**Training to achieve a goal: Peter Sandery**

If you don't have a goal, then it really doesn't matter how you perform at training. Not only do you need to have a goal, that goal needs to be demanding, but achievable if it is to provide motivation and personal satisfaction. A couple of years ago, while walking from the car park to the start of a Barossa half marathon, I asked the person I was walking with what time he aimed to do in the race. He replied that his target was 1:26. I then asked what his recent best 10k time was and his reply was 43 minutes. It doesn't take arithmetic genius to realise that there is a bit of a conflict in these two answers. His argument was that he would be able to "lift" his speed for the race. Possible, but highly unlikely was my assessment at the time. He was in front of me for the first km, but that was the last I saw of him until the end of the race when he finished in around 1:35. The above times are approximate, but it is their relationship that matters.

If you can't sustain the pace required to achieve a half marathon target time over less than half that distance, you shouldn't expect some miracle to occur to allow you to achieve your goal. Training to run distance races requires development of the capacity to run comfortably at the target pace over shorter distances. "Comfortably" is a relative term as any race pace training will involve a level of discomfit. There is a difference between discomfit and pain, the latter usually being a signal from the body that some form of injury has been sustained. One of the objectives of training is to improve running pace (the physical component), another is for you to be confident that you can sustain this pace (the mental component). The body has in-built mechanisms that will, in the absence of conscious effort on your part, move your state from one of uncomfortable to more comfortable. You don't have to like the discomfit that comes from sustained effort, but you do have to be able to accept it as the price to be paid for a good performance.

Changes in either training intensity, total distance, or both should be undertaken gradually with an increase of no more than 10% per week to minimise the possibility of injury. Two types of sessions that a person of masters age may find useful to incorporate into their training program to improve 5/10/21.1km performances are as follows:

**One kilometre repetitions**: for example 5 or 6 x 1000m at target race pace with initial recoveries of 4 minutes. Over a period of several weeks with this recovery time, slowly decrease your time per km. Repeat the process, reducing the recovery time to 3 minutes and then to 2 minutes. Try to run all 5-6 reps in the same time in any session. If you fade over the session such that the last km is significantly slower than the others, then what you will carry from the session as your last impression is a poor performance - not a good result. One way of increasing your average pace is to run some sessions with the first and last 50-100m at a pace faster than your target pace and the rest of the distance at the target pace. This also provides race practice. Aim for small, but consistent gains in pace. A drop of 4-6 seconds per km over a 10 week period may not sound like much, but if you can maintain that pace with your new impression of "comfortable", that could represent an improvement of a minute in your 10km race time.

**Sprint sessions:** 6-12 reps over distances of 100-60m, run at around 90-95% effort, with slow walk back recoveries of approximately 2 minutes. Sprint sessions can result in muscle tears and care needs to be taken to warm up thoroughly before commencing them and to react to any twinges by reducing demand or stopping the session if pain persists.

The aim of these sessions is to run as fast as you can while maintaining a smooth style. Why would a distance runner need to sprint? This question has been addressed in previous training advice notes. In the context of the current topic the reason is to improve running economy. To run at, or close to your maximum speed requires your neuro-muscular system to function in as coordinated a manner as possible. This translates into improved running economy at lower speeds and improved economy means more speed at a given level of oxygen consumption.

If you engage in any sustained demand on the body, there will be several responses to that demand. There will be gradually increasing fatigue (of muscles and nerves) that generates an unconscious reaction to reduce the discomfit by degrading your pace. This is where concentration is required to monitor how you are feeling and linking that to your training. If you are running at a pace you have trained to sustain, you will have the knowledge that you can do in a race what you have achieved in training. A race shouldn't be a step into unknown territory, but rather a confirmation of what your training has prepared you for. It should also provide motivation to continue to do the high intensity training that running at your best requires. If you don't race, there is no clearly defined test for the training you do. Each race is itself a training exercise, something you should learn from and carry that into your training and the next race.