

Designing your program

Before you lift even the lightest weight, you need the answers to certain questions. How often should you work out? What are “reps” and “sets,” and how many should you do? How much weight or resistance should you use? Why and for how long should you warm up, cool down, rest, and stretch? This section covers these issues and more.

You will also learn what a well-rounded exercise program should include besides strength training (see “Current exercise recommendations,” facing page). We hope that you find the exercise calendar on page 19 helpful as you design your exercise program.

Strength training questions and answers

Below are answers to common questions about strength training. In addition to guiding beginners, this information offers a brush-up for those who are already working out.

How often should I do strength training?

Ideally, perform a complete strength training routine two to three times a week. Of course, once a week is better than not at all. The fastest gains are made in the first four to eight weeks; after that, expect gains to slow somewhat.

Once you finish the first stage of training (12 to 16 weeks), you can keep working out two to three times a week if you would like to make further gains. Or you can step down your strength training to twice or possibly even once a week to simply maintain the gains you’ve made.

How much rest do my muscles need?

Always allow at least 48 hours for muscles to recover between strength training

workouts. So, if you do a full-body strength workout on Monday, wait until at least Wednesday to repeat it.

Some people prefer to break their strength training program into two components: upper body and lower body. In that case, you can perform upper-body exercises one day and lower-body exercises the next. Just make sure you work different groups of muscles on successive days, so your muscles can rest properly. And remember, you’ll need to schedule two to three upper-body workouts and two to three lower-body workouts a week.

What are “reps” and “sets”?

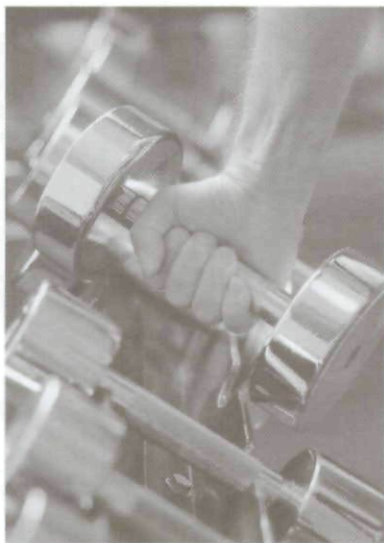
Most strength training routines call for lifting and lowering a weight 8 to 12 times, or repetitions (“reps”). That makes up one set. Typically, a complete workout includes two to four sets of approximately 8 to 12 exercises that, combined, work all the major muscle groups.

What is good form?

One reason walking is such a simple exercise is that all of us know exactly how to do it. That’s not true of strength training. Before you attempt a specific exercise, it’s essential to learn the proper form, or technique, for the equipment and exercise you’ve chosen. Poor form can cause injuries and slow gains. Good form concentrates on slow, smooth lifts and descents done while a muscle group is isolated. You isolate, or target, muscle groups by holding your body in a specific position while you contract or lengthen muscles.

It’s true that strength training machines help position you properly. But you still need to learn to adjust each machine to your body and use it correctly. If you’re using free weights or body weight for resistance, good form is even more essential. Often, it helps to run through exercises the first few times without weights or with very little weight. A class or exercise professional can be instrumental in teaching good form. Videos—and to a lesser extent, books—can also help.

It’s also a good idea to exercise in front of a mirror, at least initially. This allows you to observe your body position and to correct sloppy form.



When you can comfortably perform 12 reps, increase the amount of weight.

How much weight or resistance should I use?

Once you understand exactly how to do each exercise, choose weight that allows you to do only 8 to 12 repetitions. The last one or two reps should be difficult. If you can't lift the weight at least eight times, use a lighter weight.

If you exercise regularly, your muscles will gradually adapt to the weight you are using so you can do more reps. When you can comfortably perform 12 reps without completely tiring the muscle, it's time to increase the amount of weight.

How many sets should I do?

Strength training focuses on tiring the muscles being worked. Some studies show you can net similar boosts in strength from performing just one set versus multiple sets, but multiple sets have the edge when you first start training. And no study shows that single sets pay better strength dividends than multiple sets. If you want to progress, two to three sets of each exercise are recommended.

How long should I rest between sets?

If you don't take a rest at all, your muscles will be too tired to lift with good form. Resting for a minute between sets nets the best strength gains. Alternatively, cutting rest time between sets to 30 seconds keeps your heart rate up so you reap some aerobic benefits during a strength training session. It's wise to note, however, that it lessens strength gains. This is a tradeoff that each person should evaluate. If you do choose to cut your rest time, be sure you don't sacrifice good form.

Why should I warm up and cool down?

Any time you exercise, begin by warming up for 5 to 10 minutes, and end by cooling down for another 5 to 10 minutes. Warming up pumps nutrient-rich, oxygenated blood to your muscles as it raises your heart rate and breathing. Marching in place and gently swinging your arms or using a treadmill or exercise bike are all excellent ways to warm up. Start slowly, and gradually increase your pace. Unless a doctor or an exercise professional advises otherwise, aim for moderate exertion (see Table 2, at right).

Cooling down slows breathing and heartbeat, gradually routing blood back into its normal circu-

TABLE 2 How hard are you working?	
Exertion level	What it feels like
At rest	No exertion
Very light	No noticeable exertion
Light	Noticeable exertion with normal to slightly faster than usual breathing
Moderate	Moderately vigorous exertion with deeper breathing, with panting and sweating at the higher end of the range
Vigorous	Strong exertion with rapid breathing and heavy sweating
Very hard to extreme	Working at high intensity up to full capacity

latory patterns. This helps prevent a sudden drop in blood pressure that causes dizziness, especially if you bend over or straighten up quickly (postural hypotension). To cool down, gradually slow your movements or walk slowly until your heart rate and breathing are close to normal. Then do some stretching.

Why—and when—should I stretch?

Stretching can help you grasp a zipper that's been tantalizingly out of reach for years, work kinks out of a stiff neck, and ease back pain. Daily stretching gives you a greater range of motion and improves balance, too. Stretch after you've warmed up or at the end of a workout. Yoga and tai chi, which can be tailored to differing abilities and health concerns, combine stretching with relaxation. Studies show these activities enhance balance, lower blood pressure, and relieve stress, as well as improve flexibility.

Current exercise recommendations

Strength training, of course, is only one piece of the exercise puzzle. It's wise to keep the bigger picture in mind. A sound exercise program also includes aerobic activity, flexibility exercises, and balance exercises.

Aerobic activity (also called cardiovascular or endurance exercise), such as walking or swimming,

A strong exercise routine

For your exercise routine, aim for:

- 30 minutes of moderate aerobic exercise on most days of the week
- two to three sessions per week of strength training that works the major muscle groups of the legs, trunk, and arms and shoulders (or four to six weekly sessions if you plan to work only upper-body muscles on one day and lower-body muscles on the following day)
- balance exercises, either as part of your strength training routine or separately
- stretching exercises during or after the cool-down portion of each exercise session.

speeds heart rate and breathing for sustained periods. Aim for at least 30 minutes or more of moderate aerobic activity on most days of the week (see “How hard are you working?” on page 17). If you prefer, you can divide your 30 minutes a day into three 10-minute segments or two 15-minute periods of sustained activity.

According to many exercise guidelines, running is an example of “vigorous” aerobic exercise. “Moderate” exercise might be walking at 4 miles per hour. The truth is, though, your level of fitness dictates whether an activity is light, moderate, or vigorous. If you are rarely active, a less-than-brisk walk might qualify as moderate—or even vigorous. Table 2 can help you gauge your level of exertion. Many experts also offer the following guideline for aerobic exercise: If you can talk easily while exercising, work harder. If you can’t carry on a conversation, back off.

Flexibility exercises may expand your range of motion, keep muscles more limber, improve posture and balance, and help prevent falls. Warm muscles are less likely to be injured than cold muscles, so it’s best to perform stretches as part of your cool-down following a workout. Or if you prefer, you can stretch after a 5- to 10-minute warm-up, during which you might walk or dance to some songs on the radio. Consider activities such as yoga or tai chi, which help with balance as well as flexibility.

Because regularly performing balance exercises can help protect against falls, it’s wise to include

these kinds of exercises in your routine. Here, you may be happy to note that your strength training routine can do double duty. Several of the strength training exercises from Workout I and Workout II also improve balance, particularly standing calf raises and chair stands (page 22), hip extensions (page 23), and side leg raises (page 28). In addition, we’ve included two additional balance exercises that are simple to perform (see “Balancing act,” page 34).

A good exercise program builds slowly and safely on your current level of fitness. If you’re a beginner, don’t despair. Work up to these goals gradually. Fortunately, some of these activities overlap nicely. For example, strength training has aerobic benefits if it raises your heart rate for sustained periods of time. You needn’t follow a formula to know exactly how much faster than usual your heart should be beating—just pay attention to body signals that suggest you are exercising moderately (see Table 2). And stretching fits in well as part of a cool-down routine.

Your workout calendar

Make copies of the blank calendar found on the next page and fill in the month and days. Then decide the times and days you can do strength training. Add in aerobic activities and flexibility exercises, too (see “Current exercise recommendations,” page 17). Put a check mark on the days when you do exercise as intended. This can help you see when it’s easiest to incorporate exercise into your schedule and where roadblocks tend to crop up. At the end of the month, review the calendar to see whether you need to make any adjustments in the timing of your workouts.

If you aren’t usually active, focus on the strength training program in Workout I and gradually add aerobic activities when you find it possible to do so. Even a few minutes a day will help, especially if you try to do a bit more week by week. Although it seems counterintuitive, strength training is a good way to build up muscles too weak for walking and other aerobic activities.

If you are in good shape, you may wish to use the strength training program in Workout II. ♥

Workout calendar

Month: _____

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Time:	Time:	Time:	Time:	Time:	Time:	Time:
Type of activity:	Type of activity:	Type of activity:	Type of activity:	Type of activity:	Type of activity:	Type of activity:
Time:	Time:	Time:	Time:	Time:	Time:	Time:
Type of activity:	Type of activity:	Type of activity:	Type of activity:	Type of activity:	Type of activity:	Type of activity:
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