

HOW TO BUILD MUSCLES

Why Should You Build Up Your Muscles?

All athletes, not only those involved in contact sports such as wrestling and football, can benefit from stronger muscles. Strong muscles can increase your speed, force, and endurance.

The size and strength of your muscles are determined by

- Heredity
- Exercise
- Diet

Heredity

You have inherited a unique combination of the three types of muscle fibers:

- **Fast-twitch:** Work quickly, but tire quickly; sprinters tend to have a high percentage of these.
- **Slow-twitch:** Work more slowly, but have greater endurance; long-distance runners would usually have more of these.
- **Intermediate-twitch:** More power than slow-twitch; can be trained for high aerobic capacity.

Exercise

Muscle building is affected by three principles:

- **Specificity:** A particular muscle must be exercised if you want to develop it.
- **Overload:** A muscle must be worked more than normal to increase its strength.
- **Progression:** The workload must be increased gradually.

TRAINING TIPS FOR TEENS

- Stick to basic, compound movements, such as bench press, squats, deadlifts, bent-over rows.
- Include both stretching and resistance exercises.
- Do not work out every day; be sure to get adequate rest between workouts.
- Get plenty of sleep.
- Variety will keep workouts from getting boring, and is more healthy for you.
- Stick with it! After the initial quick results, the progress may become much slower—this is normal. The goal is to establish a healthy and rewarding lifestyle.

Diet

Besides exercise, muscles need a nutritionally adequate diet, which includes a wide variety of foods. Contrary to popular belief, you do not need to eat tremendous amounts of protein to build your muscles. Muscles are only about 22% protein; more than 70% is water! Excess protein does not turn into more muscle; in fact, it may be stored in the form of fat!

The following diet is nutritionally adequate and supplies an appropriate amount of protein for building muscle:

SAMPLE DIET

	Protein (grams)
Morning:	
½ C orange juice	1
1 egg	6
1 slice toast	2
1 C milk	8
Noon:	
4 oz hamburger	28
Hamburger bun	4
Banana	1
1 C milk	8
Evening:	
4 oz pork chop	33
Large baked potato	5
Tossed salad	1
½ C green beans	1
1 slice whole wheat bread	3
1 C milk	8
Snack:	
½ C frozen yogurt	3
2 chocolate chip cookies	1
Total	113

WHAT ABOUT STEROIDS?

Although some body builders take steroids in an effort to develop huge muscles, these drugs can have many dangerous side effects:

Steroids can:

- Stunt growth
- Cause acne
- Deepen your voice
- Alter your sex organs

All in all, you are much wiser to develop your muscles through diet and exercise. It may take longer, but you will be improving your health rather than risking it!