

## STRENGTH TRAINING 101

**Y**ou do not need to be a bodybuilder to benefit from strength training. A well-designed strength-training program can provide the following benefits:

- *Increased strength of bones, muscles and connective tissues (the tendons and ligaments)*—This increased strength decreases the risk of injury.
- *Increased muscle mass*—Most adults lose about one-half pound of muscle per year after the age of 25, largely due to decreased activity. Muscle tissue is partly responsible for the number of calories burned at rest (the basal metabolic rate, or BMR). As muscle mass increases, BMR increases, making it easier to maintain a healthy body weight.
- *Enhanced quality of life*—As general strength increases, the performance of daily routines (carrying groceries, working in the garden) will be less taxing.

### The Core Curriculum

Many exercises can be combined into a program that works all the major muscle groups. Neglecting certain groups can lead to strength imbalances and postural difficulties. A certified fitness professional can help you develop a safe, effective program.

You may also wish to consult with a certified fitness professional to learn safe technique before beginning a strength-training program. One set of eight to 12 repetitions, working the muscles to the point of fatigue, is usually sufficient. Breathe normally throughout the exercise. Lower the resistance with a slow, controlled cadence throughout the full range of motion. Lifting the weight to a count of 2 and lowering it to a count of 3 or 4 is effective.

When you are able to perform 12 repetitions of an exercise correctly (without cheating), increase the amount of resistance by 5 to 10% to continue making safe progress.

### Staying Motivated

An encouraging aspect of strength training is the fact that you'll likely experience rapid improvements in strength and muscle tone right from the start of your program. Don't be discouraged, however, if visible improvements begin to taper off after a few weeks.

It's only natural that, as your fitness level improves, improvements in strength and

appearance will come at a slightly slower pace. To help keep your motivation up, find a partner to train with you.

Aim to exercise each muscle group at least two times per week, with a minimum of two days of rest between workouts. Training more frequently or adding more sets may lead to slightly greater gains, but the minimal added benefit may not be worth the extra time and effort (not to mention the added risk of injury).

### Vary Your Program

Machines and free weights are effective tools for strength training, and a combination of the two is generally recommended. Utilizing both machines and free weights provides exercise variety, which is important for both psychological and physiological reasons. Variety not only reduces boredom, but also provides subtle exercise differences that will enhance progress.

The benefits of strength training are no longer in question. Research continues to demonstrate that strength training increases both muscle and bone strength and reduces the risk of osteoporosis. A safe strength-training program combined with cardiovascular and flexibility training will give you the benefits of a total fitness program.

### Additional Resource

About.com: [www.exercise.about.com/cs/exerciseworkouts/a/weight101.htm](http://www.exercise.about.com/cs/exerciseworkouts/a/weight101.htm)

*If you are interested in information on other health and fitness topics, contact: American Council on Exercise, 4851 Paramount Drive, San Diego, CA 92123, 800-825-3636; or, go online at [www.acefitness.org/GetFit](http://www.acefitness.org/GetFit) and access the complete list of ACE Fit Facts!™*



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