

“It hurts!!!”

Peter Sandery Level IV ATFCA Coach

How often have I heard this during or shortly after a demanding training session. Of course it “hurts” - if it didn’t, everyone would be running fast and smiling as they did so. Actually, what we usually feel is a high level of discomfort rather than actual pain – the body’s way of trying to put you off continuing the activity that caused the sensation. When you place a sustained demand on the body, the immediate response is for the brain to send a signal to lower that demand. Part of the object of training is to learn to tolerate the discomfort of training demands that lead to improved performance. It is important to be able to recognise pain associated with tissue damage that results from too great a demand on the body or sudden trauma and to reduce or cease training to reduce the potential for serious injury. That is different to experiencing a desire to reduce discomfort from a demanding activity. The training process will result in some tissue breakdown as muscles and connective tissue respond to the demands placed on them and rebuild to better withstand those demands. This will usually be experienced as post-exercise stiffness and recovery periods should be built into a training program to allow the body to rebuild tissues.

Pain is a subjective sensation, not necessarily proportional to the extent of tissue damage. Sometimes a small injury area can produce a feeling of intense pain or a larger area may result in only mild pain. It usually depends where the injury occurs and the density of sensory nerve endings at that site. A hard training session that feels very painful to do alone can be more easily accommodated if that training is done as part of a group - perhaps misery really does love company. Simply being with other runners and focussing on keeping pace with someone else seems to reduce the mental demands of some sessions.

Why the above discourse on things that hurt? The session that will now be outlined is one of those that, for most people, is perhaps better done with a group. There are several variations on variable pace training, with alternating 200m intervals being just one of these. Running multiple 200m distances at an average speed something like 10k race pace doesn’t sound too demanding and would not place too much of a demand on a trained masters runner. The key word in the above is “average”. Consider a session where the task is to run 2 or 3 sets of 6 x 200m with the six 200m distances run continuously, alternating between 800m race pace and 1/2 marathon pace, with 3-4 minutes recovery between sets. Suppose that you run 800m in 2:40 and a 1/2 marathon in around 96 minutes. That means that your 200s will alternate between 40 secs and 55 secs. You will average 47.5 seconds for the 200s, a pace that would give you a 10k race time of a little under 40 minutes. You will find that it is more demanding to run the alternating times for 6 x 200m than it is to run 1200m at a constant 10k pace. Why should this be so?

When you run the first 200m at 800m pace, you start from rest and your body has to use the anaerobic energy system to get up to pace and sustain it because your heart and breathing rates take time to get up to a level where the aerobic system can make the major contribution. When you drop the pace back for the second 200m this process continues until the aerobic system is matched to that pace (but probably with

little or no excess capacity to recharge the anaerobic system). You then move into the second faster 800m and the aerobic system has to increase energy output to meet most of the increased demand. From there on as the demand rises and falls, the breathing and heart rates fluctuate with the changes in that demand. A recovery of 3-4 minutes of walking or slow jogging allows the anaerobic system to be more or less replenished and a second set of six 200s can be done. The alternating demand improves the capacity of the aerobic system to respond to demand and that should contribute to faster 1500m, 5k and 10k race times.

Work out your own times for the alternating 200s and try the session and you should see why doing this session with training companions is an attractive option.

As you get better at meeting the demands of the above session, you can vary it by running a third set or by staying with two sets, but with eight alternating 200s instead of six. You can also try alternating 400s instead of 200s, but with the alternating paces dropping to 3-5k and marathon pace.

(The above first appeared in SA Masters News, December, 2005)