

Muscular Strength Training

This handout is for healthy individuals beginning a resistance training program. If you are a man over the age of 40, a woman over 50, or have a health problem, consult with your doctor before starting an exercise program.

Why should I strength train?

Resistance or strength training (ST) causes the body's muscles to work or hold against an applied force or weight. In addition, ST can:

- Improve your ability to perform everyday tasks
- Increase bone density
- Help prevent low-back pain
- Increase your metabolism
- Increase your stamina and energy level
- Improve joint stability

How do I get started?

First Timers

You may wish to consult with a degreed health and fitness specialist, such as an MHealthy Personal Trainer, to learn safe and effective techniques before beginning a strength training program.

Warm-up (3-5 minutes)

A warm-up prepares your body for exercise. It slowly raises your heart rate and increases blood flow to the working muscles. This improves muscle function and lowers your risk of injury.

How do I warm-up? Choose an aerobic activity (for example: walking) at an easy pace for 3-5 minutes.

Types of Equipment

Weight machines, free weights, resistance bands, and stability balls are all types of equipment that provide resistance to help increase strength. Choose equipment that is going to be the most convenient and enjoyable for you.

Order and Progression of Exercises

Work the largest muscle groups first then proceed to the smaller groups (see below). Make sure to include all major muscle groups to avoid strength imbalances.

- Chest: pecs
- Back: lats, trapezius
- Legs: quadriceps, glutes, hamstrings, calves
- Core: abdomen, lower back
- Shoulders: deltoids
- Arms: triceps, biceps

When you can consistently do 15 repetitions in each set over 3 consecutive workouts, the next time you train increase your weight by the smallest amount available for that exercise.

What are the general guidelines for resistance/strength training?

- **Frequency:** 2 or more non-consecutive days is recommended, but one day is acceptable. Rest your muscles for 48 hours between workouts. It is normal for your muscles to be slightly sore the day following your workout.
- **Intensity:** Perform each exercise with proper form (see "Form" below) until momentary muscle fatigue (the point at which you cannot perform another repetition without losing form) is reached.
- Duration:

- Repetitions: To increase muscular strength, perform each exercise so momentary muscle fatigue is reached within 8-15 repetitions for each set.
- Sets: One correctly performed set for each exercise may be enough.
 Multiple sets may provide better results, depending on your goals.
- **Rest interval:** If you do multiple sets, a typical rest interval is 30-60 seconds, but it can vary depending on your goals.
- Form:
 - **Proper speed:** Lift the weight in two counts and lower the weight in 4 counts (up 1-2, down 1-2-3-4).
 - **Range of motion:** Exercise muscles through their fullest, comfortable range of motion.
 - **Protecting joints:** Do not lock your joints when performing any exercise.
 - Proper form: If you must alter your form to complete the repetition, Stop! You have reached momentary muscle fatigue for that set. Do not sacrifice form to perform more repetitions, this is where many injuries occur.
 - Breathing: Remember to breathe. DO NOT hold your breath while performing an exercise. Complete at least one breathing cycle (in and out) per repetition. Breathe out on exertion phase, breathe in on relaxation phase.
- **Finish up with some stretching** (5 minutes): Stretching can reduce the amount of soreness you may experience following your strength training routine by increasing the amount of blood flow to the muscles.

Disclaimer: This document is for informational purposes only and is not intended to take the place of the care and attention of your personal physician or other professional medical services. Talk with your doctor if you have Questions about individual health concerns or specific treatment options.

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