

## **Masters Athletes - middle and long distance running**

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Masters athletes are not simply older versions of open age athletes. This may be a self evident statement, but it is useful to keep it in mind when you are thinking about your training and racing. A training program for young athletes is unlikely to be suitable for masters athletes.

As a group, masters athletes have physical, family, work and social characteristics that differ from younger, developing runners. This means that the mix of demands on their time and energy is also likely to be different. Many also have different goals to younger runners with respect to what they want to achieve from their running. The following is drawn from experience over more than 7 years with a group of runners, most of whom are aged from the early 30s to early 70s. Group size varies from 12 to 25 on any given night. The size of the group and the variation in abilities and personal goals requires a common, but adaptable set of training units. The established group self selects for small group activities (or does so with a little direction) and newcomers are usually placed with 'mentors' until they are able to identify members of the group of similar ability. I use a coaching approach that allows me to work through the group talking to each person about their goals and performances over a period of several weeks and to provide specific advice where appropriate. I train with the group and this gives me the opportunity to assess running techniques dynamically and provide advice to individuals during recovery periods.

A series of 6 week programs is provided to each member of the group. This a printed program occupying one side of a A4 sheet, usually with some form of specific training advice or explanatory notes on the reverse side. Each week has two sessions of speed work/interval training and 4 other days including a race and/or longer distance work, with one day for recovery. Each program allows scope for individualisation. Depending on the time of year and major races that are of interest to many of the group, the 6 week programs change to meet the demands of racing that is predominantly either track or road/cross country.

The composition and size of the group fluctuates over a year for several reasons. There have been losses when people move intra- or interstate or decide to stop competitive running. Some move to other training groups that better meet their developing needs – eg to gain sprint training. Throughout the year there are also gains as new people try the training programs offered, with some finding the demands greater than their needs and others deciding to become members. The overall program offered therefore has to be adaptable to multiple points of entry.

Some group members are people who started athletics as teenagers and have continued in the sport. Others may have been active when young and then dropped out for various reasons - career pressures, to participate in other sports, to have children, etc - and who have returned to running. A third group consists of those who have decided to take up running as masters athletes, not having experienced the sport before. Consequently, some have recorded race times that they are unlikely to achieve again while others still have their best performances in front of them. The motivational needs of individuals are influenced by the extent and nature of their athletic experiences. Consequently, comparison of current performances with age graded performance targets is generally of greater value than comparisons with previous achievements. Retaining or improving age graded performance with increasing age provides realistic, achievable race goals and hence training motivation.

For most of the group, running is part of their life style and they want to be able train and race all year round, track in summer and road and cross country in winter. Several competition programs are available to the group. Most compete in the SA Masters Athletics (SAMA) weekly summer Wednesday evening program at Santos stadium and the weekly Saturday afternoon program at various parklands venues in winter. The Athletics South Australia (ASA) summer track and field program and winter road and cross country program also caters for a small number. In addition there are various road and cross country events conducted by community groups. Various masters championships, held at times that may not coincide with the track season in Australia, provide targets for some, but not all of the group. A training program that may suit a young, developing track athlete with fixed periodisation cycles as the athlete grows physically and mentally towards peak performance is unlikely to meet the needs of a group with the characteristics outlined above. Older masters athletes, having passed the years in which the physical peak of running performance may be achieved, have an overall goal of slowing degradation of performance.

Like younger athletes, masters have physical attributes that better suit them to either sprinting or distance running, but many want to race over a range of distances, regardless of their areas of strength. This requires

a program that can be adapted to individual needs, with the knowledge that breadth of participation is likely to lead to something less than maximum performance in a specific event. Compromises are made and the aim becomes one of maximising performance across a range of race distances rather than of targeting a specific event. Some sprint training should be included even in distance training programs to maintain fast neuro-muscular action patterns. Plyometric and dynamic stretching exercises should also form part of each training session.

Increasing age, past the physical peak of the late teens and young adulthood, brings with it changes in physiology that have to be taken into account in masters athletics. These changes may include:

- A decline in maximum heart rate and hence, even without loss of stroke volume, a likely decline in  $VO_2$  max.
- A decrease in muscle mass (through muscle fibre atrophy), mitochondrial density and capillary density which limit the capacity of working muscles to extract oxygen from the blood.
- An increase in cross linking of protein fibres with associated loss of elasticity in connective and otloo-4(yo0lr)-3(an )6((yo0y