Talking to young athletes about healthy weight loss, gain
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A 14-year-old boy presents to your office for a sports preparticipation physical evaluation. In your discussion with the boy, he asks the best way to lose weight quickly when he wants to "make weight" for wrestling. How do you advise this young athlete?

Many children and adolescents participate in sports and physical activities that emphasize a particular physique. A wrestler may desire to lose weight quickly and temporarily prior to a match. A football player may want to add muscle mass to his frame. A dancer may try to maintain a very thin body habitus.

The updated clinical report Promotion of Healthy Weight-Control Practices in Young Athletes, from the AAP Council on Sports Medicine and Fitness, provides guidelines for counseling child and teenage athletes about healthy and unhealthy methods of gaining and losing weight for sports. The report is available at https://doi.org/10.1542/peds.2017-1871 and will be published in the September issue of Pediatrics.

Weight loss: no quick fix

Coaches and youths who participate in weight-class sports, such as wrestling and boxing, may feel there is a competitive advantage to losing weight quickly to qualify for the lowest possible weight class. Children and teens involved in aesthetic sports, including dance and gymnastics, also may believe that weight loss will increase their success in these activities. Therefore, these athletes may restrict calories to lose weight even though they typically have increased caloric needs compared to their less active peers.

Some athletes will attempt other weight loss methods, including use of diuretics, vomiting and excessive exercise to increase sweat production. In addition to being risky, these methods may actually impair sports performance. Several national sports governing bodies have enacted rule changes to prevent the use of acute weight loss practices by wrestlers.

Pediatricians can counsel young athletes about appropriate methods for achieving gradual weight loss when needed.

Healthy gains from varied diet, strength training

For sports where a muscular physique is considered advantageous, young athletes often aspire to increase lean muscle mass. However, an athlete who simply consumes more calories may increase body fat percentage rather than muscle mass, which can have adverse health effects.

Some children and teens take supplements to help augment muscle mass, but the safety of most supplements is not well-established, particularly for children.

Female athletes and pre-pubescent boys typically will not see big increases in muscle mass with strength training and increased caloric intake.

To achieve beneficial changes in body composition, young athletes must incorporate a healthy, varied diet and an appropriate strength-training program.

Recommendations for pediatricians

Key points in the updated statement include:
Encourage young athletes to follow dietary and exercise practices that promote good health rather than a competitive advantage in sports.

Be prepared to counsel young athletes about weight-control practices that can be detrimental to health, such as dehydration, calorie restriction and supplement use.

When weight loss is deemed appropriate, children and teens should be educated about healthy methods of gradual weight loss. Athletes attempting to gain weight should be counseled about the importance of healthy dietary changes in conjunction with an appropriate strength-training program to achieve the desired body composition.

Dr. Carl, a lead author of the clinical report, is a member of the AAP Council on Sports Medicine and Fitness.

Resource

- Online interactive tool to calculate caloric needs based on gender, age and activity level