A Harvard Health article

How to Build an Exercise Plan

A Guide to Getting Started and Developing a Balanced Plan

What type of exercise should you do?

There is no single type of exercise that can take care of all your needs. In fact, to get the most benefits from your routine, you want a mix of activities during the course of a week. Otherwise, it’s like a diet consisting only of fruit—healthful as far as it goes, but lacking a lot of the nutrients you’ll find in other foods, such as fish, vegetables, nuts, and whole grains.
Developing a balanced exercise plan

So what does a balanced exercise plan consist of? The Physical Activity Guidelines for Americans from the U.S. Department of Health and Human Services urge all adults to include the following types of exercise in their weekly routines:

- 150 minutes of moderate aerobic exercise per week (for example, 30 minutes on each of five days)
  or 75 minutes of vigorous aerobic activity (or an equivalent mix of the two).
- two or more strength training sessions per week, with at least 48 hours in between to allow muscles to recover.
- balance exercises for older adults at risk for falls.

If this all sounds overwhelming, remember that workouts can be broken up into smaller segments. For example, three 10-minute walks can get you to your daily goal of 30 minutes of aerobic exercise.

Each workout should also include a simple warm-up at the beginning and a cool-down at the end. The warm-up should consist of gentle exercise, such as marching in place, to loosen up your muscles and get more oxygen-rich blood flowing to them. To cool down, slow your activity and the intensity for five to 10 minutes, then finish off with stretches to help prevent stiffness.

Read on to learn more about each component of a balanced exercise program in greater depth and suggest a mix of activities and exercises to get you going.

Aerobic exercise (cardio)

Often called cardio or endurance activities, aerobic activities are great for burning calories and paring down unwanted fat. They consist of activities that make the heart and lungs work harder: think of walking, biking, running, and swimming, for example.

Aerobic exercise temporarily boosts your heart rate and breathing, allowing more oxygen to reach your muscles and tuning up cardiovascular endurance. These are the activities that are associated with lower risk for many diseases and longer life span.
How much should you do?

The Physical Activity Guidelines for Americans recommend accumulating a weekly total of at least two-and-a-half hours of moderate aerobic activity, or one hour and 15 minutes of vigorous aerobic activity. (Note: If you prefer a mix, 10 minutes of vigorous activity equals roughly 20 minutes of moderate activity.) Raising your weekly goal to five hours of moderate activity, or two-and-a-half hours of vigorous activity, nets additional health benefits, especially weight loss. Each session should last at least 10 minutes.

Get started

Walking is usually safe for people of any age or level of fitness and can easily be adjusted to a comfortable speed. It doesn’t jar joints or raise your heart rate to dangerous levels. For a greater challenge, you can add time, distance, or hills to improve endurance or use resistance bands to tone while you walk.

Follow these tips to get the best workout from your walks:

Find a safe place to walk. Quiet streets with side-walks, park trails, athletic tracks at local schools, or shopping malls are often good choices.

Buy a good pair of shoes. Look for supportive but flexible soles that cushion your feet. Comfort is the key when buying shoes for walking. Shop at the end of the day when your feet are at their largest size. Choose shoes with “breathable” uppers, such as nylon mesh.

Dress for comfort and safety. Wear lighter clothes than you’d need if standing still. Dress in layers so you can peel off garments if you get hot. Light-colored clothes and a reflective vest help drivers notice you.

Do a five-minute warm-up and cool-down. Start off at a slower pace for your warm-up. At the end of your walk, slow down to cool down (even if you’re not sweaty).

Practice good technique:

- Walk at a brisk, steady pace. Slow down if you’re too breathless to carry on a conversation.
- Stand tall.
- Hold your head up so your chin is level and look 10 to 20 feet in front of you.
• Lift your chest.
• Keep your shoulders down.
• Point your toes straight ahead.
• Let your arms swing loosely at your sides. If you want to boost your speed, bend your elbows at 90-degree angles and swing your hands from waist to chest height.
• Land on your heel, then roll forward onto the ball of your foot, pushing off from your toes.
• Take comfortable strides. To go faster, take quicker steps instead of longer ones.

**Strength training**

Strength or resistance training, which typically employs equipment such as weight machines, free weights, or resistance bands or tubing, protects against bone loss and builds muscle. It also improves your body’s ratio of lean muscle mass to fat. It, too, deserves an important place in your exercise routine.

Technically, strength or resistance training takes place any time your muscles face a stronger-than-usual counterforce, such as pushing against a wall or lifting a dumbbell. Using progressively heavier weights or increasing resistance makes muscles stronger. Aside from toning you, strength training provides the functional strength you need to do everyday activities—lifting groceries, climbing stairs, rising from a chair, rushing for the bus—with ease.

**How much should you do?**

The Physical Activity Guidelines for Americans recommend strengthening exercises for all major muscle groups (legs, hips, back, chest, abdomen, shoulders, and arms) two or more times a week, with at least 48 hours between sessions. One set per session is effective, though two or three sets may be better, according to some research. Repeat each exercise eight to 12 times (reps). Your body needs at least 48 hours for recovery and repair between strength training sessions in order to build more muscle and get stronger.

**Get started**

These tips for safe strength training will help you get the most from your workouts:

**Focus on form, not weight.** Align your body correctly and move smoothly through each exercise. Poor form can prompt injuries. Many experts suggest starting with no weight, or
very light weight, when learning a strength training routine. Concentrate on slow, smooth lifts and equally controlled descents while isolating a muscle group. You isolate muscles by holding your body in a specific position while consciously contracting and releasing the targeted muscles.

**Tempo, tempo.** Tempo helps you stay in control rather than undercut strength gains through momentum. For example, count to four while lifting a dumbbell, hold for two, then count to four while lowering it to the starting position.

**Breathe.** Blood pressure increases during a workout, but it rises even more if you hold your breath while performing strength exercises. To avoid steep increases, exhale as you lift, push, or pull; inhale as you release. To make sure that you’re not holding your breath, count your tempo aloud. You can’t hold your breath when you’re talking.

**Keep challenging muscles.** The right weight differs depending on the exercise. Choose a weight that tires the targeted muscle or muscles by the last two repetitions (reps) while still allowing you to maintain good form. If you can’t do the minimum number of reps, choose a lighter weight. When it feels too easy, as if you could continue doing reps, challenge your muscles again by adding weight (roughly 1 to 2 pounds for arms, 2 to 5 pounds for legs) or using a stronger resistance band. Alternately, you can add another set of reps to your workout (up to three sets), or work out additional days per week. If you add weight, remember that you should be able to do the minimum number of reps with good form, and the targeted muscles should feel tired by the last two reps.

**Give muscles time off**

Strenuous exercise like strength training causes tiny tears in muscle tissue. These tears are good, not bad: muscles grow stronger as the tears knit up. Always allow at least 48 hours between sessions for muscles to recover. So, if you do a strenuous full-body strength workout on Monday, wait until at least Wednesday to repeat it. It is fine to do aerobic exercise on the days between your strength training. If you’re doing a partial-body strength session, however, you might do upper-body exercises on Monday, lower-body exercises on Tuesday, upper-body exercises on Wednesday, lower-body exercises on Thursday, etc., and also do aerobic exercise on as many days as possible.
Balance exercises

Our sense of balance typically worsens as we age. It can be further compromised by medical conditions like neuropathy (a complication of diabetes or certain chemotherapy drugs) that can cause tingling, pain, and numbness in the feet; side effects from other medications; uncorrected vision problems; or a lack of flexibility. Poor balance often leads to falls, which can cause head injuries and temporarily or permanently disabling injuries to the bones and nervous system. Hip fractures, particularly, can lead to serious health complications and can impair independence.

Older adults at risk for falls can benefit from a combination of walking, strength training, and balance exercises. Balance-enhancing activities include tai chi, yoga, and Pilates. Strength training exercises that work core muscles in your abdomen and back also help with balance.

How much should you do?

For older adults at risk for falls, the guidelines recommend 30 minutes of balance training and muscle strengthening exercises three times a week, plus at least 30 minutes of walking activities twice or more weekly.

Flexibility exercises

Flexibility exercises like stretching and yoga gently reverse the shortening and tightening of muscles that typically occur with disuse and age. Shorter, stiffer muscle fibers may make you vulnerable to injuries and contribute to back pain and balance problems.

Frequently performing exercises that isolate and stretch elastic fibers surrounding muscles and tendons helps counteract this. A well-stretched muscle more easily achieves its full range of motion. This improves athletic performance—imagine an easier, less restricted golf swing or tennis serve—and functional abilities, such as reaching, bending, or stooping during daily tasks. Stretching can also be a great way to get you moving in the morning or a way to relax after a long day. Activities such as yoga combine stretching and relaxation and also improve balance, a wonderful combination.

However, note that experts no longer recommend stretching before exercise. Prolonged stretching impedes the maximum contractile force of muscles. For example, stretching prior to jumping decreases jump height. Instead, experts now recommend starting off your
exercise with a warm-up, such as an easy walk or a sport-specific routine such as serving some tennis balls and practicing ground strokes before a match. This increases the movement of blood and oxygen to the muscles. Then, when muscles are warm and pliable—for example, after five to 10 minutes of exercise—you can stretch. Or, even better, do your flexibility exercises as your post-workout cool-down.

How much should you do?

The Physical Activity Guidelines for Americans present no specific recommendations for making flexibility exercises part of your routine. However, the American College of Sports Medicine recommends that older adults do flexibility exercises on the same days as aerobic or strength activities, or at least twice a week.

Get started

When starting a stretching routine, follow these tips for safety:

- Check with your doctor. If you have joint disease or arthritis, or if you’ve had a joint replacement, check with your doctor before starting stretching exercises.
- Warm up first. Warm muscles are more flexible. Warm up for five to 10 minutes first, or save stretching for your cool-down routine after exercising.
- Stretch all muscle groups. Just as with strength training, stretching should include all muscle groups.
- No bouncing. Never bounce as you stretch. This triggers a contracting reflex that actually tightens the muscle you’re trying to loosen.
- Feel mild tension only. Extend your muscle to the point where you feel mild tension and hold that position. You should never feel pain.
- Breathe. Breathe easily through your nose while stretching.
- Hold and repeat. The best results come from holding a stretch for 10 to 30 seconds and repeating each stretch two to six times for a total of one minute.

Adapted with permission from Starting to Exercise, a special health report published by Harvard Health Publishing.