

## Safe Weight Loss for Athletes

In 1997 three college wrestlers tragically died due to unhealthy weight cutting practices while training to compete in a lower weight class.

Death is the ultimate sacrifice related to risks associated with unhealthy weight cutting practices. Extreme caloric restriction also causes muscle breakdown leading to poor endurance and decreased strength on ergonomic testing, decreased protein levels and body glycogen stores, lower testosterone levels, and decreased growth. Athletes may become severely dehydrated causing decreased heart output and kidney failure which places them at increased risk for heatstroke. For female athletes it can also cause missed periods and weakened bones. Because the brain's caloric needs are high, severe caloric restriction can lead to poor academic performance during wrestling season, problems with short term memory and cognition, and mood swings. Psychologically this constant emphasis on weight loss places wrestlers at high risk for anorexia and bulimia, poor body image, and feelings of inadequacy. Studies have reported that as many as 45% of wrestlers are at risk for a major eating disorder.

After the unfortunate deaths in 1997, changes have been instituted to protect young athletes from the negative effects of rapid weight loss. In Colorado CHSAA has instituted minimum body fat requirements for competition. Weight and hydration status are monitored frequently during wrestling season and immediately prior to competition to avoid dangerous weight fluctuations. However, even with these changes, are we doing enough? How are we ensuring the athlete's safety prior to the official start of wrestling season? There are no rules that prevent a 175-lb football player to be told to drop 20 or 30 lbs from the end of football season in November until weigh-in day on December 1st.

Despite policy changes there is still a significant problem in wrestling with weight loss practices. Work needs to be done to educate athletes to avoid drastic weight loss measures immediately prior to wrestling season. For safe weight loss it is recommended that one lose no more than 1-2 pounds per week. Most adolescents need 1,700 to 3,000 calories a day to meet physiologic needs for growth and normal daily activities. During heavy training wrestlers may need an additional 1,000 calories or more to meet daily requirements. Many young wrestlers, unaware of health risks, continue to restrict their intake to 1,000 calories. Consider discussing safe weight loss with your physician or a dietician. I would encourage parents and athletes to challenge the status quo.

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