

# Weight training for adolescents

## Tips for building strength safely and effectively

To get the most out of weight training, it's important to follow a few simple guidelines. You should start your weightlifting program slowly, learn proper form and how to choose your weights, and fuel your body properly to support muscle growth. It is helpful to work with a coach who has experience with adolescent athletes.

### Set goals

- Talk with your health care provider to make sure it's safe for you to start a weight training program.
- Set realistic weight gain goals along with a timeline to achieve those goals.

### Lifting: When, what and how

- When starting a new program, your weights should feel light to moderate. Your goal should be to become more confident with new movements rather than increasing the weight you lift. Focusing on consistent practice and building your technique will help you progress long term.
- Perform whole-body strength training 3–4 days per week during your sport's offseason and two days per week in-season.
- Work your whole body, not just 1–2 body parts during each session. Avoid doing “body part splits.”
- Choose multi-joint movements, such as rows instead of bicep curls, using your full range of motion.
- Warm up with 2–3 sets, increasing weight each time.
- After the warmup:
  - Do 2 sets of 8–12 reps at the same weight if you are a new lifter.
  - Increase to 3 sets of 8–12 reps after you have been lifting for 6 months or more.
- After your last set, you should feel that you could have done only 2–3 more reps with the same technique. If you cannot do 8 reps, lower the weight. If you can do more than 12 reps for all sets, increase the weight by 5–10% for your next session.



### Common misconceptions

- ***Kids are unable to improve strength before puberty. False.*** Kids gain strength by increasing how many muscle fibers their neurologic system recruits rather than by building muscle mass.
- ***Weight training may stunt growth. False.*** Well-designed weight training programs have not been shown to have any negative effect on growth plate health, linear growth or cardiovascular (heart) health in youth.
- ***Weight training may decrease aerobic performance. False.*** Combined aerobic and weight training has been shown to improve aerobic performance without limiting strength gains.

## Nutrition for building muscle mass

- Eat balanced meals containing carbohydrates, lean protein and fat to supply your body with the energy and nutrients needed to build lean tissue.
  - Carbohydrates are foods such as potatoes, rice, pasta, cereal, bread, oat and fruits.
  - Proteins are foods such as fish, meat, eggs, dairy (milk and cheese), beans and tofu.
  - Fats are foods such as oils, avocados, nuts and nut butters (such as peanut butter), full-fat dairy and butter.
- Do not skip meals! Eat every 3–4 hours, starting with a good breakfast. It is good to eat three meals, plus snacks each day.
- Eat or drink 20–30 grams of protein at each meal and before bed for optimal muscle building and repair. Eating whole foods such as dairy, lean meats, eggs, fish, poultry and beans are preferred over supplements.
- Add an extra 300–500 calories a day over your current calorie needs by eating snacks between meals or eating larger portions.

## Putting it all together

Weight training will stimulate muscle growth, but including other types of training is important. Plyometrics, medicine ball throws and skill work in your sport are crucial to your improvement as an athlete.

If adding muscle mass is a goal for your sport, you can expect to see improvements in your strength and power before you will see increases in muscle mass. This is due to how your body adapts to training.

Excess protein alone will not build new muscle tissue. An appropriate training program, puberty (hormones), extra calories, and good quality sleep are key to muscle growth.



## Snack ideas

- Cheese and crackers
- Flavored milk
- Granola bars
- Granola or muesli with whole milk
- Meal replacement shakes
- Peanut butter and jelly sandwich
- Smoothie made with whole milk, fruit and nut butter



## Contact us

To schedule a sports nutrition consultation to address your individual needs, please call 936-267-7300.