Cutting Weight in Combat Sports

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**Introduction**

In combat sports such as boxing and mixed martial arts (MMA), weight classes are established in order to make the matches fair by ensuring that the competitors are of similar weight and that neither one has an overwhelming advantage by virtue of sheer mass. In this context, cutting weight is a practice the athlete rapidly losing weight prior to a competition so that he will be able to qualify for a lower weight class and thereby gain an advantage, having naturally trained in a higher weight class but now technically being able to qualify for the lower one. The purpose of the present sample essay provided by Ultius is to discuss and analyze the practice of cutting weight in combat sports. The essay will begin with an overview of what athletes do when they decide to cut weight. Then, it will proceed to a consideration of the medical consequences of cutting weight, all of which are negative. Finally, the essay will reflect on whether the practice of cutting weight should even be allowed; this will include a discussion of the ethical aspect of the issue.

**1. Athletes Cutting Weight**

In order to understand the concept of cutting weight, it is important to know that there is a time lag between when fighters must weigh in for competition and when they actually have the fight. For example, according to Mastropierro, for the UFC, weigh-ins are typically on Friday mornings, whereas fights are on Saturday nights.[[1]](#footnote-1) So, the general idea of cutting weight is for the athlete to lose a significant amount of weight before the weigh-in so that he can qualify for a fight in a lower weight division, and to then regain that weight in the short time interval between the weigh-in and the fight (in the UFC case, two days and a night). In theory, this would put the athlete who cuts weight at a significant advantage over the athlete who does not cut weight, because the one who cuts weight would be able to regain that weight and thus hold a significant advantage over the one who weighed in at natural weight.

For example, if the qualifying weight limit for the cruiserweight division of the World Boxing Association is 200 pounds. This means that if an athlete who naturally weighs 230 pounds wants to fight in the cruiserweight division, then he would cut weight and lose 30 pounds rapidly in the weeks prior to the weigh-in for the fight. Then, in time between the weigh-in and the fight, the athlete would regain as much of that weight as possible. So, if the athlete were to regain (say) 20 of the lost 30 pounds before the fight, then he would be 220 pounds for the fight, whereas the athlete who did not cut weight would be only 200 pounds (his natural weight). This means that the athlete who cut weight would have an inherent advantage over his rival due to the fact that he will be 20 pounds more massive when going into the fight.

It is worth noting, however, that this advantage is strictly theoretical. This is because just about *all* athletes in boxing and MMA cut weight, which means that the advantage that one or the other combatant would have is effectively neutralized most of the time.[[2]](#footnote-2) The current situation is such that an athlete who did not cut weight would be at a serious disadvantage, due to the fact that cutting weight has actually become the norm and not the exception. The situation almost puts one in the mind of the prisoner's dilemma from game theory.[[3]](#footnote-3) In this scenario, two prisoners are in a situation in which both would be best off if neither one confessed, but where each one would be worse off if only one of them confessed than if only one of them confessed. In the classical dilemma, both prisoners confess, because neither of them trust the other one to not confess, and this results in a situation in which both are worse off than if neither of them would not have confessed.

For all practical purposes, a situation in which all athletes cut weight is identical to a situation in which no athletes cut weight. The only difference is that the official weight classes are several pounds shy of the actual weights of the fighters in those classes (for example, all boxers in the cruiserweight division would be closer to 220 pounds than to the officially listed 200 pounds). If all the athletes collectively agreed to stop cutting weight, then the result would be exactly the same in terms of competitive advantage as the current situation. However, due to the entrenchment of the practice of cutting weight, both fighters in a match cut weight instead of both of them not cutting weight, which puts the bodies of both fighters through traumas that could have been avoided if they had just both agreed to not cut weight—hence the resemblance to the prisoner's dilemma.

One imagines that at the beginning, cutting weight must have been a sort of technicality that was exploited by a few fighters in order to gain a competitive advantage. At the present time, however, the vast majority of fighters engage in cutting weight, which nullifies any competitive advantage that may have originally been produced by the ritual. So, now the ritual remains, even though there is no competitive advantage produced by it, insofar as everyone is doing it. If there were a rule that prevented *anyone* from doing it, then the functional result would be much the same, except that fighters would not have to put themselves through the process of cutting weight. Is this process something that should be eliminated from the combat sports? In order to answer that question, it will be worthwhile to turn attention to the evidence regarding the medical consequences of cutting weight.

**2. The Medical Consequences**

When a fighter cuts weight, one of the primary methods that he uses to achieve this objective is dehydration: about 60 percent of the human body is composed of water, and the weight that the fighter loses when cutting weight is primarily water weight.[[4]](#footnote-4) This fact in itself should be enough to trigger a medical red flag. After all, most people know that dehydration is a condition that is to be avoided, and that drinking an adequate amount of fluids every day is fundamental to maintaining good health. When cutting weight, however, the fighter implements a strategy of losing weight in water on purpose, and this involves consciously triggering the processes of dehydration.

According to the Mayo Clinic, dehydration can lead to serious health complications. For example, there is heat injury: "If you don't drink enough fluids when you're exercising vigorously and perspiring heavily, you may end up with a heat injury, ranging in severity from mild heat cramps to heat exhaustion or potentially life-threatening heatstroke."[[5]](#footnote-5) An athlete who triggers dehydration on purpose (as is done when cutting weight) can be expected to be at heavy risk for heat injury, given that he is working out and training even as he is dehydrating himself in order to lose weight. Other complications include problems with the kidneys and the urinary tract, seizures, and even shock triggered by low blood volume (since blood is mostly composed of water). Dehydration can thus devastate the human body and seriously jeopardize health; and insofar as cutting weight is essentially premised on triggering dehydration, the face-value conclusion must be drawn that this is a quite dangerous practice that should be treated with an adequate level of concern.

In one tragic case back in the late 1990s, three wrestlers at the NCAA level died as a result of attempting to cut weight.[[6]](#footnote-6) They died from hypothermia: essentially, they forced their own bodies to sweat (in order to lose weight) to such an extent that the temperature levels within their bodies plummeted to fatal lows. This resulted in failure of the kidneys and the heart, which ultimately resulted in death. This clearly shows that the human body is not meant to undergo the stress of cutting weight, and that there is serious danger involved in the practice. In order to change weight so rapidly, it is generally necessary to put the body under extreme conditions and traumatic practices, and these things come with a serious risk of permanent illness or, in some cases, even death.

The magnitude of the problem is made clear by considering the basic physiological numbers. If water composes 60 percent of the weight of the body, then consider the situation of an athlete who weighs 150 pounds but would like to cut weight to hit 140 pounds. Most of that 10 pounds lost would be in water, and 60 percent of 150 pounds is 90 pounds. So, 10 divided by 90 is 11 percent, which is the proportion of water within the body that the athlete would be losing as a result of cutting weight. But as has reported: "By medical standards, any water loss of more than 5 percent is considered serious. Anything more than 10 percent is cause for a trip to the emergency room."[[7]](#footnote-7) In the case under consideration here, though, the athlete has lost about 11 percent in water weight—and he not only does this on purpose, he does this *repeatedly* over the course of his career as a fighter. The magnitude of the health implication thus begin to come into focus.

In principle, there is no legitimate medical professional who could endorse the practice of cutting weight. When it comes to losing weight for health purposes, one should definitely *not* focus on losing water weight; and more than that, losing the weight is meant to be a sustainable practice that endures over time, as opposed to something that is done by traumatizing the body for a week. More than that, healthful weight loss is meant to keep the weight off, whereas when it comes to athletes cutting weight, the whole point is to gain the weight back as quickly as possible (i.e. between the weigh-in and the fight). There is no desirable health effect that could be produced by the practice of cutting weight, and there are clearly a slew of health risks, as has been discussed above. From the medical perspective, then, the only conclusion that can be reached is that cutting weight is a practice that should be avoided.

**Mental Health Consequences**

The clear negative consequences of cutting weight for physical health are matched by the potential negative consequences for mental health as well. In general, maintaining the chemical homeostasis of the body is crucial for mental stability, and dehydration is surely one way in which that homeostasis is disrupted. Moreover, it is worth bearing in mind that the athlete who cuts weight is engaged in what is essentially an unhealthy relationship with food and water, following a sort of binge-and-purge pattern in reverse; and this could easily be correlated with serious eating disorders. In short, there is every reason to suspect that cutting weight cannot be any better for the mind of the fighter than it is for the body of the fighter.

According to Matheny, the psychological toll of cutting weight can be a heavy one: it "dramatically increases the risk of eating disorders, and causes serious hormonal imbalances [and] mood swings."[[8]](#footnote-8) In general, mood stability is based on the stability of the rhythms of the body, which themselves are based on the regularity of processes such as eating, sleeping, and exercising. When cutting weight, the athlete essentially sends his body into a crash on purpose, radically changing his diet and tricking his own body into dehydration. This can clearly have serious effects not only on metabolism but also on the brain, resulting in the consequences listed above. Of course, eating disorders are also involved, given that in a way, cutting weight *requires* the implementation of an eating disorder: it is simply not natural to treat the body in the way that an athlete must treat it in order to cut weight.

**3. Should It Even Be Allowed?**

It is thus safe to say that the grueling practice of cutting weight is an entrenched part of the culture of boxing and MMA. Below, the medical consequences of the practice will be considered, and the conclusion will be drawn that the practice can be very hazardous for one's health. And yet one must wonder whether this itself is part of the reason that cutting weight has become entrenched in combat sports. To cut weight in the way that these athletes do this, while it can be quite dangerous, is nevertheless a demonstration of exemplary willpower and even capacity for suffering, which are traits that are generally valued in human beings in general and athletes in particular. It is almost as if the gruesome spectacle of watching someone lose 20 pounds and then gain it back in a day has become part of the thrill of combat sports themselves, for better or for worse.

Moreover, under current conditions, weight cutting is clearly incentivized due to the fact that it is in fact correlated with advanced performance results. According to research reviewed by Franchini et al., there is some evidence that fighters who cut weight more rigorously than their rivals do in fact often gain a competitive advantage and thus rank higher within their sport relative to fighters who do not cut as much weight as a result of having more concern for their health.[[9]](#footnote-9) If this is the case, then the perverse implication is that athletes are *rewarded* for *not* caring about their health, and this incentive structure is built into the structure of combat sports such as boxing and MMA. Essentially, the situation is such that an athlete must choose between being the best fighter he can be on the one hand, and taking care of his health on the other. It seems fairly clear that this choice in this form should not even exist, and that there is something wrong with a general situation that forces athletes to make this choice.

**A Comparison to Football**

Of course, there are other sports in which the risk of serious physical harm is inherent to the game. Football obviously comes to mind, especially in light of recent findings regarding the effects of concussions on permanent brain injury. There are both terrifying statistics and moving personal stories regarding the relationship between playing football and the development of chronic traumatic encephalopathy.[[10]](#footnote-10) Essentially, when one signs up to play football, one is signing up to repeatedly get one's head jarred and bumped over a long period of time, and this is a health risk that is inherent to the game. Indeed, football may well be on its way downhill because of parents who would now be much more cautious about letting their children play. That said, though, it is also clear that one can only address this risk so far without altering the fundamental nature of the game itself.

This is *not* the same as the case with weight cutting in the combat sports. In fact, fighting itself comes with its risks of permanent injury, and that risk is in fact part and parcel of engaging in combat sports. The risks associated with weight cutting, though, are not inherent to the game itself, insofar as it is not clear why weight cutting should even be a thing in the first place: it is an artificial part of the game that is not essential to the internal structure of the game itself. Indeed, weight cutting could be eliminated altogether by simply removing the time gap between weigh-in for a fight and the actual fight, since then there would be no time for the athlete to regain all the weight he had lost by cutting weight. This is a simple fix that could eliminate this entire dangerous practice from the combat sports, and there would seem to be no reason why it should not be implemented.

**Calls to Stop Cutting Weight**

In this context, the argument can easily be made that cutting weight is a practice that should be banned from combat sports, insofar as we all agree that the grotesque spectacle of having athletes regularly torture their own bodies (over and above the pain already inherent in combat sports) is not something that is to be encouraged by the culture. A very easy way to prevent cutting weight would be to simply implement a rule whereby the weigh-in for a fight immediately precedes the fight, and whereby a person who does not *literally* qualify for the relevant weight class right before the fight is just not allowed to participate in the fight. This would eliminate the practice of cutting weight, since the only advantage of the practice consists of being able to regain all the lost weight in the time between the weigh-in and the fight. If that time were eliminated, then the practice of cutting weight would also be eliminated, since there would be no benefit to actually fighting in a dehydrated state where one is 20 pounds less than one's natural weight.

According to Holland, the ONE Championship for MMA implemented a procedure for eliminating the practice of cutting weight from the tournament.[[11]](#footnote-11) This involved measuring fighters' hydration and weight levels throughout the week before the competition, such that wild changes in either metric resulted in the automatic cancellation of matches. The result was that fighters remained at their natural weights and fought at that level. The fighters were thus healthier, and the general consensus was that the performances were better as well. In short, it is untrue that there is no way to abolish weight cutting within the combat sports. There are simple, commonsense things that can be done, such as simply stipulating that wild fluctuations in weight between the weigh-in and the match are not acceptable, or such as monitoring health metrics in the week prior to the match. The main barrier to getting rid of cutting weight in combat sports may be cultural in nature: that is, many people may have the misguided notion that cutting weight is one way in which athletes prove their "toughness." In fact, the practice severely weakens athletes and thus detracts from the inherent quality of the sports.

The recommendation can be made, then, that cutting weight should be abolished in combat sports. There is of course the simple ethical argument that cutting weight puts athletes in unneeded danger and harms their health for no reason, and that this is inherently immoral. The medical evidence regarding the effects of dehydration on the human body is frankly alarming, and it is a travesty that athletes would be pressured into subjecting themselves to such a practice. Moreover, it is clear that cutting weight actually has no intrinsic relationship with combat sports themselves, and that by now the effect of competitive advantage is neutralized since almost everyone does it. And finally, it is clear that there are some very simple rules that could be implemented in order prevent the practice of weight cutting. The only reasonable conclusion that could follow is thus that those rules should in fact be implemented.

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