

The effect of marathon training on artery age

Research has identified that the aging process causes aortic stiffness. While supervised training programmes have demonstrated that aortic stiffness can be reduced, little had been known about the effects of other more generalised forms of exercise and training.

A new research study by Bhuva *et al.* involving 138 marathon completers of both sexes (aged between 21 and 69 years) examined the effect of training for and completing a marathon for the first time (Bhuva *et al.*, 2020). Participants were untrained but healthy and underwent 6 months of training for the London Marathon. Assessments were taken before training began and then 2 weeks after completion of the marathon. These assessments included recording values for central (aortic) blood pressure (BP) and aortic stiffness. Change in aortic stiffness at the end of training and completion of the marathon was evaluated from data collected.

The study's authors concluded that "Training for and completing a marathon even at relatively low exercise intensity reduces central blood pressure and aortic stiffness—equivalent to a ~4-year reduction in vascular age. Greater rejuvenation was observed in older, slower individuals".

Further information in the study abstract is available here

<http://www.onlinejacc.org/content/75/1/60>

Reference

Bhuva AN, D'Silva A, Torlasco C, et al. Training for a first-time marathon reverses age-related aortic stiffening. *Journal of the American College of Cardiology* 2020;75(1)

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