

Stepping into Better Health

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Why Walking Matters

Walking is a simple, accessible form of physical activity. To successfully sustain prolonged walking, adequate leg strength, balance, nerve and muscle coordination, and heart and lung health are needed. Walking can be done across the lifespan and can be important for activities of daily living, transportation, and work-related responsibilities.

Walking creates a low impact on body joints and requires low resources, which makes walking accessible to a variety of populations. Walking shows positive benefits on overall health and wellness, including physical and psychological health components, that create positive changes in individual and community health.

Health Benefits of Walking

HEALTH BENEFITS	WALKING SHOWS TO...
Physical Benefits	Lower blood pressure ¹
	Lower bad cholesterol ²
	Lower blood sugar levels ³
	Lower risks of chronic diseases (such as stroke, heart disease, Type 2 Diabetes) ⁴
	Lower excess body fat ⁵
	Lower risk for premature death ⁶
	Lower sleep disturbances ⁶
	Increase metabolism (bodily energy used) ⁷
	Increase strength of muscles ⁸ and bones ⁹
	Increase balance and coordination, especially in older adults ¹⁰
Mental Benefits	Increase sleep quality ⁶
	Reduce feeling of anxiety ¹¹
	Reduce feeling of depression ¹¹
	Improve mood ¹¹
	Improve cognitive functioning ¹¹
	Increase social connectiveness when walking in groups ¹¹
	Increase mental health benefits when walking outside ¹²

Nutrition and Walking: A Powerful Combination

Proper nutrition supports walking by providing energy, enhancing recovery, and improving long-term health outcomes. A balanced eating pattern that includes complex carbohydrates (e.g., fruits and vegetables), lean proteins (e.g., poultry), and healthy fats (unsaturated) can help sustain energy levels and improve endurance during walks.¹³ Nutrients like calcium, vitamin D, and magnesium also support strong bones and joints, which are essential for walking.¹⁴ Hydration (e.g. drinking water) before, during, and after walking prevents fatigue and helps maintain performance.¹³

Fueling Your Walks: Snack & Hydration Tips

- Pre-walk snacks (30-60 mins before): fruit, whole-grain toast, protein bar, etc.
- Post-walk snacks: Chocolate milk, protein shake, apple slices with almonds, or hummus with whole-grain crackers.
- Hydration: Drink 1-2 cups of water before walking and sip water every 15-20 minutes during longer walks (>30 mins)¹³

Walking Factors

Steps vs Time

All-cause mortality risk decreases progressively with higher daily step counts, up to a certain point. For adults aged 60 and older, the risk continues to decline up to about 6,000 to 8,000 steps per day. For those younger than 60, the benefit continues up to about 8,000 to 10,000 steps per day. Beyond these ranges, the reduction in mortality risk tends to level off, meaning additional steps may not provide significant extra benefit.¹⁶ Steps can be a way to track your walking throughout the day.

Time is another factor to consider for walking. Adults perform at least 150 to 300 minutes of moderate-intensity aerobic activity (like brisk walking 5 days a week for 30 minutes) or 75 to 150 minutes of vigorous-intensity activity (like running) each week, or an equivalent combination of both.

Walking Intensity

The talk test is a simple and effective way

to gauge aerobic exercise intensity based on one's ability to speak during physical activity. During moderate-intensity aerobic activity, an adult should be able to talk but not sing. In contrast, during vigorous-intensity activity, one will find it difficult to say more than a few words without pausing for breath. This method helps individuals self-monitor their exertion level without needing specialized equipment, making it especially useful for beginners or those exercising without a heart rate monitor.¹⁵ Heart rate can also be used to evaluate exercise intensity.

Heart rate is a more objective way to measure exercise intensity than the talk test and requires a heart rate monitor. It is measured in beats per minute (bpm). Maximum heart rate (HR_{max}) can be estimated using age and used to determine target heart rate zones (very light to vigorous).

Using Age and Heart Rate to Track Exercise Intensity¹⁷

To estimate maximum heart rate (HR_{max})

$$208 - (0.7 \times \text{age in years})$$

Example: 60-year-old person

166 bpm

To estimate all other heart rate zones, multiply your HR_{max} by the percentages for each zone.

Very Light Intensity	<57% HR_{max} <95 bpm
Light Intensity	57-63% HR_{max} 95-105 bpm
Moderate Intensity	64-76% HR_{max} 106-126 bpm
Vigorous Intensity	77-95% HR_{max} 106-160 bpm

Ways to increase walking throughout the day.

	Schedule small breaks throughout the workday.
	Plan time for walking in the morning or in the evening.
	Use walking meetings at work.
	Park farther from entrances.
	Take the stairs instead of the elevator.
	Walk your dog or volunteer to walk other people's pets.
	Track your walks and try to make small increases.

Ways to increase walking intensity.

	Walk longer distances without rest.
	Walk up inclines (think hills or stairs).
	Walk with resistance (ankle weights, small dumbbells, weighted vests, backpacks, etc.)

Equipment to Track Walking Progress:

- Pedometer (steps per day)
- Smart Phone (time walked or steps taken)
- Watch (time walked)
- Smart watch (time walked, steps taken, heart rate during walk)
- Heart rate monitor (heart rate during walk)

Exercises to Enhance Walking and Injury Prevention

In addition, adults should engage in muscle-strengthening activities involving all major muscle groups on two or more days per week.

EXERCISES	DESCRIPTION	MODIFICATIONS	VISUAL
Squat (2-4 sets, 6-12 reps)	<ol style="list-style-type: none"> 1. Stand with feet slightly wider than shoulder-width; arms crossed over chest. 2. Push hips back and bend knees like sitting in a chair. 3. Lower as far as comfortable; keep knees behind toes. 4. Keep chest up and back straight. 5. Return slowly to standing. 	<ul style="list-style-type: none"> • Chair Tap: Squat to lightly touch a chair for balance. • Counter Support: Hold a counter for stability. • Wall Squat: Slide down wall for joint support. • Partial Squat: Only bend knees slightly. • Wide Stance: Feet wider to ease knee pressure. • Sit-to-Stand: Repeatedly stand from a chair. 	
Lunge (2-4 sets, 6-12 reps)	<ol style="list-style-type: none"> 1. Stand hip-width apart; step forward. 2. Bend front knee over ankle. 3. Lower back knee straight down. 4. Push through front leg to stand. 5. Repeat reps, then switch sides. 	<ul style="list-style-type: none"> • Chair-Support: Hold a chair for balance. • Short-Step: Take a smaller step to reduce depth. 	

EXERCISES	DESCRIPTION	MODIFICATIONS	VISUAL
Calf Raises (2-4 sets, 6-12 reps)	<ol style="list-style-type: none"> 1. Stand tall, feet hip-width apart. 2. Rise onto the balls of your feet. 3. Pause briefly at the top. (1 to 5 seconds) 4. Lower your heels with control. 	<ul style="list-style-type: none"> • Chair Support: Hold chair for balance. • Single-Leg: Raise on one leg. • Wall Assist: Light touch on wall. • Seated: Do raises while seated. • Step Raise: Heels drop off a step. 	
Hip Extension (2-4 sets, 6-12 reps)	<ol style="list-style-type: none"> 1. Stand with feet hip-width apart. 2. Shift weight to right leg. 3. Lift left leg straight back 3-6 inches without leaning. 4. Tighten core to keep back neutral. 5. Hold 3 seconds, then lower with control. 	<ul style="list-style-type: none"> • Keep a slight bend in knees. • Relax shoulders down and back. • Align shoulder-hip-ankle on standing leg. • Focus on a spot for balance. • Use a chair for extra support. 	
Leg Extension/ Leg Curl (2-4 sets, 6-12 reps)	<ol style="list-style-type: none"> 1. Sit tall with shoulders down and feet flat. 2. Lift your right leg and straighten it, toes up. 3. Bend knee and lower slowly. 4. Finish reps, then switch sides. 	<ul style="list-style-type: none"> • Standing Curl: Hold a chair while curling heel toward glutes. • Partial Curl: Curl only partway for reduced strain. • Single-Leg Curl: Perform one leg at a time for challenge. • Slow Tempo: Slow the curl for added control/strength. 	

EXERCISES	DESCRIPTION	MODIFICATIONS	VISUAL
Chest Press (2-4 sets, 6-12 reps)	<ol style="list-style-type: none"> 1. Lie on your back; knees bent; feet flat, hip-width apart 2. Feet, hips, head, spine all aligned. 3. Lower weights to chest by bending elbows, keeping body straight. 4. Press weight towards ceiling, extending arms 	<ul style="list-style-type: none"> • Light Weights: Use lighter dumbbells. • No Weights: Press fists upward. • Single-Arm: Press one arm at a time. • Floor Press: Limit elbow depth. • Bridge Press: Lift hips for added challenge. 	
Bent Over Row (2-4 sets, 6-12 reps)	<ol style="list-style-type: none"> 1. Stand with feet slightly wider than shoulder-width; arms crossed over chest. 2. Push hips back and bend knees like sitting in a chair. 3. Lower as far as comfortable; keep knees behind toes. 4. Keep chest up and back straight. 5. Return slowly to standing. 	<ul style="list-style-type: none"> • Chair Support: Hold chair for balance. • Light Weights: Use lighter dumbbells. • Single-Arm Row: Row one arm at a time. • Seated Row: Sit and hinge slightly for support. • Band Row: Use resistance band instead of weights. 	
Marching Crunch (2-4 sets, 6-12 reps)	<ol style="list-style-type: none"> 1. Shift weight to left leg and lift right in a high march. 2. Hinge forward slightly, keeping back flat and core tight. 3. Lower right leg and repeat on the other side. 4. Continue in a steady marching rhythm. 	<ul style="list-style-type: none"> • Chair Support: Hold a chair for balance. • Floor Version: Lie on your back and march legs while lifting shoulders slightly. • Seated Version: Sit tall and lift one knee at a time. • Smaller Range: Lift legs lower for comfort. • Slower Pace: Move slowly to improve control and core engagement. 	

Safety First

- Stay hydrated and dress appropriately for the weather
- Use sunscreen and wear a hat in sunny conditions
- Be visible: wear bright or reflective clothing
- Watch for traffic and follow pedestrian signals
- Listen to your body for aches and pains

Resources

- CDC Physical Activity Guidelines
- American Heart Association Walking Tips
- Dietary Guidelines for Americans

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