

## HAZARDS OF RAPID WEIGHT LOSS

Three collegiate wrestlers died in 1997 while attempting rapid weight loss for their weight-class certifications. Death is obviously the most extreme consequence of rapid excessive weight loss, but others include:

- Inadequate intake of vitamins and minerals
- Lack of energy, especially from reduced carbohydrate stores in muscles and liver; slowed metabolism
- Negative changes in mood; exercise seems more difficult
- Eating disorders, especially in women
- Loss of muscle mass, strength, and power
- Reduced endurance; mental and physical exhaustion
- Loss of bone mineral density
- Depressed immune function

Rapid weight loss by fluid restriction leads to dehydration—not fat loss. As the percentage of body weight lost from fluid increases, so do the dangerous consequences of dehydration. Early signs of dehydration include nausea, dizziness, fatigue, and difficulty concentrating. Dehydration increases the risk of heat injury, including muscle cramps, heat exhaustion, and heat stroke. Even a 2-3 pound loss of body weight as fluid can have a negative impact on performance and body temperature regulation.

The only way to safely and effectively lose fat and preserve muscle is through modest calorie restriction and exercise. This is best achieved during the off-season to minimize any detrimental effect on performance. Losing weight by depriving the body of vital nutrients and fluid compromises health and athletic performance.

## GUIDELINES FOR EVALUATING WEIGHT LOSS DIETS

Many diets are based on the premise that a "special" combination of foods and/or supplements can build muscle and lose fat, regardless of how many calories are consumed. Believers are more likely to lose dollars than pounds. Be wary of weight loss programs that:

- Promise dramatic weight loss of more than 1-2 pounds per week
- Emphasize one macronutrient (such as protein) while restricting another (such as carbohydrate) or claim that a food or nutrient is either the "key" to weight loss or the primary "villain" that keeps people overweight
- Promote eating foods in "special fat-burning combinations"
- Make claims such as "quick and easy," "metabolically proven," "eat all you want and still lose weight," "burns fat and builds muscle," and "energizing"
- Promote unproven or spurious weight-loss aids such as herbs, amino acid supplements, body wraps, "Lose weight while you sleep" pills, etc.
- Claim that a weight-control product contains a unique ingredient or component that is unavailable in other products
- Fail to inform users about the risks associated with rapid weight loss
- Use diuretics and/or appetite suppressants

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## REFERENCES

Centers for Disease Control (1998). Hyperthermia and dehydration-related deaths associated with intentional rapid weight loss in three collegiate wrestlers – North Carolina, Wisconsin, Michigan, November-December, 1997. *Morbidity and Mortality Weekly Report*, 47(6):105-108.

Coleman, E., and S.N. Steen (1996). *The Ultimate Sports Nutrition Handbook*. Palo-Alto, CA: Bull Publishing Co.

Walberg-Rankin, J. (1998). Changing body weight and composition in athletes. In: D.R. Lamb and R. Murray (eds.) *Perspectives in Exercise Science and Sports Medicine Vol. II, Exercise, Nutrition, and Weight Control*. Carmel, IN: Cooper Publishing Group, pp. 199-237.