

# Weight Loss and Body Composition

By Dusty Rhodes, DO, and Mike Laycox, LAT, RN



When Tommy visited the training room and asked for advice on how to lose 25 pounds following the football season, it wasn't a surprise. He had started conditioning for wrestling and was planning on competing in the 151-pound weight class.

When football began five months ago, he had visited the training room and asked for advice on how to gain 25 pounds. Now, he wanted to get lean and mean for the wrestling season but hadn't thought about how rapid weight loss might effect his athletic performance. He naturally assumed that he had a much better chance of winning at the 151-pound weight division than at 176 pounds. It does make sense that there's an advantage in wrestling to being lean, but body weight can be a very misleading measure. Rapid weight loss can have an adverse affect on performance and that's why it's important to understand weight loss in the context of body composition.

The body is made up of lean muscle, water, fat and bone. Lean muscle is essential to strength and athletic performance. Frequently an athlete will lose muscle mass while dieting and be unaware of it because they rely on standard scales to measure weight-loss. But the scale doesn't offer any information about where weight loss is coming from, so he or she may feel that they are successfully losing weight when an eight-pound weight loss shows on the scale after a vigorous workout. It is usually from water loss however, and doesn't represent any benefit. In fact, losing large amounts of water shortly before an athletic event can have a negative effect on athletic performance. The goal of any successful weight loss plan should be to lose fat and preserve muscle, and it can be accomplished through a careful balance of diet, exercise and monitoring of body composition. It can't be done quickly.

Miami Valley Hospital's Sports Medicine Center recommends a minimum of 5 to 7 percent body fat for high school wrestlers. The guideline may vary depending on the athlete's age. Skin fold measurement by a skilled professional is a good way to monitor body composition during the weight loss process.

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