

# AEROBIC ACTIVITY FOR OLDER ADULTS



# **WHAT IS AEROBIC ACTIVITY?**

Aerobic activity, often referred to as endurance and cardio activity, is physical activity that requires people to use large muscles in a rhythmic manner for an extended period of time. This may include activities such as walking, jogging, biking, swimming, etc. (U.S. Department of Health and Human Services, 2018)<sup>1</sup>.

# **WHY IS AEROBIC ACTIVITY IMPORTANT?**

Aerobic activity makes our heart beat more rapidly and forces our breathing rate to increase. This helps us meet the demands of the body's movement. Regular aerobic activity helps make our cardiovascular system stronger. In addition, greater amounts of aerobic activity provide additional health benefits (U.S. Department of Health and Human Services, 2018)<sup>1</sup>.

# WHAT ARE THE HEALTH BENEFITS?

Older adults who engage in regular aerobic activity are faced with greater health benefits, including a reduced risk of age-related loss of function. Other health benefits include (Mayo Clinic, 2020)<sup>2</sup>:

- Reduced risk of heart disease, high blood pressure, & type 2 diabetes
- Helps manage arthritis
- Strengthens your heart
- Reduces risk of stroke- helps keep arteries clear by increasing high-density lipoprotein (HDL) levels or “good cholesterol”
- Helps protect cognitive functioning
- Prevents onset of dementia and improve cognition in people with dementia
- Lowers risk of falls
- Boosts your mood (reduces anxiety and eases depression)
- Improves overall quality of life

# WHAT IS THE PROBLEM?

Aerobic activity is extremely important for older adults. It is recommended that older adults should receive at least 150-300 minutes of moderate-intensity aerobic activity/week or 75-150 minutes of vigorous-intensity aerobic activity/week. However, over half of the older adult population (65 years and older) do not meet federal guidelines for aerobic activity.

**Statistics of older adults meeting guidelines (CDC, 2016)<sup>3</sup>:**

- 65-74 years: 42.5%
- 75-84 years: 30.9%
- $\geq 85$  years: 19.4%

This is a problem, as physical inactivity is linked to chronic health conditions and increased mortality and morbidity in older adults (Taylor, 2013)<sup>4</sup>.

When older adults do not receive enough aerobic activity, it may reduce their stamina and result in quicker fatigue during daily activities such as:

- Shopping
- House cleaning
- Preparing and cooking meals
- Walking to the mailbox
- Lawn maintenance/gardening
- Walking the dog

## **WHAT ACTIVITIES CAN I DO?**

Aerobic activity can be achieved a number of ways, including:

- Swimming
- Water aerobics
- Jogging or running
- Bike riding
- Yard work
- Sports

## Land Workout Options (Silver Sneakers, 2020)<sup>5</sup>

1. March in place
2. Heel taps: tap your heel in front of you
3. Toe taps: standing with your feet shoulder-width apart, alternate tapping your toes in front of you in a rhythmic patten.
4. Side taps: step out to the side with one foot, and follow it with your other foot, tapping on the floor. Repeat in the opposite direction.
5. Knee taps: in a wide stance, lift one knee, and tap it with the opposite hand.
6. Out, Out, In, In: standing with your feet shoulder-width apart, step out with one foot then the other. Step back in with your leading foot then the other.
7. Up, Up, Back, Back: standing with your feet shoulder-width apart, step forward with one foot then the other. Next, step back with your leading foot then the other.

Silver sneakers is a low cost workout program and gyms that provide classes for all skill levels. You can find the link to find classes near you here:

<https://www.silversneakers.com/class/signature-classic/>

The senior Alliance also offers similar classes:

<https://www.thesenioralliance.org/programs/education/>

### **Lower intensity exercises that can be done alone**

#### ***Seated exercises***

Seated exercises are perfect for older adults who have weakness in their legs, wheelchair users, cardiac patients, or for anyone starting exercises and are worried about the intensity. This makes working out possible with just a chair! Studies have shown that seated exercises that were performed 3-4 times a week were just as effective as lowering symptoms of depression as regular aerobic exercise (Choi & Sohng, 2018).

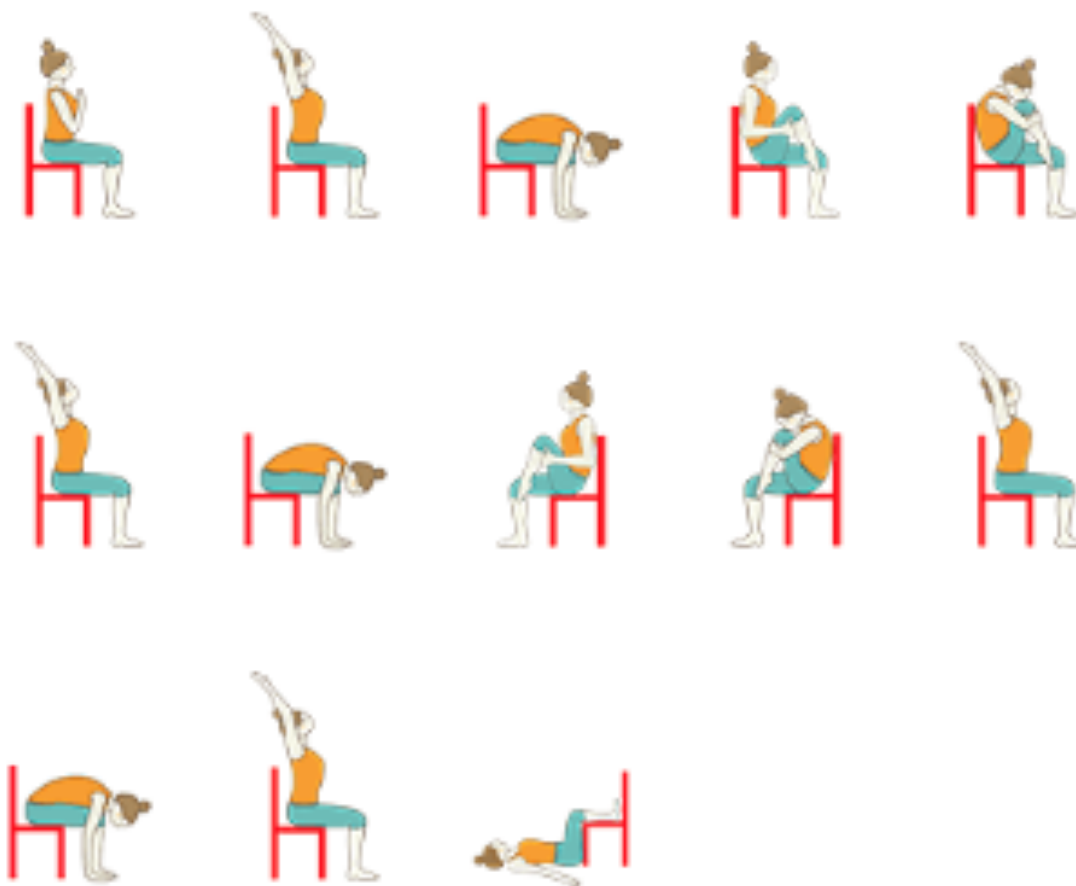


Here is the link for some seated exercises:

<https://californiamobility.com/21-chair-exercises-for-seniors-visual-guide/>

#### ***Yoga***

Yoga builds strength and flexibility as well as improving balance. Yoga is a great alternative to intense workouts because it is easy on the joints. Individuals with multiple sclerosis, low back pain, and unstable knees can benefit from yoga (Joshi et. al, 2016). Yoga has been proven to lower symptoms of depression because of its connection between deep breathing and movement (Joshi et. al, 2016). Poses can be used in seated and in standing. Here are some beginner yoga poses. When moving to the next pose, make sure to sync your breathing to inhale when moving to the next pose.



**A great yoga video to do on your own:**

**<https://www.youtube.com/watch?v=kFhG-ZzLNN4>**

***Walking + Gardening/ domestic activities***



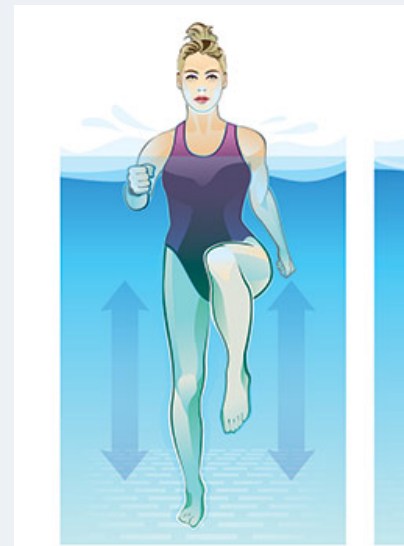
## Water Aerobic Options

1. Water walking: about waist-deep in the water, walk around the pool just as you would on land.

Picture from: Creaky Joints



2. Water marching: stand straight with arms extended and perform a march motion.



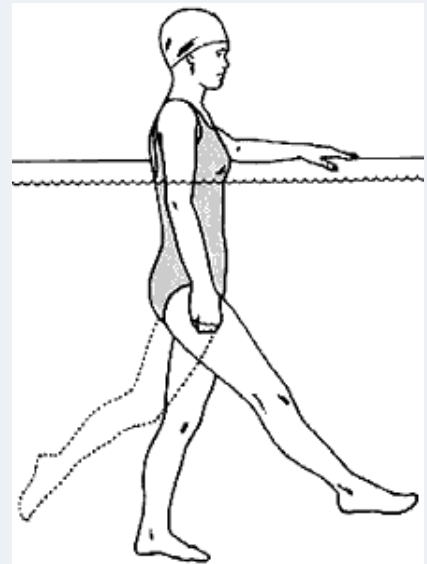
Picture from: Experiencelife.com

- Flutter kicks: perform a front float while keeping your head above the water. Using a kickboard or holding the pool wall, flutter kick with your legs.

Picture from: The Changed Up Life



- Leg swings: stand at one side of the pool, while holding the pool wall, and swing the outside leg forward then backwards. Repeat with the other leg.



Picture from: Washington.edu

Balance Considerations: Each of the water aerobics activities listed above can be modified to fit various functional statuses. For increased stability, individuals can perform these activities while holding onto the pool wall/ledge.

\*Note: As a precaution, make sure you consult with your physician or a healthcare professional if you present with a chronic health condition, injury, or balance deficits prior to engaging in aerobic activity.

# RESOURCES

Silver Sneakers Facebook Page: For all those Facebook users out there, this page frequently posts great exercise options for older adults. In addition to aerobic activity options, they also provide strengthening exercises.

[https://www.facebook.com/silversneakers/?epa=SEARCH\\_BOX](https://www.facebook.com/silversneakers/?epa=SEARCH_BOX)

ARCH\_BOX

Silver Sneakers Classes: For those who are looking to participate in an aerobics class, this website provides a list of available Silver Sneaker classes that are nearby.

<https://www.silversneakers.com/learn/classes/>

Perceived Exertion Chart: It can be difficult to track a workout's intensity level. Below is a perceived exertion chart that can help individuals identify what level of intensity they are exercising at. Remember that greater health benefits are associated with moderate to vigorous-intensity levels.

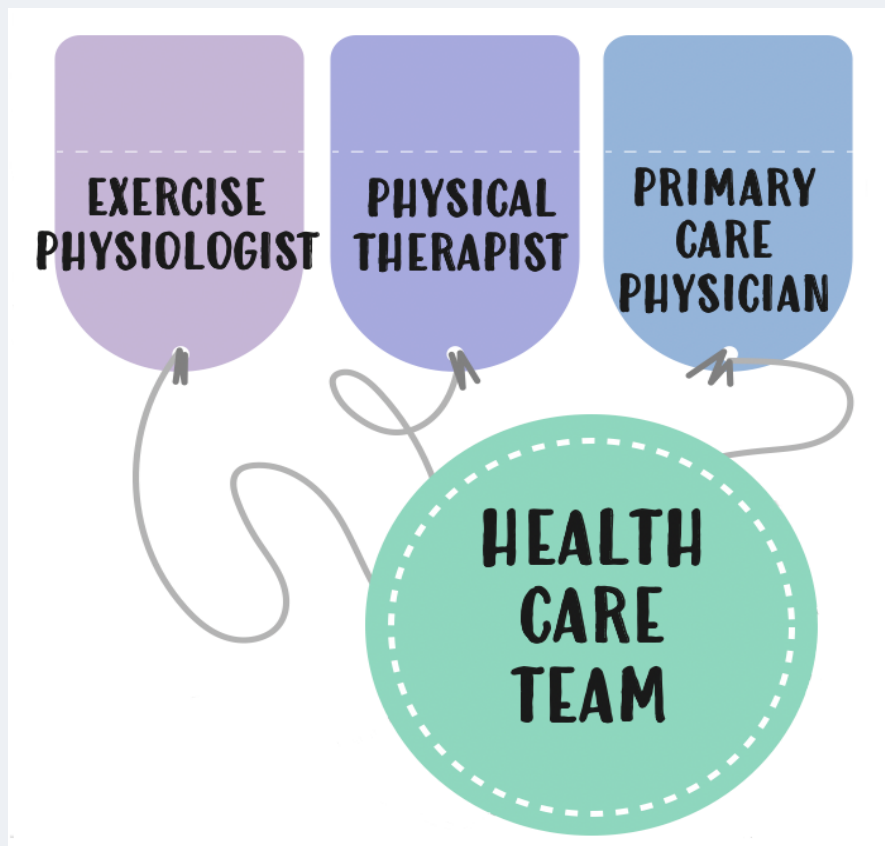


**PERCEIVED EXERTION**

the  **YMCA**  
FOR YOUTH DEVELOPMENT®  
FOR HEALTHY LIVING  
FOR SOCIAL RESPONSIBILITY

- 1 Okay to go!**  
"I feel great, and I'm breathing normally."
- 2 Very, Very Light Intensity**  
"I feel terrific. I don't even feel like I'm exerting myself."
- 3 Very Light Intensity**  
"This is fun. I feel like I could go forever."
- 4 Light Intensity**  
"I can tell I'm exercising. I feel good."
- 5 Moderate Intensity**  
"I'm sweating a little. I'm working."
- 6 Moderate to Intense**  
"I'm exercising harder than I thought I would. I'm getting a workout."
- 7 Intense**  
"The workout is hard, but I can take it."
- 8 Very Intense**  
"This is difficult. I'm breathing hard. I'm not sure how long I can go."
- 9 Very, Very Intense**  
"I'm very uncomfortable. I can't talk in a normal tone of voice. I should slow down."
- 10 Maximum Intensity**  
"I'm completely exhausted. I must slow down immediately."

# HEALTH CARE TEAM



Exercise Physiologist: An exercise physiologist can help develop exercise programs for patients suffering from chronic diseases.

Physical Therapist: A PT can help develop an exercise program that meets individuals' current functional status. A PT can help restore function and promote wellness.

Primary Care Physician: A PCP can help identify any underlying health factors that should be considered prior to engaging in aerobic activity.

# OCCUPATIONAL ENGAGEMENT

A lack of aerobic activity can negatively affect performance with everyday activities. More specifically, prolonged aerobic inactivity affects the activity domain within the International Classification of Functioning (ICF) model. Engaging in aerobic activity, such as the options listed above, can help improve daily functioning. For example, walking on a regular basis can increase ones' stamina and help reduce fatigue during activities such as grocery shopping, walking up and down the stairs, cleaning the home, etc.

# REFERENCES

Taylor, D. (2013). Physical activity is medicine for older adults. *Postgraduate Medical Journal*, 90(1059), 26-32. Doi:10.1136/postgradmedj-2012-131366 <sup>4</sup>

[https://health.gov/sites/default/files/2019-09/Physical\\_Activity\\_Guidelines\\_2nd\\_edition.pdf](https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf) <sup>1</sup>

<https://www.mayoclinic.org/healthy-lifestyle/fitness/in-depth/aerobic-exercise/art-20045541> <sup>2</sup>

<https://www.cdc.gov/mmwr/volumes/65/wr/mm6537a9.htm> <sup>3</sup>

<https://www.silversneakers.com/blog/ssc-cardio-follow-along-workout/> <sup>5</sup>