Weight Training Guidelines and Programs

One of the most important things you can do for your body to maintain health is lift weights. Diet and aerobic (cardio) activity are equally important, but strength training provides many major benefits, including:

- Increases metabolism. Muscle burns more calories than fat, so the more muscle you have, the more calories you’ll burn all day long.
- Strengthens bones, especially important for women
- Increases muscle strength and muscle endurance
- Helps avoid injuries
- Increases confidence and self-esteem
- Improves coordination and balance

Getting started with strength training can be confusing - what exercises should you do? How many sets and reps? How much weight? The routine you choose will be based on your fitness goals as well as the equipment you have available and the time you have for workouts.

**What is the right routine?**

- Warm-up (aerobic) - three minutes low intensity to break a sweat. (Examples: running, cycling, walking, etc.)
- Pre-exercise stretching - hold at a gentle stretch for a ten count; do one to two repetitions of each stretch, no bouncing. Stretch muscles that you'll be using during your workout. (Example: hamstrings, calves, quads and chest.)
- Weight training - choose from programs described on the back of this page.
- Post exercise stretching/strengthening - 1 to 2 minutes/muscle group for stretching, and add abdominal and low back strengthening if they have not been included in your weight training routine.

**How many exercises should I do?**

At least 1 exercise for each major muscle group (upper body, lower body, and core).

**How much weight?**

The correct weight should produce fatigue by the last repetition in each set, or determine resistance by using a percentage (typically 60-80%) of your one repetition maximum. (Example: If you can lift a maximum of 50 lbs. one time during leg extension, 70% of that would be 35 lbs.)

**How much time between workouts?**

Rest 48 to 72 hours between workout sessions for each muscle group.

**How often should I do my workout?**

The number of sessions per week for each muscle group - 2 to 3 sessions, on non-consecutive days.

**What is the correct lifting technique?**

Maintain proper postures and move through the lift in a slow, controlled manner (usually 2-4 count for the push/pull/contraction with a 4-6 count for the relax/recovery phase).

**What is range of motion?**

Each lift should be done through a joint's entire range of motion.

**How do I maintain muscle balance?**

Balance the program to include opposing muscle groups. (Example: hamstrings oppose quadriceps.)

**How should I progress?**

Increase the resistance or weight of an exercise when you are able to complete all repetitions of the last set without muscle fatigue.

**Why warm up and cool down?**

Brief aerobic exercise will warm the muscles, making them flexible and ready for activity. Cool-down exercises are important to return the body to resting level.
“No pain, no gain”
Wrong! Pain is your body’s warning signal to stop before you hurt yourself.

What should be the length of my program?
It takes approximately 8-12 weeks to achieve gains in strength.

Weight training programs

<table>
<thead>
<tr>
<th>Program Goal</th>
<th>Sets</th>
<th>Repetitions</th>
<th>Resistance</th>
<th>Rest Between Sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endurance</td>
<td>3</td>
<td>15 to 25</td>
<td>50-65% of 1 Rep. Max</td>
<td>30 to 60 seconds</td>
</tr>
<tr>
<td>Health/Fitness</td>
<td>1 to 3</td>
<td>8-12</td>
<td>60-80% of 1 Rep. Max</td>
<td>30 to 60 seconds</td>
</tr>
<tr>
<td>Strength</td>
<td>3 to 6</td>
<td>5 to 6</td>
<td>80-88% of 1 Rep. Max</td>
<td>3 to 5 minutes</td>
</tr>
<tr>
<td>Size</td>
<td>3 to 6</td>
<td>8 to 12</td>
<td>80-85% of 1 Rep. Max</td>
<td>30 to 60 seconds</td>
</tr>
<tr>
<td>Power</td>
<td>3 to 6</td>
<td>2 to 4</td>
<td>80-90% of 1 Rep. Max</td>
<td>3 to 4 minutes</td>
</tr>
</tbody>
</table>

Table content taken from Essentials of Strength Training and Conditioning, edited by Thomas Baechle for the National Strength and Conditioning Association.

- Endurance and Health/Fitness programs are appropriate for inexperienced or currently inactive individuals.
- Strength and Power programs are appropriate for individuals training for sports.
- The Size program is appropriate for individuals who wish to participate in bodybuilding.

Keynotes to remember
- Balance your strengthening program with aerobic activity. Aerobic (cardio) exercise should be done 150 minutes per week at a moderate intensity for maintenance of cardiovascular health and fitness. For weight loss, 200-300 minutes per week is recommended.
- An ideal exercise program will incorporate aerobic activity, resistance training, and flexibility exercises.
- Proper nutrition is very important to support your exercise program and promote a healthy lifestyle.
- Drinking water before, during, and after exercise is important to keep your body from dehydrating.
- Remember that you are an individual, and the changes to your body may be different from those of other people.