Safe Weight Loss and Weight Gain for Young Athletes



Many athletes actively seek changes in body weight in hopes of improving athletic performance. In some sports, such as wrestling (/English/healthy-living/sports/Pages/Wrestling.aspx), gymnastics (/English/healthy-living/sports/Pages/Gymnastics.aspx), dancing (/English/healthy-living/sports/Pages/Ballet-and-Dance.aspx), and running (/English/healthy-living/sports/Pages/Running.aspx), athletes and coaches (/English/healthy-living/sports/Pages/Coaching.aspx) associate optimal performance with a relatively low body mass (/English/health-issues/conditions/obesity/Pages/Body-Mass-Index-Formula.aspx). In other sports, particularly contact and collision sports, such as football (/English/healthy-living/sports/Pages/Football.aspx), increased body mass is often encouraged.

Athletes interested in losing or gaining weight should discuss strategies for healthy weight loss (/English/health-issues/conditions/obesity/Pages/Losing-Weight-Safely-Sensibly-Successfully.aspx)or weight gain with their doctor. The following is information from the American Academy of Pediatrics about healthy weight loss or weight gain for the young athlete.

Weight and age

Ages 2 to 10 years

Generally, children in this age group should not lose weight because it can affect normal growth (/English/ages-stages/gradeschool/puberty/Pages/Growth-Charts-By-the-Numbers.aspx) and development. Concerns about weight need to be addressed with the child's doctor. The usual goal for children who are overweight (/English/ages-stages/gradeschool/nutrition/Pages/Is-Your-Child-Overweight.aspx) at this stage is to maintain weight and allow them to "grow into" their weight.

Ages 10 to 12 years

Some children in this age group will start to grow faster as they enter puberty (/english/ages-stages/gradeschool/puberty/Pages/default.aspx). The "early bloomers" often have a temporary size and strength advantage over children who develop later. Boys who have not yet begun puberty will sometimes try to gain weight to keep up with their peers. However, efforts to gain weight before puberty lead to increased fat, not muscle, and do not speed up strength and muscle development.

Ages 12 to 18 years

Many teens (/english/ages-stages/teen/Pages/default.aspx) try hard to gain or lose weight to improve how they look. Teen athletes may also want to improve their sports performance.

Weight and sports performance

Athletes who are trying to improve sports performance (/English/ages-stages/gradeschool/fitness/Pages/Sports-Performance-and-Ability-in-School-Age-Children.aspx) should keep the following in mind:

- There is no single "best" weight for a given sport. For each athlete there is a range of healthy weights that allow for peak athletic performance.
- It is often more beneficial to monitor athletic performance (such as strength, speed, jump height) than weight.
  athletes, weight and body mass index (BMI) are not good indicators of body fat and lean muscle.
  hletes who are thinking about making major changes in weight, and those who are in weight-classified sports (such as wrestling), should have body composition measurements taken to find out percentages of body fat and

lean tissue.

Back to Top

- Coaches and parents often do not realize the influence they have on young athletes. Even a casual weight-related comment from a coach might place the athlete at increased risk for unhealthy eating behaviors. Parents should try to be aware of weight-related messages their children may be receiving from coaches.

Weight loss

Athletes (and coaches) in many sports, such as wrestling, gymnastics, dancing, and running, believe that they will perform better if they lose weight. For athletes who are above their healthy weight, losing excess body fat may be beneficial. However, weight loss in athletes who are already at a healthy weight is not likely to improve performance. Also, most diets that limit calories often result in decreased training intensity and peak performance.

For the athlete who wants to lose weight in a healthy way, the following tips may be helpful:

- Do not lose more than 1 to 2 pounds per week. Anything faster than this is often due to loss of muscle tissue or water (both of which are important for athletic performance).
- Weight loss efforts should combine changes in athletic training and diet.
- Cycles of weight loss and gain should be avoided. This leads to decreases in metabolism and calorie requirements.
- Weight loss can be difficult and frustrating. Young athletes who wish to lose a lot of weight should talk with their doctor first.

Weight gain

Athletes in some sports, such as weightlifting (/English/healthy-living/fitness/Pages/Weight-Training-and-Lifting.aspx) and football, think that strength, power, and sports performance will get better if they are able to gain weight. However, it is important to remember that weight gain can come from increases in either fat or muscle. Increases in muscle may be very helpful for some young athletes, but increases in fat may result in decreased sports performance.

Unfortunately, it is much easier to gain fat than muscle. Young athletes should be encouraged to make changes that will help with improving strength, rather than just gaining weight.

For the athlete who wants to gain lean muscle in a healthy way, the following tips may be helpful:

- Gain only 1 to 2 pounds each week. Gains faster than this often lead to greater increases in fat.
- Increase calories by 300 to 400 calories each day. Two servings of instant breakfast or meal replacement products can be one option. (Note: "Weight gainer" supplements (/English/healthy-living/sports/Pages/Sports-Supplements.aspx) often contain too many calories and cause greater increases in fat than in muscle.)
- Eat every 2 to 3 hours, or about 5 to 9 times per day.
- Weight lifting should be done in sets of 8 to 15 repetitions for muscle growth, or in sets of 4 to 6 repetitions to develop strength and power.
- There should be at least 48 hours between hard workouts. This allows muscles to recover between training sessions.
- Increases in weight and muscle size tend to become much easier during puberty.

Last Updated 2/3/2012

Source Care of the Young Athlete Patient Education Handouts (Copyright © 2011 American Academy of Pediatrics)

The information contained on this Web site should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.