



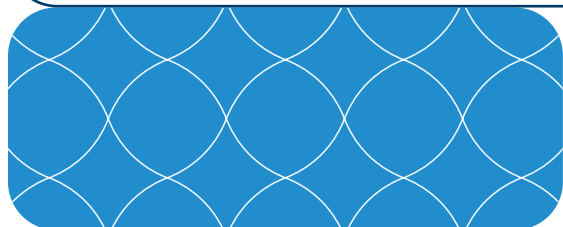
# Strength Training

## Visit Six

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## Types of Physical Activity

Being physically active means doing any kind of activity that gets your body moving.

The types of physical activity that can help you get fit and stay healthy include:

- **Aerobic or “cardio” activities.** These make your heart beat faster and make you breathe harder, such as brisk walking, riding a bike, or running. They strengthen your heart and lungs and build up your endurance.
- **Strength training activities.** These make your muscles work against, or “resist,” something. Examples include lifting weights or doing push-ups. These activities help tone and strengthen your muscles and bones.
- **Stretches.** These let you move your joints and muscles through their full range of motion. Stretching helps you be more flexible.
- **Balance.** These help you be steadier and more coordinated. Balance also helps lower your risk of falling.

This booklet is going to focus on **strength training activities**. Developing a program between these 4 types of physical activity is important because each one contributes to your overall fitness.



## Strength Training

### Resistance

Muscles get stronger when they are used regularly, but especially when they have to work against something. This is called “resistance.” For example, you use your arm muscles when you bend your arm at the elbow. But when you do the same movement with something heavy in your hand, your arm muscles are working against more resistance.

“Resistance training” means using things like weights, rubber tubing, or certain exercises to make your muscles stronger. It’s a 3-step process:

#### Step 1: Stress

- When you exercise against resistance, you stress your muscles slightly but not to the point of serious damage or injury.

#### Step 2: Recovery (rest)

- When you rest, your body rebuilds the muscles and the connective tissues between them (joints, tendons, and ligaments). This prepares them for the next time they will be stressed.

#### Step 3: Repeated stress

- When you stress the same muscles again, the process is repeated. The muscles get stronger over time.

A resistance-training program to increase muscle fitness can include:

- Basic muscle-conditioning exercises such as push-ups, leg lifts, and other common exercises.
- Resistance training with exercise bands.
- Weight training with free weights (“dumbbells”) or weight-training equipment.
- Doing heavy housework and yard work on a regular basis. This may include scrubbing the bathtub, washing walls, tilling the garden, or pulling weeds.
- Strength training the muscles of your trunk (core). This helps you have better posture and balance. It can help protect you from injury.

- Core stabilization (core stability or core strength) means using the muscles of the trunk to support the spine and body during activity.
- The trunk muscles include those in the abdomen and back, around the neck and shoulder blades, and around the pelvis, hips, groin, and buttocks.
- Core stabilization helps improve posture, balance, strength, and coordinated movement. And it helps protect the body from injury.

## Benefits

Strength training has many benefits, including:

- Stronger muscles to help protect your joints
- Less body fat
- Stronger bones
- Better posture and balance
- Lower blood sugar
- Less stress
- Fewer body aches
- More energy
- Higher metabolism which helps burn more calories

Stronger muscles can work longer before they get tired. Many daily activities require you to move, lift, or control a weight. Muscle strength will help you do these activities with less stress on your muscles. You'll notice that you can lift heavy grocery bags more easily. You can pick up children without feeling as much strain. And you can carry heavy items longer before you get tired.

## Doing the Right Amount

Experts say it's best to do exercises to strengthen bones and muscles at least 2 times each week. For example, you could do weight training or stair climbing.

How many repetitions and sets you do of a specific exercise depends on your goals.

- A **repetition** (or rep) is one complete movement of an exercise, such as lifting a dumbbell or doing a sit-up.
  - For example, if you lift a dumbbell up and down once, that's 1 rep. If you lift it 10 times, that's 10 reps.
  - The goal is to do 8 to 12 reps.

- A **set** is a group of repetitions.
  - For example, you have done 2 sets if you lift a dumbbell 10 times, take a rest, then lift it another 10 times.
  - The goal is to do 2 to 3 sets.

## Building Your Muscle Fitness Safely

Strength training is an important part of overall physical fitness. Here's how to build your muscle fitness safely.

- If you can, learn from a professional.
  - Your training can be from a local YMCA, a fitness club, or an experienced professional trainer. Set a goal such as body building, toning and shaping certain body areas, or improving performance in a certain sport.
- Don't forget to warm up.
  - Take 5 to 10 minutes to walk or jog in place.
- Learn the proper form for each exercise, and then always use it.
  - The proper form ensures that you get the most out of each exercise. It also helps prevent injuries. A good trainer will teach you about proper form.
- Give your body time to adjust.
  - Allow at least 2 weeks for your muscles and connective tissues to adjust to the new stresses and strains of weight training. Start by lifting weights that are lighter than you can manage. This helps you tell the difference between the normal aches and pains of weight training and the pains of overuse or real damage.
- Work slowly, and move your muscles through their full range of motion.
  - Do fewer repetitions slowly, using the entire length of the muscle. This works better than doing many repetitions quickly with only a short part of the muscle.
- Learn how to breathe properly when you work with weights.
  - Breathe out (exhale) when you push against the weight. Don't hold your breath at any point. Breathe in (inhale) when there is little or no resistance.
- If you can, ask a trainer for help.
  - If you are starting weight training on your own, here is a basic plan you could follow.



- Start with 2 to 3 sets of 8 to 12 repetitions. Start with a weight that's hard to lift on the 8th repetition.
- Increase the weight you lift when you can do 12 repetitions. With the increased weight, you might have to go back to 8 repetitions. When you can do 12 repetitions with the increased weight, try adding a little more weight.
- Change your program.
  - Variety keeps your interest up and injuries down. Mix muscle strengthening with flexibility and aerobic work. Also, vary your work by switching between:
    - Your upper body and lower body.
    - Free weights (“dumbbells” or barbells) and machines.
    - Heavier weights with fewer repetitions and lighter weights with more repetitions.
  - By starting slowly and using the right technique, you may find that weight training is an enjoyable and effective way to build strength.

## Tips

- Warm-up and stretch before you start to help your muscles get ready.
  - Start with 5 minutes of warm-up.
- Use heavy weights and do fewer reps to build strength.
  - If you are using higher resistance, aim for 6 to 10 reps.

- Train all the big muscle groups.
  - This includes your legs, arms, chest, and back.
- Train 2 to 3 days a week.
  - Rest days are important, so don't train every day.
  - For example, strength train on Monday, Wednesday, and Friday or on Tuesday, Thursday, and Saturday.

## Strength Training at Home

You don't always need to go to a gym or use a machine. There are things you can do at home:

- Use cans or water bottles as weights.
- Doing bodyweight exercises like push-ups, sit-ups, and squats.
- Engaging in heavy gardening tasks such as digging, shoveling, or raking.
- Working with resistance bands.
- Do an online yoga video.

## Frequently Asked Questions (FAQs)

### How often should I do strength training activities?

- Muscle-strengthening activities should be done at least 2 days a week to gain the full benefits.
- It's important to let your muscles time to recover between sessions.
  - For example, strength train on Monday, Wednesday, and Friday or on Tuesday, Thursday, and Saturday.

### Should I start with light weights?

- Yes, light weights are recommended when you're beginning strength training.
- As you get stronger, add more weight.

### How many repetitions and sets should I do?

- The number of repetitions and sets depends on your goals:
  - 6 to 10 repetitions to improve strength and power and help with weight loss.
  - 10 to 15 repetitions to improve strength and tone.
  - 15 to 20 repetitions to improve muscular endurance.
- You should aim for at least 1 set, but 2 to 3 sets have even more benefits.

### How do I do my lifts?

- When lifting weights, use a slow, controlled motion.
  - For example, lifting the weight to a count of 2 and lowering it to a count of 4 helps you keep good rhythm and control.

### What about breathing during strength training?

- It's important to breathe normally throughout the exercise. In general, breathe out (exhale) when you use force (like when lifting or pushing) and breathe in (inhale) when the resistance is lower.

### How much rest should I take between strength training sessions?

- Wait at least 48 hours between strength training sessions to allow your muscles time to rest and recover before working them again.
- It's important to rest between strength training days. Don't strength train on back-to-back days (in a row) so your muscles have time to rest and get stronger.
  - For example, strength train on Monday, Wednesday, and Friday or on Tuesday, Thursday, and Saturday.

### Do strength training activities count as aerobic activities?

- No, strength training activities do not count toward your aerobic activity total. They are separate from aerobic exercises like walking or running, but both are important for overall fitness.



## Strength Training Exercises

### Basic Muscle Conditioning

Basic muscle conditioning exercises help make your muscles stronger and work better.

#### Wall Push-Up

This exercise strengthens the chest, shoulders, and arms.



1. Stand facing a wall with your feet about 12 to 24 inches from the wall. If you feel any pain when you do this exercise, stand closer to the wall.
2. Place your hands on the wall at shoulder height, slightly wider apart than your shoulders. Turn your fingers out a little, rather than straight up and down.
3. Slowly bend your elbows and bring your face toward the wall, keeping your shoulders and hips lined up. Then slowly push back to the starting position. Keep the motion smooth and controlled.
4. Repeat 8 to 12 times.

When you can do this exercise against a wall with ease and no pain, you can try it against a counter. You can then slowly progress to the end of a couch, then to a sturdy chair, and finally to the floor.

### Seated Leg Extension

This exercise strengthens the muscles in the front of your thighs (quadriceps).



1. While sitting in a chair, straighten one leg and hold for 6 seconds. Do not lock your knee. Then slowly lower your leg.
2. Repeat 8 to 12 times with each leg.

When this exercise becomes easy, you can add a light weight to your ankle.

### Chair Squat

This exercise strengthens the muscles in the front of your thighs (quadriceps), back of your thighs (hamstrings), and glutes (buttocks).



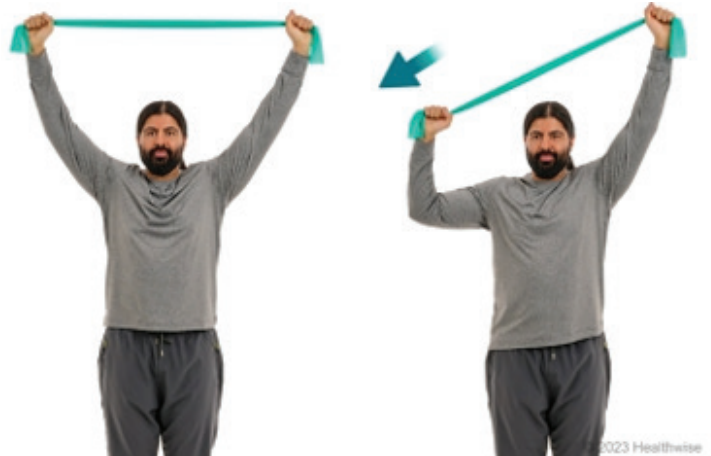
1. Stand with your hands lightly resting on a counter or chair in front of you. Put your feet shoulder-width apart.
2. Slowly bend your knees so that you squat down like you're going to sit in a chair. Make sure that your knees don't go in front of your toes.
3. Lower yourself about 6 inches. Your heels should stay on the floor at all times.
4. Rise slowly to a standing position.
5. Repeat 8 to 12 times.

### Resistance Training with Exercise Bands

Resistance band exercises help make your muscles stronger by stretching the band. You can change how hard the exercise is by using a thicker or thinner band or by changing where you hold the band.

#### Resistance Band Lat Pulldown

This exercise is called “lat” because it works the latissimus dorsi muscles, which are the big muscles on the sides of your back. This exercise also strengthens muscles in your shoulders, arms, and helps you build strength in your upper body.



1. Sit or stand up straight. Grasp an exercise band with your hands about shoulder-width apart.
2. Raise both arms overhead, palms of your hands facing forward.
3. Slowly pull one arm down and to the side, bending your elbow and stretching the band until your elbow is at shoulder height. Hold for 1 to 2 seconds.
4. Slowly return to the starting position with your arms straight up.
5. Repeat with the other arm.
6. Repeat 8 to 12 times with each arm.

#### Resistance Band Shoulder Press with Band Pull-Apart

This exercise strengthens the muscles in your shoulders, upper back, and arms.

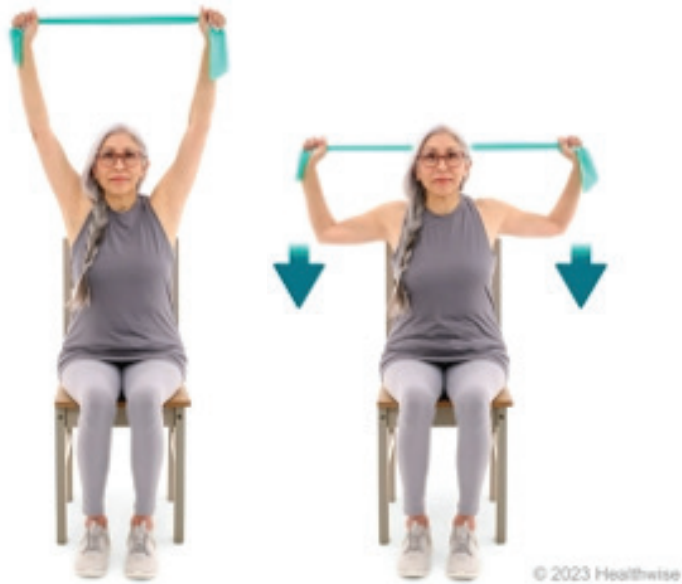
1. Sit or stand up straight. Grasp an exercise band with your hands about shoulder-width apart.
2. Raise both arms overhead, palms of your hands facing forward.



3. Slowly pull your hands apart, stretching the band. Hold for 1 to 2 seconds.
4. Slowly return to the starting position with your arms straight up.
5. Repeat 8 to 12 times.

### Resistance Band Overhead Triceps Extension

This exercise strengthens the muscles in your shoulders and the muscles in the back of your upper arms (triceps).



1. Sit or stand up straight. Grasp an exercise band with your hands about shoulder width apart.
2. Raise both arms overhead.
3. Bend your elbows until they are at shoulder height, with the stretched band either behind or in front of your head. Hold for 1 to 2 seconds.
4. Slowly return to the starting position with your arms straight up.
5. Repeat 8 to 12 times.

### Resistance Band Chest Pull-Apart

This exercise strengthens the muscles in your upper back, shoulders, and arms.



1. Sit or stand up straight. Grasp an exercise band with your hands about shoulder-width apart.
2. Raise your arms to chest level and bend your elbows.
3. Slowly pull your hands apart and your shoulder blades together, stretching the band. Hold for 1 to 2 seconds. Try to keep your hands up at your chest level, and do not pull your shoulders up toward your ears.
4. Slowly return to your starting position.
5. Repeat 8 to 12 times.

### Resistance Band Row

This exercise strengthens the muscles in your upper back, shoulders, and arms.



1. Stand or sit up straight in a chair without arms. Grasp an exercise band with your hands about shoulder-width apart.

2. Hold your hands at the level of your hips, or near your lap if you are sitting down.
3. Slowly pull your hands apart, stretching the band. Hold for 1 or 2 seconds.
4. Slowly return to your starting position.
5. Repeat 8 to 12 times.

## Weight Training with Free Weights

Weight training with free weights helps make your muscles stronger by lifting dumbbells or other weights. You can make the exercise harder by using heavier weights or lifting them for a longer time.

### Chest Press

This exercise strengthens the muscles in your chest, shoulders, and arms.



1. Lie on a bench or exercise ball, and hold light weights straight up over your chest. You can also use soup cans or filled water bottles for weights. Do not lock your elbows. You can keep them slightly bent if that is more comfortable.
2. Slowly lower your arms, keeping them extended, until the weights are level with your chest or slightly lower.
3. Slowly raise your arms until you are in the starting position.
4. Repeat 8 to 12 times.

### Lateral Raise

This exercise is called lateral because it involves lifting your arms out to the sides (away from your body). “Lateral” refers to the side of the body. This exercise strengthens the muscles in your shoulders and helps keep them strong and steady.



1. Stand with your feet shoulder-width apart and your knees slightly bent. Or sit up straight in a chair.
2. Hold a 1-to 2-pound weight in each hand. The weight may be a dumbbell, a can of food, or a filled water bottle.
3. Bend your elbows 90 degrees while keeping them at your sides. With your palms facing in, hold the weights straight in front of you.
4. Slowly lift the weights and your elbows out to the sides to shoulder level, keeping your elbows bent. Keep your shoulders down and relaxed as you lift. If you find that you are shrugging your shoulders up toward your ears, your weights may be too heavy. Try using lighter weights (or even no weights).
5. Slowly lower the weights and your elbows until your elbows are back at your sides.
6. Repeat 8 to 12 times.

### Bicep Curl

This exercise strengthens the muscles in front of your upper arms (biceps).





1. Sit leaning forward with your legs slightly spread apart and your left hand on your left thigh.
2. Hold a 1- to 2-pound weight in your right hand. The weight may be a dumbbell, a can of food, or a filled water bottle.
3. Place your right elbow on your right thigh, keeping your elbow slightly bent.
4. Slowly lift (curl) the weight up and toward your chest.
5. Slowly return it to the starting point.
6. Repeat 8 to 12 times.
7. Repeat these steps with your other arm.

### Additional Exercises

Find videos to even more exercises in our online Health Library.



#### Chair Push-Ups

This exercise strengthens the muscles in your arms.

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#### Curl-Ups

This exercise strengthens the muscles in your core.

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#### Glute Sets

This exercise strengthens the muscles in your buttocks.

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#### Heel Raises

This exercise strengthens the muscles in your lower legs, which help support your knees, ankles, and feet.

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#### Heel Slides

This exercise strengthens the muscles that bend your hips and knees.

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#### Straight-Leg Raises

This exercise strengthens the muscles in the front of your thighs and hips.

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## Train Your Brain for Fitness

### Strong Mind, Strong Body

Many people think the body is the most important part of being fit, but the mind is just as important.

You can have big muscles or be really healthy, but if your mind is not strong, it is hard to stay motivated.

Training your mind means wanting to make a change and having a plan.

### Find What is Stopping You

Find out what is holding you back from reaching your fitness goals:

- Do you feel like you can't do it?
- Are you afraid of failing?
- Maybe you feel like you are not good enough.
- Or maybe you need to learn a new skill, like how to lift weights.

Figure out what needs to change so you can work on it.



## Change Negative Thoughts

The way you talk to yourself matters.

If you are having a negative thought, ask yourself “What’s something that’s true but more helpful?”

Here are some other examples of negative thoughts and how they can be replaced with more helpful thoughts:

- **Original thought:** “I am not good at exercising.”
- **Replacement thought:** “I am getting better at exercising every day.”
- **Original thought:** “I am weak compared to other people.”
- **Replacement thought:** “Everyone starts somewhere. Working hard makes me stronger every day.”
- **Original thought:** “I am never going to be able to lift heavier weights.”
- **Replacement thought:** “Progress takes time. I am building strength with each workout.”
- **Original thought:** I feel embarrassed when I ask for help with a technique.”
- **Replacement thought:** “Asking for help is how I learn and not get injured. Even the best athletes started by learning the basics.”

The more you practice positive thoughts, the easier it gets.

### Practice Every Day

Write down your new, positive thoughts. Put them where you will see them every day. Read them often.

The more you remind yourself of these good thoughts, the more you will believe them.

### Learn from Mistakes

It is okay to mess up. If you miss a workout or do not meet your goal, do not give up.

Think about what happened, learn from it, and try again.

Falling down is not the problem. It is not getting back up that stops people from reaching their dreams.



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