



## Myths of Fighter's Cardiovascular Conditioning

At Coro Fitness, leading sports conditioning and personal training services company in Aventura, Hallandale Beach, Sunny Isles Beach, Miami Beach, Miami, Coral Gables, Coconut Grove, Ft. Lauderdale and outer lying areas in South Florida and Manhattan, we know that one of the biggest misconceptions of fighters is that they must be aerobically fit. In part this may be true, but it depends on how one becomes aerobically fit that matters. If I would have to gamble on how many fighters do long-slow-distance cardio work, I'm willing to bet my house that most would admit to doing some form of long-slow-distance running or cycling.

The idea is to develop the cardiovascular system in a way that does not fail in combat. Although everyone agrees on the fitness and wellness benefits of a good cardiovascular training program, we have to examine just what kind of cardiovascular adaptations are specific to combat. Traditionally since the old times, combat athletes have engaged in long hours of "road work," running several miles (i.e., 3-7) to "develop" combative stamina, but the training methodologies have progressed immensely during the years. Therefore specific training for combat should change too and be adapted with the progress of time.

Although this approach to caloric burn is effective and may be needed in the case of fighters carrying excessive body fat, it does little to develop the type of conditioning needed in combat. To better and fully understand this concept, it would be necessary to understand how the body provides energy, but I do not want to turn this article into an exercise physiology class and I will avoid that technical part, to keep it simple in a way that everybody can understand it. Again, long slow distance training is not the optimal method of training to develop the type of adaptation that allows combative athletes to better sustain the effects of repeated high power outputs.

Many of our Coro Fitness clients involved in fighting sports in Aventura, Hallandale Beach, Sunny Isles Beach, Miami Beach, Miami, Coral Gables, Coconut Grove, Ft. Lauderdale and outer lying areas in South Florida, Manhattan know that there is no doubt that sprints are, by far, the preferred method of running to train for the explosive and intermittent nature of combat.

When combat athletes, especially grapplers, are in the middle of it, they are producing high energy with the major core muscles and limbs. These specific areas start producing lactic acid at the local level. On the mat, it translates that if you are working for control from your opponent's back or are holding on to your opponent when they have mounted you, you may require high energy levels for 30 to 60 seconds. In this situation, your arms, legs and core will be "going acidic" very quickly. They will start to burn and eventually your body prevents you from contracting those muscles.

What happens next?

You slow down, lose position, or get grounded and pounded! If you are not physically prepared for combat with specific training, there are good chances you are going to lose.

The systemic and lower-body adaptations developed by sprinting protocols are certainly appropriate and needed by the combat athlete, also to develop the ability to regulate lactic acid in the lower body. However, when it comes to developing the local muscle adaptations needed to deal with high lactic acid concentration that results from combative training and competition, running and cycling may not be the most efficient way to train the cardiovascular system.

Coro Fitness clients based in Aventura, Hallandale Beach, Sunny Isles Beach, Miami Beach, Miami, Coral Gables, Coconut Grove, Ft. Lauderdale and outer lying areas in South Florida, Manhattan, involved in fighting sports, in order to more specifically train the cardiovascular system as well as the local muscle effort, we have to teach the body how to adapt to high lactic acid production at the systemic level and at the local muscle level. I believe that the best way to do this is by creating "fighting circuits", that in my opinion is the best type of training for developing the ability to deal with the cardiovascular and metabolic challenges of combat competition and training.

The process of developing a fighting circuit is easy to understand, but it is a bit challenging to actually design. To begin, it is necessary to study a tape of yourself and opponent to see the strength and weaknesses, and then design a program for the specific event and opponent. Every discipline has different characteristic and every fighter has different characteristics and style. In some matches more sub maximal isometric contractions (Abu Dhabi) are used, while others are forced to be more explosive (Greco-Roman wrestling). Boxers, Thai Boxers and some MMA (mixed

martial arts) athletes prefer standup, requiring more core and lower-body explosiveness, others instead prefer groundwork and submission, requiring more isometric holds. When studying the "perfect match," it is necessary to look at time intervals between action and rest ratios. It is also necessary to look at what type of intensity is required during the work intervals and what type of rest is provided (active or inactive recovery). In addition, it is necessary to observe the frequency and type of muscle contractions and body movements that are utilized.

With this information, I can put together a circuit to fit the specific cardiovascular demands of the sport and the athlete's style.

I see it all the time with combat athletes that come to me, mostly from Aventura, Hallandale Beach, Sunny isles Beach, Miami Beach, Miami, Coral Gables, Coconut Grove, Ft. Lauderdale and Manhattan, who want to take their training to the next level, they usually have poor physical conditioning but are very good at long slow distance running or cycling and lifting weights in a bodybuilding fashion, that maybe good for a bodybuilding contest but not to prepare you for combat!

Long slow distance cardiovascular training will do very little to prepare a fighter for the intermittent nature of combat (e.g., wrestling, Thai Boxing, MMA and other forms of fighting). Long-distance work can play a role in the weight management of a fighter throughout the year in order to be in the right weight division, but proper nutrition is an easier way to that and you will easily avoid damage to your joints and lower back due to the constant pounding, especially for heavy athletes.

Therefore, my concept of conditioning for a fighter must change. Sprints and specific fighting circuits must rule the conditioning of a fighter from a cardiovascular and power endurance perspective.