

## **INTENSE TRAINING VERSUS VOLUME TRAINING**

*Ever since the marathon boom of the early 1980's, high mileage training has been the accepted paradigm among middle and long distance coaches. However cutting back the miles and concentrating on quality is not only more time –efficient, it can also produce superior results for all but very elite runners*

*I will continue to preach the merits of cranking up the intensity rather than pressing the high volume button. Research continues to show that high intensity work is best for boosting Vo2Max and economy and that upswings in volume offer diminishing performance returns. High Speed interval work versus more moderate tempo type running demonstrates clear advantages for the former leading to improvements in a number of performance variables while the higher-mileage syndrome can be shown to stagnate or hurt performance.*

*In every walk of life there are trends, and in spite of our claims to open-minded scientific principles, this applies to training theories as in any other subject material. Back in the 50's, interval training was perceived to be the only way to success. Then along came Percy Cerutti, coaching Herb Elliott. Herb won the Olympic 1500m title in a world record time at the age of 21, leading most of the way.*

*This was evidence enough for many people to switch away from boring interval training on the track and go running up sandhills instead. Almost simultaneously came the Lydiard system, based on running 100 miles a week, which was the basis of the gold medals and world records of Peter Snell and this became the key to success*

*The American physiologist David Costill established the fact that up to about 80km a week there is a straight –line relationship between mileage per week and improvement in VO2Max, which added scientific credibility to practical experience. From the start of the marathon boom, as mentioned then, high mileage has been the theme of all middle distance and long distance coaching. Exceptions have been rare, partly because coaches have not dared to go against the trend and partly because, for professional marathon runners with all day to train, mileage is the answer.*

*Tim Noakes, whose book *The Lore of Running* remains the bible of most distance coaches, sets out several basic principles, one of which is always do the minimum amount of training, which is not as paradoxical as it may appear. What he means is : do the minimum amount you need to achieve your goal .If you don't reach your goal, you can always do more*

*Bruce Tulloh will tell you he ran 13mins 12secs( **4min 24secs miling**) for 3 miles on no more than 28 miles a week, while working full time, which included warm –ups and races. An actual week of training included*

**Mon** A run up to 2800m(1:3/4m) very fast

**Tues** 6x800m on track, fast work, all at faster than his race pace

**Wed** 8x700m on grass(easier running)

**Thurs** 2x 400m in 56secs and 58 secs

**Fri** Rest

**Sat** 2 Mile Race

*If he could run an average of 4mins 24s for 3 miles while working full time then this kind of training is going to be perfectly adequate for an athlete trying to break 30mins for 10k- and more*

*than adequate for someone trying to break 40mins!. You may argue that natural ability has a lot to do with these performances, but all anyone can do is fill their genetic potential. Doubling mileage and workload when he tried it never improved his time, merely equalled it.*

*Speed training is important for distance runners. It is interesting to note when you ask endurance runners to define speed work they have different ideas. One may answer:*

- 1) A good speed workout is 8x200m on the track at considerably faster than race speed with 30secs/R between intervals*
- 2) Speed work involves 3 up-tempo, one mile repeats on a hilly course with about 5 mins of rest in between*
- 3) Speed work is 400-800m intervals on the track at a little faster than 5k velocity with 400m jogging in between*
- 4) Speed work consists of 10x100m at nearly full speed with a 1 min or 2 min rest after each repetition*
- 5) Speed work?; are just regular 4mile runs faster than usual*

*It is clear from these disparate, but representative answers that a lot of distance runners may have lost its definition of the term 'speed work'. In all the responses there is no agreement at all concerning the actual running velocity and in every instance it is a speed endurance session regardless of what speed they run at. In fact the only common thread is a recognition that some form of speed work should be carried out at a faster than usual pace*

*If those same runners are also asked about when speed work should be done, again there is little unanimity but the most common answer appears to be during the 4 weeks before my most important competition or during the racing season!*

*They do not have a 'statement of purpose' for their speed workouts, they cannot tell how their speedy efforts would make them faster in their preferred races. The general notion is if they ran more quickly during workouts now and then some of that speed would magically appear during their competitions*

*The confusion about speed work is disappointing because most serious runners do have pretty good endurance (they can run for a long time at a modest pace) but they have barely scratched the surface of their speed potential. They are great at carrying out long endurance building training runs but they do not have a systematic way of truly developing their speed*

*So how should endurance runners do speed work, when should it be carried out and how should it vary for different types of runners?*

*The point about training is that it is specific to the event, speed work does involve running at or above race pace and the specific purpose of speed work is to improve efficiency, flexibility, coordination, muscle power, and thus running speed, but also appropriate for the individual runner and different distance of event as in the marathon against a 5k*

*If you want to run a 31 min 10k for instance (ie 5min mile pace) then you have to train to be*

*really efficient at that pace ,speed work should be adjusted to suit a runner's competitive needs .If you want to run a marathon in just under 3 hrs you have to work really hard to be able to be efficient at miling constantly at 6min 55s tempo. There would be no worthwhile cause running at a few miles at the 5k pace in above only to find that 10miles down the road glycogen stores would be almost totally wiped out*

*The point is you have to choose a velocity in a speed workout which will carry over to, and be usable in a competitive situation. It is simply unproductive to run fast occasionally around the track without a specific goal pace you want to achieve for your competitive event, such workouts are speed sessions only in the sense that you are running faster than you would in a race*

***Speed work should be carried out all year at your specific goal pace and that goal pace extended further out up and to the race distance of your event***

*The traditional approach based on the idea that longer, steady running will provide a good base for the faster speed training which comes later is outdated, there is no evidence that it actually works better, in fact the subsequent period of speed training thus becomes an attempt to re-coup the speed that has been lost, not a bold step-up to significantly higher running speeds*

***Speed is something which must be nurtured and developed over time. Limiting speed work to short periods of time makes it impossible to 'milk' all the potential speed out of an individual runner***

*Consistently running slow only teaches you to run slow overall, we come back to the jargon of raising your lactate threshold, the point at which blood acidity starts to markedly rise, impairing performance. Running faster intervals than normal race pace will bring greater toleration and lift your threshold much quicker than steady state running, which could be argued only maintains, in the most, what you already have. Faster running prepares you for even faster running to come.*

***A great saying is that Endurance will get you across the finishing line but Endurance and Speed will get you there first.***

*For most athletes they are in full time employment and managing your running time is more difficult. Planning and preparing a proper training schedule will be important*

*Have a goal time for your event and set a goal pace in your monthly plan of training sessions which is progressive*

*To give you an idea of what speed to run your different sessions here is a very trusted methodology:*

*When distance runners move up or down in their races or different training sessions what they do can fairly accurately be assessed.*

*The measure of their potential is called the 4 sec rule for men and the 5 sec rule for women*

*Eg A female runner able to run for instance 2m10s for the 800m(65s/400) would be expected to run 70s/400 in the 1500m(4m 22.5s); 75s/400(9m 22.5) in the 3000m; 80s/400m(16m 40s) in the 5000m and in the 10000m she should run 85s/400(35m 25s*

*In training sessions, whether you are training at 800m/1000m/1600m/2000m etc, etc knowing your goal time for your race distance will enable you to set a goal pace for your particular training*

*By using different pace sessions in your microcycle you will experience both speed and*

*stamina at the distance below and above your specialist distance. This gives all round preparation eg for the 1500m runner the 5k & 3k pace sessions give you stamina while 800 & 400m paces give you speed*

*Finally if you are to train at different paces each week the question of optimum recovery times becomes very important:*

<b><i>Pace</i></b>	<b><i>Distance Of Rep</i></b>	<b><i>Time</i></b>	<b><i>Recovery Jog</i></b>	<b><i>Standing Time</i></b>
5000	4x1 mile	4:48	200 (eighth)	1min 1 ½ min novice
3000	6x1000	2:50	250 (quarter)	75s 2min novice
1500	6x600	1:36	300 (half)	1 ½ min 2 min novice
800	4x400	59s	400 (same)	2 min 3min novice
400	8x200	27s	400 (double)	2 min 3mi novice

*Remember speed all the year round,well at least speed endurance*

*Pure speed work are runs of up to 7-8 secs,sprints with recoveries for all at minimum of 3 mins---7 min/R, I would recommend them even for the distance runner but that is another chapter. For now I would be happy if you kept to more speed endurance than the long slow slog,so much more time-efficient*

*Good Luck*

