

# Benefits of Exercise and Physical Activities



Allina Health



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*First edition*

**Developed by Allina Health.**

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For specific information about your health condition, please contact your health care provider.





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# Exercise and Activity

## Get Regular Exercise

### Tip

If you can, join a pulmonary rehabilitation program. You will learn skills to manage your health and have an exercise program created just for you.

Talk with your primary care provider to see if pulmonary rehabilitation is right for you.



It is important to get exercise each day. Even a small amount of exercise can improve your health and lead to fewer hospital stays. It is important to get regular exercise that you can do comfortably.

It is important to balance exercise with rest. Your muscles need oxygen to do activities. As your lungs take in less oxygen and your body works harder than normal to breathe, you may need longer rest periods after stressful situations.

**Talk with your primary care provider about what is right for you or if you have any problems exercising.**

### Benefits of regular exercise

Exercise means working your muscles to strengthen and condition them. This includes your heart.

Starting an exercise program can be a challenge. Stick with it and after a few days or weeks you may begin to see or feel these positive changes:

- more confidence and independence
- more energy for your everyday activities or special events
- less difficulty reducing or maintaining weight
- having less shortness of breath
- having more strength, endurance, flexibility and balance
- improved feeling of well-being and a reduction in stress
- better quality sleep
- having better control of your lung disease symptoms.

# Basic Exercise Guidelines

## Tips

- Try to work on being active 5 to 6 days a week for a total of 30 minutes each.
- You can exercise in chunks of 5 to 10 minutes at a time.
- If you skip more than 2 days of exercise, restart your program at a lower level and slowly increase again.

Start your exercise program slowly and work up to your abilities. Choose an exercise you enjoy doing such as walking, riding a stationary bike, swimming, gardening.

If you can exercise, slowly increase what you are doing by adding 1 minute each day.

## Clothing and footwear

- Wear layers of loose-fitting clothing. Wear comfortable athletic shoes.

## Temperatures

- Exercise in comfortable temperatures. If the weather is too hot or cold, exercise indoors.
- Do not take a hot or cold shower or bath for at least 15 minutes before or after exercise.

## Food and drink

- Wait up to 2 hours after eating a full meal and after taking most medicines to exercise.
- Drink 6 to 8 ounces of water before you exercise (unless you are on a fluid restriction).
- Do not drink alcohol right before or after exercise.

## Warming up and cooling down

- Warm up until low-level activity slowly raises your heart rate.
- Stretch in slow, controlled movements. Do not bounce while stretching.
- At the end of your workout, do low-level activity and stretching. This lets your heart rate return to normal and helps you cool down.
- Drink 6 to 8 ounces of water after you exercise (unless you are on a fluid restriction).

## Your health

- Do not exercise if you do not feel well or have a temperature higher than 100 F.
- If you smoke, quit. If you cannot quit, do not smoke 1 hour before or after you exercise.
- Avoid exercises that involve straining, pushing, pulling or heavy lifting when there is little or no movement of your body or if you have to hold your breath.



## Differences between activities and exercise

Activities are things you do each day such as walking to your car, making a meal, or doing a hobby or housework. These keep your body moving throughout the day.

Exercises are physically exerting movements done to make your muscles, heart and lungs stronger. They must go above and beyond what you do in your daily routine.

For example, going to the grocery store is not exercise but going to the mall to walk is exercise.

Your daily activities are important but regular exercise is needed to build and maintain your muscles and bones.

Be careful of exercises in which both arms are above your head for a long time. This can lead to fatigue.

## Types of exercise

There are four types of exercise that are important to prevent or slow the effects of aging. This includes:

### ■ aerobic (cardiorespiratory):

Aerobic exercise continues for a period of time (at least 10 minutes) without rest. In order to be considered “aerobic,” an exercise must cause you to experience one or more of the following:

- make you mildly short of breath
- increase your heart rate
- cause you to sweat.



## Tip

To tell how hard you are exercising you can use the “talk test.” This is your ability to have a fairly normal conversation while exercising. If you can sing, you need to work a little harder. If you have trouble talking, you need to slow down.

**The National Institute on Aging (NIA) recommends that all adults (including older adults) have at least 150 minutes of aerobic exercise each week.** It is best for you to do aerobic exercise 5 to 7 times each week.

■ **strength training:**

Strength training applies resistance to your muscles. This can increase strength, reduce body fat and improve bone health.

It is important that you increase the amount of resistance over time.

Examples include using:

- elastic bands
- cuff and hand weights
- weight machines.



**The American College of Sports Medicine (ACSM) recommends that all adults (including older adults) do strength-training exercises at least 2 times each week with at least 1 day of rest in between.**

As you strength train:

- make sure to include exercises that target your largest muscles in your upper and lower body
- use enough weight for your muscles to be tired between 8 and 15 repetitions
- increase the amount of weight you are lifting when you can do 15 repetitions or more.

■ **balance exercises:**

Balance exercises can help to improve your steadiness, reaction time and mobility, and help to prevent you from falling. Examples include dancing, yoga, tai chi and even standing on one leg.

**The ACSM recommends to do 20 to 30 minutes of balance exercises 2 to 7 times each week.**



■ **stretching:**

Stretching can help to improve flexibility and reduce joint and muscle stiffness. Being more flexible will help you move more freely to do your daily activities (reaching into a shelf or getting dressed).

**According to the ACSM, stretching should be done 3 to 7 times each week.**

Hold each stretch for 10 to 30 seconds and repeat 2 to 4 times. Make sure to relax and breathe. Do not hold your breath or bounce as this could cause an injury. Stop right away if you feel any pain while stretching.



## Example: Weekly Exercise Program

### Tips

- Choose exercise you enjoy. You do not need to join a club or buy expensive equipment.
- Use music, dance or sing-along for fun.
- Try 2 or 3 different types of exercise each week for variety.

The following page shows an example of how you could plan out 1 week of aerobic exercise, strength training, balance exercises and stretching. Use this as a guide as you plan your exercise program each week.

Plan different exercises (or different combinations of exercises) to continue to build and maintain your muscles and bones.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	30 minutes aerobic exercise	30 minutes aerobic exercise		30 minutes aerobic exercise	30 minutes aerobic exercise	30 minutes aerobic exercise
	Strength training		Strength training		Strength training	
		20 to 30 minutes balance exercise	20 to 30 minutes balance exercise		20 to 30 minutes balance exercise	20 to 30 minutes balance exercise
	Stretching	Stretching		Stretching		Stretching

Here are some examples of activities you can do for each type of exercise:

Aerobic Exercise	Strength Training	Balance Exercise	Stretching
<ul style="list-style-type: none"> <li>■ walking</li> <li>■ biking</li> <li>■ swimming</li> <li>■ dancing</li> <li>■ aerobics</li> <li>■ cardio equipment (treadmill, elliptical, bike)</li> </ul>	<ul style="list-style-type: none"> <li>■ upper body exercises</li> <li>■ lower body exercises</li> <li>■ core (abdominal) exercises</li> <li>■ variety of upper, lower and core exercises</li> </ul>	<ul style="list-style-type: none"> <li>■ standing exercises</li> <li>■ Tai Chi</li> <li>■ Qigong</li> <li>■ head movements and eye exercises</li> </ul>	<ul style="list-style-type: none"> <li>■ flexibility exercises</li> <li>■ Pilates</li> <li>■ yoga</li> <li>■ chair yoga</li> </ul>

## How to breathe while exercising



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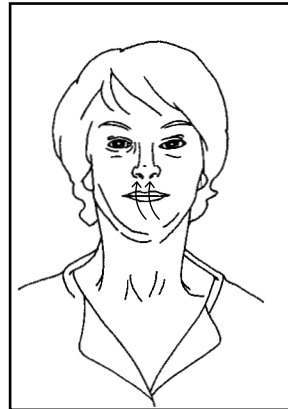
**Pursed-lip breathing looks like you are blowing out a candle.**

- ❑ Use pursed lip breathing.

Think of this as an exercise to control your breathing. It forces out the old air so you can take in new air that has fresh oxygen.

- When doing an activity, think about breathing through pursed lips during the hardest part of your activity.
- To do pursed-lip breathing:

- Inhale (breathe in) through your nose with your mouth closed. (A) (Breathe through your mouth if you are having trouble.)



**A**



**B**

- Exhale (breathe out) through your mouth with your lips pursed (puckered). Blow out the air slowly. (B)
- Exhale twice as long as you inhale. For example, inhale to the count of 2 and exhale to the count of 4.

☐ Use diaphragm (soft belly) breathing.

1. Breathe in through your nose as deeply as possible. Think the word "soft" as you breathe in.
2. Push your belly out as you breathe in. (A)
3. Let your breath out through your mouth, slowly and completely saying the word "belly" as you breathe out. (B) Bring your belly in as you breathe out.
4. Rest and repeat these steps 10 times.



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**A**

**B**

## Being short of breath while exercising

You may find yourself short of breath while you are exercising. Some of this is normal. You can rate your level of breathlessness on this scale:

Your goal is to stay in the first two.



1. mild (only you notice)
2. mild difficulty (someone else can notice)
3. moderate difficulty (you can keep exercising)
4. severe difficulty (you cannot keep exercising).

If you reach the third, you should cool down or stop if you need to catch your breath. If you reach the fourth, stop.

### Important

If you have any of the symptoms listed at right, stop what you are doing and rest.

Call your provider if they do not go away after rest, or if they continue to limit your activity.

**Call 911 if these symptoms are severe.**

### When to stop exercising

It's important to "listen" to your body while you exercise.

**Stop exercising if you:**

- feel dizzy or lightheaded
- have an upset stomach or vomit
- have a cold sweat
- are short of breath (making talking difficult)
- are very tired (fatigue) or have extreme exhaustion
- feel that your heart is pounding or racing
- faint or have black-out spells
- feel that your heart is skipping beats or has become irregular
- have chest pain or pressure
- have pain or pressure in your neck, jaw, teeth and arm or between your shoulder blades
- have new joint or muscle pain.

# Upper Body Exercises

## □ Arm (bicep) curl

This exercise will help strengthen your arm muscles.



**A**



**B**

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- Stand (or sit) with your hands at your sides.
- Hold the weights like you would hold a shopping bag. (A)
- Slowly bend your arms up and down. (B)
- Do this exercise 8 to 15 times (repetitions).
- Do this exercise 2 to 4 times each week with at least 1 day of rest in between.



## ❑ Chest press

This exercise will help strengthen the muscles in your shoulders and chest.



A



B

- Place soup cans in each of two plastic grocery bags. Tie a knot at the top to prevent the cans from falling out.
- Lie on your back on a flat surface with your knees bent.
- With one bag in each hand, bend your elbows to keep them at your sides. (A)
- Push your arms up toward the ceiling, straightening your elbows. (B)
- Slowly return to your starting position.
- Do this exercise 8 to 15 times (repetitions).
- Do this exercise 2 to 4 times each week with at least 1 day of rest in between.

## ❑ Band rows

This exercise will help strengthen your midback muscles.

### Tip

To anchor the elastic band:

- tie a knot in the middle of the band
- place the knot in a doorframe at chest height and shut the door. (Make sure the door latches tightly.)



**A**



**B**

- Anchor an elastic band in front of you.
- Hold the ends of the band in your hands. (A)
- Tighten your stomach muscles.
- Gently pull your elbows back, while squeezing your shoulder blades together. (B)
- Return to your starting position.
- Do this exercise 8 to 15 times (repetitions).
- Do this exercise 2 to 4 times each week with at least 1 day of rest in between.

## ❑ Arm (tricep) extension with a band

This exercise will help strengthen your arm muscles.



**A**



**B**

- Hold one end of the elastic band in your left hand near your heart.
- Grasp the band toward the middle with your right hand. Your arm should be at a 90-degree angle. (A)
- Tighten your stomach muscles.
- Keep your right upper arm against your body and straighten your elbow back behind you. (B)
- Return to your starting position.
- Do this exercise 8 to 15 times (repetitions).
- Repeat with the other arm.
- Do this exercise 2 to 4 times each week with at least 1 day of rest in between.

## Wall pushup

This exercise will help strengthen your upper back and arms.



**A**



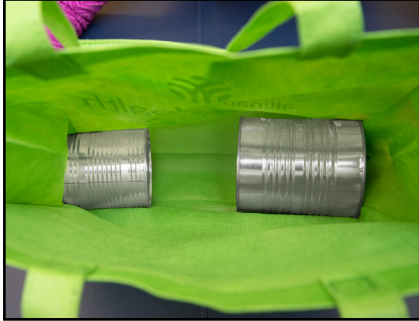
**B**

- Stand facing a wall. Keep your feet shoulder-width apart. Place your hands on the wall, also shoulder-width apart. (A)
- Tighten your stomach muscles.
- Lean into the wall, keeping your back straight. (B)
- Return to your starting position.
- Do this exercise 8 to 15 times (repetitions).
- Do this exercise 2 to 4 times each week with at least 1 day of rest in between.
- The closer you stand to the wall, the easier the exercise will be. As you get stronger, stand farther from the wall to challenge your muscles.

## Lower Body Exercises

### ❑ Seated knee extension

This exercise will help increase your leg strength.



A



B



C

- Place 2 soup cans in a reusable grocery bag. (A)
- Sit in a sturdy chair. Sit with good posture with your feet flat on the floor.
- Balance the grocery bag on the top of your ankle. (B)
- Slowly straighten your leg straight out. Stop as soon as you feel tension. (C)
- Hold for 3 to 5 seconds.
- Slowly lower your leg to the starting position without letting your leg drop to the floor.
- Do this exercise 8 to 15 times (repetitions).
- Repeat with the other leg.
- Do this exercise 2 to 4 times each week with at least 1 day of rest in between.

## Chair sit to stand

This exercise will help strengthen your legs.



**A**



**B**

- Sit in a sturdy chair. Sit with good posture with your feet flat on the floor.
- Scoot forward to the front of the seat. You can cross your arms or leave your arms at your sides, depending on what is most comfortable.
- Lean forward with your “nose over your toes.” (A)
- Push up, straightening your knees and hips, into a standing position. Squeeze your buttocks. (B)
- Sit down slowly with good control.
- Do this exercise 8 to 15 times (repetitions).
- Do this exercise every day.
- You can also hold a weight in each hand to make this exercise more challenging. If you add weight, do this exercise 2 to 4 times each week with at least 1 day of rest in between.

## ❑ Standing hip extension

This exercise will help strengthen the muscles in your buttocks and hips.



**A**



**B**

- Stand behind a sturdy chair (or counter), holding the back of the chair for support. Stand with good posture.
- Place an elastic band around your ankles. Keep your feet shoulder-width apart. (A)
- Lift (extend) one leg backward, keeping your knee straight. (B) Do not hunch or lean forward.
- Do this exercise 8 to 15 times (repetitions).
- Repeat with the other leg.
- Do this exercise 2 to 4 times each week with at least 1 day of rest in between.

## ❑ Standing hip abduction

This exercise will help strengthen the muscles on the side of your hip and buttocks.



**A**



**B**

- Stand behind a sturdy chair (or counter), holding the back of the chair for support. Stand with good posture.
- Place an elastic band around your ankles. Keep your feet shoulder-width apart. (A)
- Keep your knees and body straight, and toes pointing forward.
- Lift your leg out to the side. (B) Do not lean.
- Do this exercise 8 to 15 times (repetitions).
- Repeat with the other leg.
- Do this exercise 2 to 4 times each week with at least 1 day of rest in between.



## ☐ Heel raise

This exercise will help strengthen your calf muscles.



**A**



**B**

- Stand behind a sturdy chair, (or counter) holding the back of the chair for support. Stand with good posture. (A)
- While keeping your knees straight, rise up on the balls of your feet so your heels are off the floor. (B)
- Slowly lower your feet.
- Do this exercise 8 to 15 times (repetitions).
- Do this exercise every day.

## Balance Exercises

These balance exercises will help with your balance and walking.

### Heel-toe (tandem) walking



**A**



**B**

- Stand near a wall (or counter) with one hand resting on the wall for support. Stand with one foot directly in front of the other foot.
- Put one heel in front of your toes like you are on a balance beam (“heel-toe, heel-toe”). (A)
- Walk forward for the length of your hallway or counter. Do not look at your feet as you walk. (B)
- Do this exercise for 2 to 3 minutes each day.
- You can make this exercise more challenging by:
  - moving your head right to left
  - moving your head up and down
  - walking faster
  - using your hands less for support.

## Single leg stance



- Stand near a chair (or wall or counter) with one hand resting on the chair for support.
- Stand on one leg and hold as long as you are able, working up to holding for 30 seconds. Do not look down.
- Repeat with the other leg.
- Do this exercise for 2 to 3 minutes each day.
- You can make this exercise more challenging by:
  - moving your head right to left
  - moving your head up and down
  - walking faster
  - using your hands less for support.

# Stretching Exercises

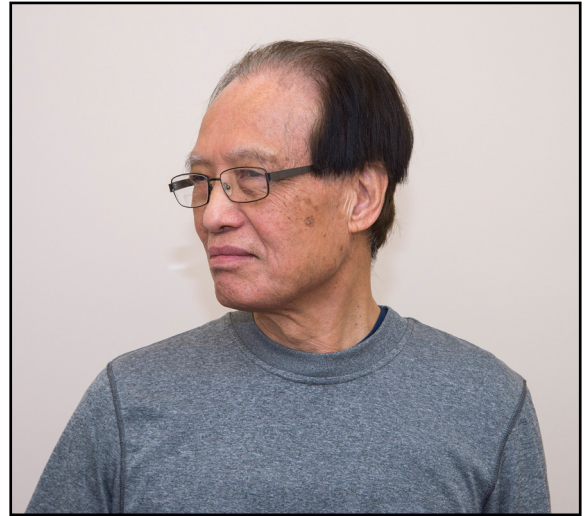
## Neck range of motion exercises

These neck exercises will help improve how far you can move your neck.

### Rotate



**A**



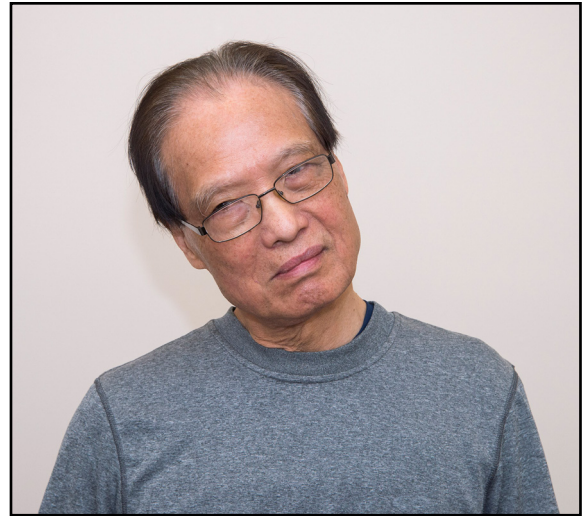
**B**

- Look straight ahead. (A)
- Turn your head slowly to look over your shoulder. (B)
- Turn as far as you can without feeling pain.
- Hold for 5 to 10 seconds.
- Repeat on the other side.
- Do this exercise 2 to 4 times each day.

## □ Bend to the side



**A**



**B**

- Look straight ahead. (A)
- Tilt your head and your right ear toward your shoulder. (B)
- Tilt as far as you can without feeling pain.
- Hold for 5 to 10 seconds.
- Repeat on the other side.
- Do this exercise for about 1 minute each day.

## □ Chin tuck



**A**



**B**

- Look straight ahead. (A)
- Tuck your chin down toward your throat. (B)
- Hold for 5 to 10 seconds.
- Do this exercise for about 1 minute each day.

# Home Exercise Program

When you complete your timed exercise, please fill out the boxes below.

Date	Time	Morning	Afternoon	Evening	Symptoms/Feelings
	4 min.				
	5 min.				
	6 min.				
	7 min.				
	8 min.				
	9 min.				
	10 min.			May decrease exercise to twice a day.	
	11 min.				
	12 min.				
	13 min.				
	14 min.				
	15 min.				
	16 min.				
	17 min.				
	18 min.				
	19 min.				
	20 min.		May decrease exercise to once a day.		
	21 min.				
	22 min.				
	23 min.				
	24 min.				
	25 min.				
	26 min.				
	27 min.				
	28 min.				
	29 min.				
	30 min.				

# Home Exercise Program

When you complete your timed exercise, please fill out the boxes below.

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	4 min.				
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	22 min.				
	23 min.				
	24 min.				
	25 min.				
	26 min.				
	27 min.				
	28 min.				
	29 min.				
	30 min.				



## To Do List



- Talk with your primary care provider about which exercises are best for you.
- Know when you should stop exercising.
- Bring any questions to your next primary care provider's visit.
- Consider joining a respiratory rehabilitation program.
- Keep all follow-up appointments.











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