

# Aerobic exercise

Aerobic exercise (cardio) is a physical activity that increases the heart rate and the body's use of oxygen (breathing). Aerobic activity uses large muscle groups (e.g., chest, glutes) and can be maintained at a continuous rhythm. Activities such as walking, dancing, bicycling, and swimming are forms of aerobic exercise. Regular aerobic exercise is important for overall health, including chronic disease management and healthy aging.

## Health benefits of aerobic exercise

Aerobic training is particularly beneficial for improving physical fitness (endurance) and keeping your heart, lungs, and circulatory system healthy. The table below summarizes the potential health benefits of regular physical activity in adults and older adults.

Health benefits of regular physical activity in adults and older adults	
Improves...	Lowers the risk of...
<ul style="list-style-type: none"> <li>Anxiety symptoms</li> <li>Bone health</li> <li>Irritable bowel syndrome symptoms</li> <li>Physical capacity</li> <li>Sleep</li> <li>Quality of life</li> <li>Weight</li> </ul>	<ul style="list-style-type: none"> <li>Cardiovascular (heart) disease</li> <li>Certain cancers</li> <li>Dementia</li> <li>Depression</li> <li>Falls and fall-related injuries (older adults)</li> <li>Hypertension (high blood pressure)</li> <li>Mortality (death)</li> <li>Overweight or obesity</li> <li>Type 2 diabetes</li> </ul>



# Types of aerobic exercise

Aerobic workouts can be performed at a moderate or vigorous intensity. Intensity can be measured using personal judgment, such as how hard you're breathing, or specific tools such as heart rate monitors. For the most health benefits, try to incorporate various intensities into your routine.

Aerobic exercise		
	Moderate-intensity	Vigorous-intensity
Target heart rate	40–60% of maximum heart rate*	60–85% of maximum heart rate*
Perceived effort (on a scale of 1–10)	Level 5–8	Level 8–10
Talking ability	Can talk but can't sing	Can't say more than a few words without pausing for a breath
Examples	<ul style="list-style-type: none"><li>• Biking</li><li>• Boxing</li><li>• Brisk walking</li><li>• Climbing stairs</li><li>• Dancing</li><li>• Doubles tennis</li><li>• Gardening</li><li>• Jumping on a trampoline</li><li>• Hiking</li><li>• Roller skating</li><li>• Water aerobics</li></ul>	<ul style="list-style-type: none"><li>• Biking 10+ mph (16+ kph)</li><li>• Endurance sports (e.g., basketball, soccer)</li><li>• Jogging/running</li><li>• Jumping rope</li><li>• Rock climbing</li><li>• Rowing</li><li>• Swimming laps</li><li>• Yard work (e.g., raking, shoveling)</li></ul>

\*Age-related maximum heart rate can be calculated by subtracting your current age from 220. This calculation provides your maximum heart rate in beats per minute.

It's important to note that many moderate-intensity exercises can become vigorous depending on a variety of factors, including your personal health, workout environment, and level of physical fitness. Consult with your healthcare provider to learn more about choosing exercises that fit your needs.



# Physical activity guidelines

From youth to adulthood, aerobic exercise is an important part of a healthy lifestyle.

Population	Type of activity	Activity frequency	Activity duration (minimum)
Children 3–5 years old	Active play (variety of activities)	Daily	Unlimited throughout the day
Children and adolescents 6–17 years old	Moderate to vigorous intensity aerobic	Daily	60 minutes per day
	Muscle-strengthening	3 or more days per week	
	Bone-strengthening	Bone-strengthening 3 or more days per week	
Adults 18–64 years old*	Moderate-intensity aerobic OR Vigorous-intensity aerobic OR A combination of both	Spread throughout the week	150 to 300 minutes per week  75 to 150 minutes per week
	Muscle-strengthening; involving all major muscle groups	2 or more days per week	
Older adults 65 years and older*	<b>A combination of:</b>  Balance training  Aerobic  Muscle-strengthening  Intensity should be determined by individual level of fitness	Spread throughout the week	150 minutes per week

\*Aim for the recommended activity level, but be as active as you are able. Consult with your healthcare provider to learn more about appropriate physical activity goals.





## Aerobic exercise tips

Certain health benefits of aerobic exercise can begin with as little as one session of moderate-to-vigorous physical activity, including sleep and blood pressure improvement. Other benefits, such as chronic disease risk reduction, begin days to weeks after routinely being more active.

### Did you know?

Only 53% of North American adults meet the physical activity guidelines for aerobic exercise.

Consider the following tips to help stay on track with your physical activity goals.

## Practice exercise safety

Moderate-intensity and low-impact aerobic activities are regarded as some of the safest forms of exercise. This includes activities such as walking, bicycling, dancing, golfing, and swimming. Despite this, any physical activity may lead to an injury—especially if not performed properly. Common sports-related injuries include back pain, knee pain, muscle strains, and sprains.

Other adverse events, such as dehydration or overheating, may also occur if preventive measures are not taken. Before starting a new activity, be sure to have all of the proper knowledge and equipment to stay safe. Exercise safety can be summarized into five key points, as outlined in the graphic below.

### 5 tips for exercise safety



Begin slowly



Consider  
your climate



Drink water



Listen to  
your body



Use proper form  
and equipment



## Seek support

Family and friends may be able to support you with your health goals by helping you stay motivated and engaged. Having social support while making dietary or lifestyle changes may also make the transition easier. Give them ideas about how they can help, such as helping with accountability or exercising with you.

## Set SMART goals

Consider applying the SMART goal-setting principles to set small, measurable goals that are realistic. The acronym SMART stands for:

**S**pecific: the goal targets a specific area for improvement

**M**easurable: the goal quantifies or suggests an indicator of progress

**A**ttainable: the goal is achievable

**R**ealistic: the goal states which results can be realistically achieved based on resources

**T**ime-related: the goal specifies when the result(s) can be achieved

SMART goals can be used whether you're just starting out with aerobic exercise or you're an experienced athlete. Start with one or two goals and build on those goals once you've achieved them. Examples of SMART goals include:

- I will take the dog for a 15-minute walk during my lunch break five days this week.
- I will bike for at least 30 minutes with a friend or family member at the park on Saturday.
- I will jog the path that goes up the local hill rather than the flat path two out of five times a week for one month.
- I have been meeting the minimum aerobic exercise physical activity guidelines for three weeks consecutively. I will add strength training to my routine for 30 minutes once a week for four weeks.

## Track your progress

Try not to focus only on the outcome you desire (e.g., weight loss) but rather on the behavior changes that happen over time that are necessary to reach the outcome. Celebrate each small win along the way, such as improving the duration, intensity, or frequency of your aerobic training. Healthy rewards, such as a new pair of running shoes or a massage, are encouraging ways to stay motivated.

Mobile apps are simple and convenient tools you can use to track progress and celebrate milestones. Examples of habit-tracking apps include:

- Coach.Me ([App Store](#)) ([Google Play](#))
- GoalsOnTrack ([App Store](#))
- Google Fit ([Google Play](#))
- Strides ([App Store](#))



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This handout was developed and medically reviewed by Fullscript's Integrative Medical Advisory team.

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Updated: August 2022