 - Fitness
 - Performance

The preventive recommendations presented here specify the *minimum amounts* of physical activity essential for healthy aging.

The ABCs of Physical Activity (The FITT of Physical Activity)

- **Frequency** (how often)
 - How many days per week
- **Intensity** (how hard)
 - Low (not much effort)
 - Medium (noticeably increased breathing)
 - High (add a hill or stairs to the above example)
- **Time** (how long)
 - Per session
- **Type** (what)
 - Walking, swimming, dancing, yoga, tai chi



Aerobic Activity



- Activities that require the heart and lungs to work harder to meet the body's increased need for oxygen.
 - Walking, swimming, bicycling

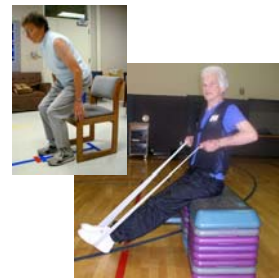
Aerobic Activity

- **Frequency, Intensity and Time**
 - At least 30 minutes of *medium-energy* activities on five days each week
- OR
- At least 20 minutes of *high-energy* activities on three days of each week
- OR
- Combinations
 - at least 20 minutes of *high-energy* activities on 2 days/week [+]
 - at least 30 minutes of *medium-energy* activities on 2 days /week

You can "bank" aerobic activity throughout the day. However, activities must last for at least 10 minutes without stopping to count toward your daily total.

Muscle Strengthening Activity

- Any activity that strengthens and supports muscle and connective tissue.
 - Gravity assisted activities such as chair stands
 - "Resistance" activities such as band exercises



Muscle Strengthening Activity

- **Frequency**
 - *At least* two days each week
 - Allow at least one day of rest between sessions for each muscle group
- **Intensity**
 - To build muscle strength, use a resistance (or weight) that allows 10-15 repetitions for each exercise
 - If you can do 15 chair stands easily, add a weighted vest or hand held weights to make it harder!
- **Time**
 - One set for each exercise (10-15 repetitions)
 - When doing chair stands and band exercises, try to do each exercise 10-15 times in a row.

The level of effort should be medium to high. On a scale from 0-10 that's 7-8!

Flexibility Activity

- Activities to help maintain the range of motion needed for regular physical activity and daily life tasks.
 - Stretching, range of motion activities



Flexibility Activity

- **Frequency**
 - *Preferably*, flexibility activities are done on all days that aerobic or muscle strengthening activities are being done, or 2-3 days per week
 - There does not appear any reason to discourage daily flexibility training
- **Intensity**
 - To the point of *mild discomfort*
 - This subjective feeling of discomfort will vary from person to person.
 - Avoid *pain*.
- **Time**
 - Do each stretch 3 to 4 times
 - Hold each stretch for 10-30 seconds
 - Try to stretch all the major muscle groups.

Stretching 3-5 days per week may improve osteoarthritis symptoms.

Balance Activity

- Activities to help maintain the range of motion needed for regular physical activity and daily life tasks.
 - Stretching, range of motion



Balance Activity

- **Frequency**
 - Balance exercises should be done at least three days per week
 - This amount has been shown to be effective in fall prevention studies
- **Intensity**
 - There are currently no recommendations regarding the intensity of balance exercises
 - *Most activities are of lower intensity (e.g. standing balance tasks, seated ball exercises)*
- **Time**
 - There are currently no recommendations regarding how many sets, or repetitions of balance exercises should be done.

Walking, Tai Chi, and muscle-strengthening exercises have all been shown to improve balance in older adults.

Physical Activity for Bone Health



- **Specific** strength and weight-bearing activities are needed for bone health throughout life.
- Muscle-strengthening is good for the spine and hip.
- Femoral neck needs impact!

Physical Activity for Bone Health

- **Frequency**
 - 2-3 times per week
- **Intensity**
 - Medium to high
 - more than 4 times bodyweight (BW) for impact activities.
 - Jumping (3-8 BW); walking (1-2 BW); running (1.5-2.5 BW).
 - Muscle-strengthening activities as prescribed
- **Time**
 - 70-100 jumps
 - 1 to 3 sets



Exercise and Fall Risk



- Increase strength
 - Resistance training
 - Weighted vest
- Improve balance
 - Tai Chi
 - Mobility training
 - Gait training
 - Resistance training
 - Weighted vest

The Take Home Message?

A physically active lifestyle
may be the best medicine for
healthy aging!

Questions



References

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