## **Running in Your 60's and Beyond**

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"Run when you can, walk if you have to, crawl if you must; just never give up." Stay Active



Mick Thompson competing at the Northern Cross Country Championships in 2007 aged 66

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When I started to look into this I realised that although the number of runners in the over 60 categories is increasing throughout the world there is little support on how to go about your training and the injury risks involved. Most research shows runners to be able to keep their performances going until around 50 years old then more intrinsic factors which you can not control start to kick in. However this does not mean you can not maintain your times for longer or stop enjoying your sport. The benefits of keeping your running going are that you will have a better quality of life. The number of over 60's performing regular exercise has grown rapidly. Studies show average times have got faster for the over 60's compared to the younger age groups which have hit a plateau or slowed (study of New York City marathon).

This article looks at the science behind running over 60, what can you expect to happen to your performance. The second section will look at injury risks.

Running is controlled by three major factors; the heart (the pump), lungs (oxygen supply) and the muscles (our wheels). Age tends to affect the ability to maintain intensity and recovery. Training levels tend to decrease. In turn this will relate to the decline in the physiological factors that measure performance.

#### Why do we slow down?

The physiological reason for us slowing down seems to be more related to loss of muscle mass and elasticity.

For a sedentary person strength starts to reduce after the age of 50 at a rate of 15% per decade, after 70 it increases to a 30 % loss. If you continue to work on your strength studies suggest you can minimize this loss. This loss of muscle mass can be slowed but not stopped. Any activity we do causes damage, its how our muscles adapt. With age the ability to repair muscle fibres and cells decreases. The theory suggests if the muscle fibres and cells are not getting messages to fire up (damage severed the link, lack of use) they die. This is what happens with injury, you will notice muscles around the injury site atrophy (waste). What the body can do is cross fire to other fibres and cells to take over. As we get older however this ability also slows down.

We tend to lose fast twitch fibres (speed) more quickly than slow twitch fibres (endurance). This is why we seem to lose muscle quantity but not quality. We adapt to be more suited to endurance events. Which explains why, many move to the marathon as they get older. To keep your times you have to work on keeping the connections between muscle fibres and cells. Strength and speed work now start to have more importance over endurance.

Maximum heart rate may also decline as we get older this may relate to why speed work becomes harder and for many avoided. I had a response to a newsletter i did on this subject from one of the over 70 runners. His comments were very interesting about heart rate. He found if he could get near his maximum heart rate he knew he was going to have a good race but if it was low it was going to be slow and showed he was perhaps over training. Since reaching his 70's he has noticed his maximum heart rate has dropped and with this his speed. So from this it appears that running at faster paces requires a higher maximum heart rate which will decline naturally throughout life. Exercise does reduce the speed of this decline but cannot stop it.

Other reasons for performance decline, not related to science tend to be; consistency in training, psychological effects or injury.

Running for the over 60's helps to reduce heart disease, keeps blood pressure and cholesterol down (usually related to weight). It can help to maintain bone mass.

Older athletes need all the training components of younger athletes;

· Aerobic and anaerobic conditioning

·Upper and lower body strength

Sports specific skill development

·Cross-training

·Flexibility training

·Recovery

### The difference is in frequency, intensity, time and type of training.

Anaerobic training (intervals) is the most taxing type. You may want to decrease these sessions to once every 2 weeks rather than the usual twice a week. Its important to keep these sessions as they work on speed. How else would you expect to keep your speed if you didn't include it.

You may require 1-2 days recovery in-between sessions this does not necessarily mean complete rest but perhaps cross training/flexibility/strength or slow run.

Your long run (10 miles plus) can be every 3<sup>rd</sup> week instead of every 2<sup>nd</sup>.

Flexibility is the main factor affecting speed. As you get older your stride length becomes shorter. Maintaining flexibility work and sprint drills can help to decrease this effect. A good exercise to put into your warm-up is striding and mobility work.

Monitoring heart rate is important for everyone as it can tell you if you have recovered from your previous training session. For the older athlete I would say it is a must. (First you need to find out what your resting heart rate is). When monitoring if you find your heart rate to be 5 beats above normal it's a sign of over training.

Strength training is essential. It's important to include core stability exercises, single limb exercises and sports specific exercises. The best structure is working on 1 set of 12-16 reps. Squats, lunges, step ups, step downs, chest press/bench press, side step ups, seated row, plank, bridging, superman are examples of exercises to put in. Balance, agility and co-ordination exercises may become more challenging but more important. Performing unilateral (single limb) balancing exercises such as step-ups, step-downs, wobble board, one leg dead lifts and simple agility drills (ladder work, sprint drills) help to keep form and posture as well as protect you from falls. Your sensory awareness is vital to allow you to understand what your limbs are doing, what's under your feet and quickly reacting to any changes to avoid falls and injury.

I think for everyone whether involved in sport or not should always have regular health check ups.

#### What about injury risks?

Not many injuries are related to age. There are huge debates on whether running increases your risk of arthritis/joint degeneration but the benefits far outweigh these risks.

Genetics play a far more involved role to whether you can continue to run. But even then

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lifestyles are changing all the time. People are living longer.

Most injuries that occur are due to over training. You may notice old injury sites giving you a few problems but this is usually due to bad management when the injury first occurred. If you look after your injuries straight away they will cause no problems in the future.

Running is a repetitive sport so the injuries are the same for everyone but the older athlete is more at risk from these mainly because they have been running for a lot longer. Those who start running later on in life tend to have less injuries. Its important to remember that if you do get injured, healing takes longer as you get older, never push through an injury you just have to be patient and use cross training.

# Common injuries seen at pro-am sports injury clinic (60 + age groups) alongside a brief account of the causes.

•Achilles tendinopathy – abnormal foot strike, calf muscles too tight. Your foot posture will change from years of activities, its always important for anyone, any age to have their foot posture measured to ensure the trainers they are using are correct.

·Medial tibial stress syndrome (shin splints) – New surface/running shoes, over training, biomechanical flaw (muscle imbalance)

·Plantar fasciitis – foot mechanics

·Runners knee – imbalance between the quadriceps, weakness of pelvic stabilisers (balance), incorrect running shoes

·lliotibial band syndrome (ITBS) – too high mileage, bank running, down hill running, muscle imbalance core muscles

Ankle sprain – poor balance/reaction to changes under the foot

•Muscles pulls – inflexibility, over training on tight muscles

Most of these injuries are due to the repetitive nature of running, its important to cross train.

Running from my point of view is very beneficial to the older athlete with research showing that those involved in running have a far better quality of life that their sedentary counterparts.

Keeping a well balanced training programme is essential to anyone but does become more important as you get older.

I know for most it can be depressing to see your times slowing down but what was the reason you started to run in the first place? Enjoyment / healthy lifestyle? For me I see the older runners out their enjoying themselves a lot more that their younger competitors. I think priorities change and the people and places you get to see become more important than actual rankings and times. Knowing that your running has allowed you to be more agile and active, enjoying your retirement years must be a great feeling.