

Exercise and the Olympic bounce

The article by Dr Fitzpatrick titled *The Olympic Legacy* printed in November 2011¹ certainly provoked some controversy. Are the devotees of exercise on a hapless mission to postpone death? A starting point may be that anthropologists tell us that man was born to run and was built for persistence high endurance running.

Dr Roger Bannister gave the Chadwick lecture to the Sports Council in 1972 titled *Sport, Physical Recreation, and the National Health*.² This article now seems strangely old fashioned but it did set some high ideals. Bannister was cautious in stating that there was no proven link between exercise and improved health. He did, however, bring attention to the research by Morris on the fact that active bus conductors suffered less coronary heart disease than sedentary bus drivers³ and the work by Rose on civil servants which demonstrated that the more physically active outside work had a two- to threefold less chance of having a coronary thrombosis.⁴

Dr Tom Bassler was a well known pathologist and athlete who wrote in the 1970s that marathon running and training would confer some type of immunity from coronary heart disease.⁵ Sadly he was wrong for a variety of reasons. The work on cardiac rehabilitation by Dr Kavanagh in Toronto was taking place at the same time. His results over a long period of time are impressive and include some post infarct marathon runners.^{6,7} Now there is plenty of evidence to suggest that exercise is good for you and this was not available in the 1970s.⁸ Recently Dr Michael Mosley discussed how fitness could be improved with high intensity training for as little as 3 minutes per week on BBC TV Horizon.⁹ The problem was that in Mosley's case his insulin sensitivity improved but his own aerobic fitness (VO₂ max) did not improve much. This is thought to be due to a genetic difference with 15% of the population being non-responders to the benefits of exercise and 20% being high responders.

It would appear that marathon running is not without its dangers and sudden deaths in these runs hit the headlines. Dr Dan Tunstall Pedoe, who was the medical director of the London Marathon for many years, listed a summary of the causes of death in the London Marathon between 1981 and 2003.¹⁰

Seven sudden deaths were reported, five with severe coronary heart disease and two with hypertrophic cardiomyopathy. This gives a death rate of 1 death per 67 000 entrants which Dr Tunstall Pedoe stated was no higher than people going about their daily activities. The question of screening for hypertrophic cardiomyopathy in young athletes has been controversial. The Italian programme that was started many years ago has reduced the incidence of sudden cardiac death. The most sensible option seems to be a health questionnaire, physical examination, and an ECG.¹¹

A new term has come into vogue recently as everybody is tired of all the talk about the Olympic Legacy and that is the Olympic bounce (try to forget about the political one). This means there should be some new impetus to encourage more sport and interest in fitness following the Olympics. After all the furore now perhaps less school playing fields will be sold off. The RCGP, however, may have moved to bigger and better premises at Euston but the council were not thinking of the benefits of exercise when they made this decision. At Princes Gate residents who wanted an early morning run could simply cross the road, get into Kensington Gardens, and then head for Hyde Park and the Serpentine. Now you face a hazardous run along the Euston Road to get to Regent's Park!

In our area an Olympic breakfast was held before the torch arrived. Two residents of the town who had won gold and silver Olympic medals in the past were present. Most importantly after the torch left our town there was an athletic event at a local school. Bursaries have been set up by local businesses for promising sporting and artistic teenagers.

One of the Olympic volunteers came to see me in the surgery recently with hip pain due to excessive walking in the Olympic Park. When I had finished working out her Oxford hip score she proudly produced a packet from her bag. This was her very own silver coloured baton complete with the Olympic logo. Each volunteer was given a replica baton at the end of the games. Now back to reality: the greatest challenge ahead for the Health of the Nation is not a lack of interest in exercise but the size of the food trolleys and what is in them and that, sadly, is beyond our control.

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Footnote

Following the collapse and miraculous survival of Fabrice Muamba at White Hart Lane, one of the most sensible comments about reducing sudden cardiovascular deaths at football came not from a medic but a goalkeeper, David James writing in the *Observer*.¹² The player lived because of cardiac resuscitation and not expensive screening. The provision of trained staff and defibrillators is mandatory at Premiership matches but should this change to cover many more levels of sport?

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