Elements of a training program – sample sessions: Peter Sandery

The type of training program that you put together for yourself depends on what you want to achieve and what you are prepared (or are able) to put into the training. Many SA Masters Athletics club runners want to run in summer and winter competitions and across a range of events. Most just compete in the SAMA summer T&F and winter road and cross country events, others also enter national, regional and world championships.

The training sessions that are outlined below may help you to plan a program to meet your needs. There is no such thing as a "one size fits all" when it comes to a training program. You will have to determine what your various race speeds are (what you can do now and what you aim to achieve in the short and longer term), how many repetitions you can manage to start with and the maximum you can do, and the recovery times that are appropriate for you.

The Golden Rule of training is that the body responds to demand and does so in quite specific ways. You have to work out the response you want (your goal) and work backwards to the demand that will move you in that direction and hence the sessions that will achieve that most efficiently. Avoid the temptation to become a training "junkie". It doesn't follow that, if a session produces good results, expanding that session will produce better results. The law of diminishing returns applies, particularly as the body ages. There is a volume/intensity point in all training where the risk of injury outweighs the physical benefits. Recovery should be a programmed component of all training and recovery takes longer with increasing age, limiting the training intensity and volume mix that your body can sustain.

It is not just what we think of as the physical body that needs and responds to demand. Mental fitness - the ability to tolerate discomfort, the capacity of the brain to coordinate smooth efficient movement at a variety of running speeds, the discipline to train consistently and race "smart" - is no less physical than than muscle fitness. Changes in the brain are as important as those in muscle. Without appropriate nerve signals from the brain the muscles do not function.

Masters runners can be categorised in two broad classes – experienced athletes whose best times are in the past and athletes who are still building their fitness towards their best times. For the former group, aiming at race times of the past is an exercise in futility. It is better to aim at an age-graded percentage for each of your events. That gives a target that can be achieved and allows you to better judge your performance relative to your age.

The structure of your training is likely to vary throughout the year, depending on the type of racing you want to do. It should still include the basic components that maintain maximum speed, speed endurance over distance and the ability to run as fast as your need to when you need to.

The program below is based on the one I use with the group I coach and run with. It is a suggested weekly program for fit runners, during the summer season, incorporating a total distance of around 45km/week:

Mon – intervals (2-4km) plus warmup etc.
Tue/Fri – 10km hills run with short sprints on uphill and some downhill sections
Wed – SAMA races
Thu – intervals (4-6km) plus warmup etc.
Fri/Tue – rest day (passive rest or alternative activity - swim, cycle, walk, gym)
Sat – 5 km flat run, alternate kms between vVO2max pace and ½ marathon pace
Sun – 15km run at conversational pace

This weekly program can be adjusted to meet your level of fitness, your competition plans and the time you have available for training. The elements of this training program are aimed at speed maintenance, vVO2max improvement and good pace judgement. A small sample set of some of the interval sessions we use is outlined below. Adjust these interval sessions to meet your needs, i.e. run fewer/more repetitions, decrease/increase the pace or take longer/shorter recovery times to suit your level of fitness. Do not run intervals if injured or ill. Remember that discomfort is a part of interval training, pain is not. Stop if you experience pain.

Hydrate adequately before and during training and run sensibly in adverse conditions. Use the SAMA hot weather policy to guide whether you train or not and the level of demand that is sensible in prevailing conditions.

Over a period of time, your training should aim to develop/maintain cardiovascular fitness, neuromuscular efficiency and the energy systems that power the body. Briefly, the aerobic system is the main energy source for extended periods of demand – distance races primarily. The anaerobic system has two components. The alactic (or creatine phosphate CP) system is primarily used for powerful movements that are sustained over short periods of time – 60m, 100m and to a lesser extent, 200m sprints. The lactic anaerobic system is important over race distances from 400m to 1500m and specifically the 800m race. It is a self-limiting system. Sustained demand leads to fatigue, high levels of discomfort and muscle cell conditions that quickly limit the energy output of the system. All three systems are active for all movements; it is the relative contribution of each to overall energy needs that changes with the level of demand and the time for which demand is sustained.

In the interval sessions listed below, vVO2max is the best speed you can sustain aerobically, essentially your 3k race speed. Sprints at 95-98% maximum sprint speed are meant to be done at the best speed you can manage while running smoothly. The order of the sessions is not intended to specify a required sequence. Fit them into your program to provide the type and range of demand that meets your needs.

The {outcome} intended from each session is just the main outcome. Most sessions will also have secondary outcomes.

Session 1 5x100m @ 98%, 5x200m @ 800m pace, 5x100m @ 98%; 100m walk recovery in 60s within sets; 2min, 100m slow walk between sets.
[2km] {CP (alactic anaerobic) capacity, neuromuscular training}

Session 2 3 x (3x400m @ 1500m pace, 100m walk in 60s recoveries), 3 minutes between sets.
[3.6km] {aerobic capacity/lactic tolerance}

Session 3 6 x (100m, 200m, 100m, continuous) @ 98-95% effort, smooth acceleration and running; 100m walk in 60s recoveries.
[2.4km] {anaerobic capacity, neuromuscular training}

Session 4 1000m, 800m, 600m @ vVO2max pace, 2 min recoveries; 2x400m @1500m pace, 100m walk in 60s recoveries; 4x200m @ 800m pace, 100m slow walk in 2 min recoveries.
[4.0km] {aerobic capacity/lactic tolerance}
The aim is to increase the pace as the rep length and recovery times decrease, but keeping it largely aerobic until the last set of 200m reps. These have a longer recovery to assist keeping the speed up.

Session 5 15x100m sprints, rolling start, 98% effort, recovery of twice your 100m sprint time (jog or walk).
[1.5km] {CP (alactic anaerobic) capacity, neuromuscular training}
Focus on running as smoothly as you can for each sprint. Use your arms to drive movement and try to reduce footfall noise.

Session 6 16 x 200m @ 800m pace, recoveries (walk near start of next rep) starting at 90s, decreasing for successive reps by 5s to 20s.
[3.0km] {lactic tolerance}
Aim to keep your 200m reps at a constant pace. It will become more difficult to this towards the end of the session.

Session 7 15x300m @ vVO2max pace, 30s walk in a loop recoveries.
[4.5k] {aerobic speed maintenance}

The 30s walk recovery is there just to allow your breathing and heart rates to drop so that they have to be brought up again at the start of each rep. This makes the session more demanding than a straight 4.5km run at vVO2max pace.

Session 8 10 x 300m @ 1500m pace, 100m walk in 60s recoveries.
[3km] {vVO2max improvement}

Session 9 5x1000m @ 5k race pace, 3 min recoveries between sets.
[5km] {vVO2max improvement, pace judgement}
You can vary this session by sprinting the first and last 50/100m of each rep with the rest of the 1000m done at an aerobic pace.