

Weight Control Programs For Wrestling

We've seen plenty of instances of weight abuse throughout the text of this book. Until nine years ago (1997), the rubber suit was simply a much needed part of the wrestler's wardrobe. Extra workout sessions in searing heat were the norm. Starving before weigh-ins was simply a test of intestinal fortitude. If you did not cut a lot of weight for wrestling, you were not tough enough. We have examined why and how wrestlers



cut weight and the overall results and feelings of the professional world. More importantly, we have looked at how coaches, wrestlers, and parents perceive weight cutting today. Even though there have been drastic changes over the past nine

years, in terms of weight control programs and awareness, there are still many many wrestlers who try to circumvent the system and cut weight in the wrong ways. For almost seventy years the unsafe practices of cutting weight went relatively unnoticed in college wrestling, but over the course of thirty-three days in 1997, the invisible walls around weight cutting came crashing down.

In the wake of 1997's tragedies, the [NCAA](#) adopted changes to the rules regarding weight loss in order to enhance safety, retain competitive equity, and empha-

size competition rather than weight loss. This included making changes in the weight classes (adding seven pounds to each weight class), promoting a healthy diet and hydration process, and specific rules regarding weight loss and body fat/hydration levels.

The [NCAA](#) has set the following recommendations for collegiate wrestlers and weight loss:

- Ascertain weight classes at the beginning of the season to curb rapid weight loss at the end of the season.
- Specify weigh-in times that discourage dehydration practices.
- Require all wrestling coaches to be certified in cardiopulmonary resuscitation and first aid.
- Add guidelines from the NCAA Sports Medicine Handbook on heat illness, ergogenic aids, and body composition.
- Develop a weight control program based on the individual wrestler's percent body fat, urine specific gravity, and overall body weight. The NCAA program does not allow wrestlers to have their body fat drop below 5% and lose more than 1.5% of body-weight per week.

The NCAA's Weight Certification Program and Procedures

The NCAA has specific guidelines for athletes to follow in order to determine the Lowest Allowable Weight-One (LAW-1). The first step to LAW-1 is to determine

the wrestler's body fat percentage while in a fully hydrated state. This means all athletes must have a urine specific gravity test to ensure that they meet the maximum specific gravity for a hydrated wrestler of 1.020. The athletic trainer or doctor will use a refractometer or urometer to determine the urine specific gravity. If the wrestler's urine tests above 1.020 specific gravity, no tests to determine percent body fat may continue because the wrestler is considered dehydrated at a urine specific gravity of 1.021 and above. If the wrestler's urine specific gravity meets the hydration standard, the trainer will proceed with the program. The wrestler will step on a scale and have the weight recorded to the nearest tenth of a pound.

The second step to determine the wrestler's LAW-1 is to measure body density, or body fat. Body density can be measured one of three ways: using calipers to measure skin-folds, hydrostatic (or underwater) weighing, or the "Bod Pod." Once this has been completed, the number of weeks of weight loss will be determined, as well as the amount of weight that can be lost per week. The amount of weight loss can only reflect 1.5% of total weight per week. An equation will be used to determine the athlete's Lowest Allowable Weight-2 or LAW-2. Comparing LAW-1 to LAW-2 will give the athlete his or her Minimum Wrestling Weight (MWW).

Mathematical Example of Determining MWW

1. Urine Specific Gravity = 1.011
2. Body Weight = 138 lb.
3. Body Fat Percentage = 12%
4. Total Fat Weight = 138 lb. $\times$ 0.12 = 16.6 lb.
5. Fat Free Weight = 138 lb. $-$ 16.6 lb. = 121.4 lb

6. Lowest Allowable Weight 1 = $121.4 \text{ lb.} / 0.95 = 127.7 \text{ lb.}$
7. Number of weeks = 15 weeks.
8. $\text{LAW2} = 138 - (1.5\% \times 15 \text{ wks} \times 138) = 106.5 \text{ lb.}$
9. $\text{LAW1} = 127.7 \text{ lb.} > \text{LAW2} = 106.5 \text{ lb.}$

Therefore, LAW1=MWW=127.7 lb.

The National Federation's Weight Control Program

As far back as 1991, [Wisconsin](#) was the first state to implement mandatory body fat measurement, and losing no more than 1.5% of body weight per week for their high school wrestlers. The main goal of the Wisconsin program was twofold: to standardize body fat testing of wrestlers and to develop a program based on nutrition education geared to stop detrimental weight-cutting behavior. Wisconsin set the standard for weight management programs upon which the [National Federation](#) based their wrestling program.

And in 1998, Michigan developed the most comprehensive weight management program to date. Michigan's program offered nutritional education to coaches, a skin fold test for body fat that would not allow any wrestler with less than 7% body fat to compete unless authorized by a physician stating that the wrestler was naturally lean and had less than 7% body fat. The best part of Michigan's program was that it created a monitoring program for weight management.

Prior to 2003, most states used a 50% system for weight certification. Wrestlers had to have at least 50% of their weigh-ins at the weight they wanted to

compete at for post-season. While this seemed like a good idea at the time, problems arose. For example, weighing-in at one weight class above the weight you wanted to certify at was okay, but if you “bumped up” to the next weight class to wrestle somebody tough or not accept a forfeit after weighing in at one weight class higher (actually two weights up from certification), you would lose certification at the lowest weight and the weight you weighed in at became your new certified weight. Sounds confusing? This actually happened at a school where I know the coach and wrestlers well. A top ranked lightweight wrestler weighed in for a match at 119, to take a week off from cutting down to his certified weight class of 112. Rather than accept a forfeit at 119 he bumped up to get a match at 125, thus de-certifying himself for 112 and re-certifying at 119. This athlete had a very good opportunity to win his state tournament at 112 (as he had handily defeated the eventual state champion earlier in the year), but because he and coach made one minor error at weigh-ins an opportunity for a state championship was seriously minimized.

The National Federation of State High School Associations (NFHS) established in 2005 that by the following wrestling season all states would be required to implement a weight management program that included a specific gravity not to exceed 1.025; a body fat assessment no lower than 7% males/12% females and a monitored weekly weight loss plan not to exceed 1.5% a week.

The [Virginia High School League](#) (VHSL) officially required all wrestling programs to follow their weight control program in 2003 with guidelines similar to Wisconsin and Michigan; and these guidelines were adopted by the National Federation for all weight control programs. The VHSL program involves the following:

- Education of the medical, wrestling, and educational communities on nutrition and safe weight loss.
- Calculation of the lowest wrestling weight based on 7% body fat for males and 12% for females.
- Measurement of urine specific gravity to determine proper hydration level for body fat measurement.
- Monitoring weight loss based on a maximum of 1.5% of body weight loss per week.

This weight control program offers a print-out whereby all coaches and wrestlers can track where they must be each week, in terms of weight lost. It also shows both the minimum weight a wrestler can be at 7% body fat and establishes how much weight an athlete may lose per week to maintain the 1.5% body weight loss per week rule.

Additionally, the VHSL weight control program adheres to the National Federation rules on weigh-in times and procedures. In a dual, triangular or quad meet, schools will weigh-in shoulder to shoulder approximately one hour before the start time of the first match. In a tournament situation, weigh-ins may begin no sooner than two hours prior the beginning of the first round of wrestling. No longer may wrestlers miss their weight class to continue cutting weight before weigh-ins. Once a wrestler steps into the weigh-in room, he or she will have three attempts to make weight. If the wrestler is over the limit, he or she may not engage in any method to lose any more weight. In other words, they may not use the bathroom, spit, vomit, or employ other methods to reduce their weight. About the only thing the

wrestler may do is remove any undergarments or clothing they may have had on during their first weigh-in. If there is more than one scale available, the wrestler may challenge each scale to try and make weight.

Initially, the VHSL's program was met with resistance from the coaching community because many coaches did not understand the requirements for the policy. Some coaches did not feel it was fair that wrestlers could only lose 1.5% of body weight per week, or that some of their wrestlers would not be able to wrestle at the weight they wanted to, based on the tests conducted. The program was put into place to help reduce the amount of weight wrestlers could dehydrate and to promote safe, controlled weight loss. Through educational programs, more coaches began to understand the program and see the overall benefits.

As a coach, I still find myself looking at my athlete's weights and wondering if they can cut down to the next lowest weight class to improve their opportunities. I have to catch myself and realize that most of my wrestlers are fairly lean, with low body fat and cannot cut down to a lower weight class safely. It's a difficult cycle to break, but over time it will improve. Fortunately the weight control program print-out that I get from our athletic trainer after hydration and body fat testing tells me exactly how, when, and how much weight an athlete can lose safely.

There are two major concerns I have with the rules of wrestling which have very little to do with the weight control program. In 2005 many high school federations, including my own state of Virginia decided to not allow any weight allowance for matches or tournaments that occur after a snow or [inclement weather day](#). The rationale behind this decision was that wrestlers should not

be cutting much weight to begin with, so missing a day or two of practice will not harm their opportunity for making their correct weight. In many school divisions, when the weather forces the cancellation of school, athletic programs are NOT allowed to practice. For a wrestler, missing practice is missing a day of not being able to keep their weight under control. I do agree with the notion that wrestlers should be close to their weight because of the weight control program, but when they cannot practice because of unforeseen circumstances, they should not be punished.

My other concern about the weight control program addresses [the hydration test](#). Athletes must have their [urine specific gravity](#) (USG) testing to make sure they are properly hydrated in order to have their body fat measured. The VHSL program set a USG of 1.030 as the uppermost limit for hydration, advising that a USG at or below 1.025 as being properly hydrated. If a wrestler's USG is between 1.026 and 1.030, the computer program used to produce the lowest wrestling weight adds additional weight to compensate for what they would weigh if the athlete was "properly" hydrated. I know my athletes are hydrated; I make sure they keep water bottles with them during practice and that they have ample opportunity to get water if they need it. We work hard during practice and my athletes sweat, but they do replace most of their fluids. No one complains of being tired, or any signs of dehydration. However, a day or two before we begin testing for the weight control program, we run through a trial urine specific gravity test to make sure everyone is hydrated. I cannot emphasize how many normally hydrated wrestlers I have whose USG tests at 1.026 and above! To compensate for this, my wrestlers will drink plenty of water over the next few days before the test, thus driving their weights up and giving them a higher weight to start

from to get to their lowest weight. I don't think it is sensible for hydrated wrestlers to almost over-hydrate in order to pass the USG test. Raising their weights a few pounds means it will take longer for the athlete to get down to their lowest wrestling weight. Logic suggests some sort of middle position on this issue.

The following guidelines should be addressed to coaches, wrestlers, and families in regards to wrestling and weight control:

1. Take the focus off cutting weight as a mechanism for success. Rather, spotlight technique, strength and conditioning development.
2. Stress quality diet and nutritional habits, including proper hydration at all times.
3. Do not allow wrestlers to wear heavy layers of sweats or sweat impermeable clothing.
4. Develop in-season and off-season strength and conditioning programs. ([Strength Training Programs](#) | [Strength Training Workouts](#))
5. Follow all of the state guidelines for weight control programs.
6. Keep up to date on the latest [literature](#) regarding weight management, nutrition, and training.
7. If the wrestler, parent, and coach decide that losing weight is something they want to do, develop a safe program to cut the weight, rather than using starvation and dehydration.

A following chapter will explore recommendations to coaches, parents, and wrestlers regarding weight cutting, training, and nutrition. Remember, weight control programs are supposed to *help* the athlete control

their weight by having specific guidelines of a minimum weight at 7% body fat *and* a set limit of weight that athlete may lose per week. The rationale behind these goals is to allow the wrestler's body to adapt to a slow weight loss *without* losing performance levels. Dehydrating as little as 5% of body weight in a short period of time has been proven to show significant reduction in performance by wrestlers.

By following all necessary national and state guidelines, coaches are insulating themselves from potential liability lawsuits if one of their wrestlers is injured or dies as a result of not following the mandatory weight control program. Coaches need to make sure they protect themselves by following all of the rules. If a coach makes one poor decision regarding weight cutting and an athlete dies from that choice, he or she can and will be held responsible. Hopefully it will not come down to a negligent death lawsuit to hammer home the responsibilities of the coaching staff to play by the rules.