

Muscle-Strengthening Exercises

To do most of the strength exercises here, you need to lift or push weights. You can use weights, resistance bands, or common objects from your home. Or, you can use the strength-training equipment at a fitness center or gym. Start with light weights and gradually increase the amount of weight you use. **Note:** You can find additional exercises to do at home here: <http://www.nia.nih.gov/health/publication/exercise-physical-activity-your-everyday-guide-national-institute-aging-1>

Working With Weights

You don't have to go out and buy weights for strength exercises. Find something you can hold on to easily. For example, you can make your own weights from unbreakable household items:

- Fill a plastic milk jug with sand or water and tape the opening securely closed.
- Fill a sock with dried beans, and tie up the open end.
- Use common grocery items, such as bags of rice, vegetable or soup cans, or bottled water.

Working With a Resistance Band

Resistance bands are stretchy elastic bands that come in several strengths, from light to heavy. You can use them in some strength exercises instead of weights.

Wrapping a Resistance Band

1. Lay the band flat in your hand with the end toward your pinky finger.



2. Wrap the long end of the band around the back of your hand.



3. Grasp firmly.



How Much, How Often?

Try to do strengthening exercises for all of your major muscle groups on 2 or more days per week. But don't exercise the same muscle group 2 days in a row.

- If you have not done strength training before, you might need to start out using 1- or 2-pound weights (or no weights at all). Your body needs to get used to strength exercises. Starting out with weights that are too heavy can cause injuries.
- It should feel somewhere between hard and very hard for you to lift the weight. It shouldn't feel very, very hard. If you can't lift a weight 8 times in a row, it's too heavy for you. Reduce the amount of weight.
- Take 3 seconds to lift or push a weight into place, hold the position for 1 second, and take another 3 seconds to return to your starting position. Don't let the weight drop; returning it slowly is very important. This is one complete movement of an exercise, or a repetition.
- Start by lifting 8 times, working up to 8–12 repetitions for each exercise. If you can't do that many at first, do as many as you can. You may be able to build up to this goal over time.
- When you can do two sets of 8–12 repetitions easily, increase the amount of weight at the next session. Keep repeating until you can reach your goal, and then maintain that level as long as you can.

Safety

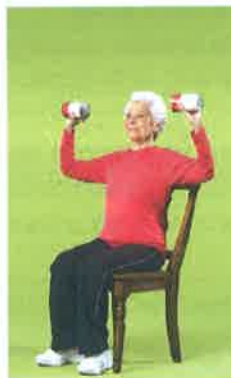
- Talk with your doctor if you are unsure about doing a particular exercise. For example, if you've had hip or back surgery, talk about which exercises might be best for you.
- Don't hold your breath during strength exercises. Holding your breath while straining can cause changes in blood pressure. This is especially true for people with heart disease. Breathe regularly.
- Proper form and safety go hand-in-hand. For some exercises, you may want to start by alternating arms and work your way up to using both arms at the same time. If it is difficult for you to hold hand weights, try using wrist weights.
- To prevent injury, don't jerk or thrust weights into position. Use smooth, steady movements.
- Avoid "locking" your arm and leg joints in a tightly straightened position. To straighten your knees, tighten your thigh muscles. This will lift your kneecaps and protect them.

- For many of the sample exercises in this guide, you will need to use a chair. Choose a sturdy chair that is stable enough to support your weight when seated or when holding on during the exercise.
- Muscle soreness lasting a few days and slight fatigue are normal after muscle-building exercises, at least at first. After doing these exercises for a few weeks, you will probably not be sore after your workout.

Overhead Arm Raise

This exercise will strengthen your shoulders and arms. It should make swimming and other activities such as lifting and carrying heavy items easier.

1. You can do this exercise while standing or sitting in a sturdy, armless chair. Hold weight with palm facing upward.
2. Keep your feet flat on the floor, shoulder-width apart.
3. Hold weights at your sides at shoulder height with palms facing forward. Breathe in slowly.
4. Slowly breathe out as you raise both arms up over your head, keeping your elbows slightly bent.
5. Hold the position for 1 second.
6. Breathe in as you slowly lower your arms.
7. Repeat 8–12 times.
8. Rest; then repeat 8–12 more times.
9. As you progress, use a heavier weight and



Front Arm Raise

This exercise will strengthen your shoulders and make lifting groceries easier.

1. Stand with your feet shoulder-width apart. Keep your feet flat on the floor during the exercise.
2. Hold weights straight down at your sides, with palms facing backward.
3. Keeping them straight, breathe out as you raise both arms in front of you to shoulder height.
4. Hold the position for 1 second.
5. Breathe in as you slowly lower your arms.
6. Repeat 8–12 times.
7. Rest; then repeat 8–12 more times.
8. As you progress, use a heavier weight and alternate arms until you can lift the weight comfortably with both arms.



Side Arm Raise

This exercise for your shoulders can help you put things up on a shelf or take them down more easily.

1. You can do this exercise while standing or sitting in a sturdy, armless chair.
2. Keep your feet flat on the floor, shoulder-width apart.
3. Hold hand weights straight down at your sides with palms facing inward. Breathe in slowly.
4. Slowly breathe out as you raise both arms to the side, to shoulder height.
5. Hold the position for 1 second.
6. Breathe in as you slowly lower your arms.
7. Repeat 8–12 times.
8. Rest; then repeat 8–12 more times.
9. As you progress, use a heavier weight and alternate arms until you can lift the weight comfortably with both arms.



Arm Curl

After a few weeks of doing this exercise for your upper arm muscles, lifting that gallon of milk will be much easier.

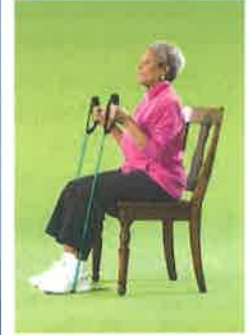
1. Stand with your feet shoulder-width apart.
2. Hold weights straight down at your sides, palms facing forward. Breathe in slowly.
3. Breathe out as you slowly bend your elbows and lift weights toward chest. Keep elbows at your sides.
4. Hold the position for 1 second.
5. Breathe in as you slowly lower your arms.
6. Repeat 8–12 times.
7. Rest; then repeat 8–12 more times.
8. As you progress, use a heavier weight and alternate arms until you can lift the weight comfortably with both arms.



Arm Curl With Resistance Band

This variation of the Arm Curl uses a resistance band instead of weights.

1. Sit in a sturdy, armless chair with your feet flat on the floor, shoulder-width apart.
2. Place the center of the resistance band under both feet. Hold each end of the band with palms facing inward. Keep elbows at your sides. Breathe in slowly.
3. Keep wrists straight and slowly breathe out as you bend your elbows and bring your hands toward your shoulders.
4. Hold the position for 1 second.
5. Breathe in as you slowly lower your arms.
6. Repeat 8–12 times.
7. Rest; then repeat 8–12 more times.
8. As you progress, use a heavier strength band.



Back Leg Raise

This exercise strengthens your buttocks and lower back. For an added challenge, you can modify the exercise to improve your balance.

1. Stand behind a sturdy chair, holding on for balance. Breathe in slowly.
2. Breathe out and slowly lift one leg straight back without bending your knee or pointing your toes. Try not to lean forward. The leg you are standing on should be slightly bent.
3. Hold position for 1 second.
4. Breathe in as you slowly lower your leg.
5. Repeat 8–12 times.
6. Repeat 8–12 times with other leg.
7. Repeat 8–12 more times with each leg.
8. As you progress, you may want to add ankle weights.



Side Leg Raise

This exercise strengthens hips, thighs, and buttocks. For an added challenge, you can modify the exercise to improve your balance.

1. Stand behind a sturdy chair with feet slightly apart, holding on for balance. Breathe in slowly.
2. Breathe out and slowly lift one leg out to the side. Keep your back straight and your toes facing forward. The leg you are standing on should be slightly bent.
3. Hold position for 1 second.
4. Breathe in as you slowly lower your leg.
5. Repeat 8–12 times.
6. Repeat 8–12 times with other leg.
7. Repeat 8–12 more times with each leg.
8. As you progress, you may want to add ankle weights.



Source: National Institute on Aging, *Exercise and Physical Activity: Your Everyday Guide*.

<http://www.nia.nih.gov/health/publication/exercise-physical-activity-your-everyday-guide-national-institute-aging-1>