

FIGHTING TALK

COMBAT SPORTS & CONDITIONING

RUNNING: FRIEND OR FOE FOR CONDITIONING?

BY MARCO MASTROROCCHO

In a previous column, I wrote an article about combat sports training myths.

One myth was about about running. Although I pointed out it wasn't inherently bad some people wrote to me saying they had ditched the practice for good. I therefore think a little clarification is necessary.

Running **is not** something to be avoided. It has been part of fight conditioning for decades and for good reason. But you must use it correctly.

Running is part of many fight clubs' training regimes and many students regard it as something they must do. But they often adopt a simplistic approach that lacks specificity or care for their physical wellbeing.

Before we look at what you can do to get the most out of running, let's look at what running actually involves.

THE BIOMECHANICS OF RUNNING

Running is a single-limb activity because you alternate legs while doing it. Power comes from the extension of the hip, rather than pushing with the toes, as is sometimes thought.

When you run all your bodyweight crashes through your front foot when it hits the ground, causing shock that travels from the mid-foot and toes, through the ankle, along the shin and knee, all the way to your pelvis, including your hip flexors, lower back, Iliotibial (ITB) band and glutes. It's therefore of paramount importance to know how to run properly.

Weight-bearing exercise is great for strengthening the skeletal system. We start doing it naturally as children but if you watch kids run they do it instinctively. They don't engage the hip flexors and do not use the heel-toe action when striding.

Kids do not even raise their knees but rather fall into the movement, displacing the centre of gravity by leaning forwards (google "pose running"—the first video option that appears is interesting stuff about running technique). As we grow running becomes a more conscious action, hence the importance of doing it properly.

Unless you're an expert runner, you need to limit the amount you do. You also need to know about stride technique, shoes, contact points according to speed, stride frequency and breathing.

DISTANCE RUNNING OR INTERVALS?

Old-school fighting gyms often tell athletes to run 10 km or jog for an hour. This can cause serious injuries but many fighters ignore little niggles that could eventually cause structural damage. They are, by nature, people who tend to go the extra mile and push themselves. They take the pain and keep going; brave, but foolish.

The results can be serious. Inflammation of the tibialis (shin splints), lower back pain, ITB inflammations and hip flexor strains caused by poor stride technique or shoes are just a few



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potential problems.

All these injuries can delay or impair your training and performance. For instance, your hip flexor enables you to lift your leg and whip it round for kicks. If it is damaged you're in real trouble. You'll be in constant pain every time you raise your



Learn proper technique to avoid injuries

STEVE MITCHELL

leg or quickly check or change direction.

Fighters usually run to improve their stamina or to lose a few kilos to make weight but if it's not done to the right intensity, there's little point.

Distance running teaches the body and mind to stay focused and not to give up. It also boosts the cardiovascular system, improves the oxygenation of cells and tissues, size of

mitochondria, lung strength, and efficiency in delivering nutrients to the body. But adaptations occur quickly so if you don't keep varying your approach you soon hit a plateau.

That's when running becomes something to tick off a to-do list rather than an activity that derives benefit. Yet many people keep plodding along, running in their comfort zones rather than with intensity. Their training

system, therefore, becomes lazy—even if they run for miles.

Remember, training should reflect the needs of a particular phase of your training. It is, therefore, important to vary the patterns and adjust things to suit the changing requirements of the season. The following table gives some general guidance on the best forms of running during training phases:

TYPE	DURATION ¹	DISTANCE	WHEN	VOLUME/% OF EFFORT
ENDURANCE	30-45 MIN	6-9KM	PRE SEASON 4 WEEKS	HIGH/MODERATE (BP ²)
CYCLIC INTERVALS	30-40 MIN	5-8KM	FIRST 4-6 WEEKS INTO PREPARATION	MEDIUM/50-70% MAX
ACYCLIC INTERVALS	30-40 MIN	5-7KM	4 WEEKS (AT 8-12 WEEKS FROM FIGHT)	MEDIUM/60-80% MAX
HILL SPRINTS (CYCLIC AND ACYCLIC)	ROUNDS OF 3-5 MIN	SETS OF 50-100M	4 WEEKS (AT 6-8 WEEKS FROM FIGHT)	LOW/100%
FLAT SPRINTS (CYCLIC AND ACYCLIC)	ROUNDS OF 3-5 MIN	SETS OF 50-100M	4 WEEKS (AT 4 WEEKS FROM FIGHT)	LOW/100%

¹ Times are variable according to the discipline and fight duration. The time frames are theoretical, since we all know that is not always possible to have long notice before an event; we adapt it to what we have to work with. Ideally though, it would follow the above structure.

² Base Pace = 50% of your max sprint speed measured on track or treadmill



Let's assume you're training for an MMA title fight that lasts for five, five-minute rounds. Your target is, therefore, five minutes of high intensity acyclic activity, repeated five times with only one minute of rest in between.

Your preparation should begin with non-stop activity of the required amount of time +30-35%. The

average runner covers 1 km in five minutes, so five rounds of five minutes is 5 km in total. Let's assume some fatigue at the beginning of the preparation phase and bring that up to 6 km. To create a good base, we raise that total by 30-35 % to around 8 km although the exact requirements can be amended to suit individuals.

Towards the end of the preparation phase, I'd ask my athletes to cover the same distance in the fastest possible time to increase lactate resistance.

The volume of running then decreases while the intensity increases in the run-up to the fight.

For those resorting to running to lose weight in the last few weeks before a contest, I have one final note. Running in the heat, or with plastic bags under your clothes to sweat more are harmful solutions. You'll only lose water and minerals, not body fat, not to mention your body will overheat.

Often being overweight is related to diet so that is what you should be focusing on. If your coach has let you get into the last few weeks overweight, then something's not right. Train wise! **M&F**

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