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‘Daily commuting physical activity on foot or bicycle reduced the risk of ischaemic stroke.’

Leisure and occupational physical health and risk of stroke: Get on your bikes!

There is good evidence that regular physical activity reduces the risk of cardiovascular disease. However, the impact of physical activity on stroke risk has been less well understood.

In the Honolulu Heart Program (Abbott et al, 1994), men with increased leisure or occupational activity experienced a lower risk of intracerebral haemorrhage than inactive men, but the association with physical activity and thromboembolic stroke was weaker. The Physicians’ Health Study (Lee et al, 1999) noted no significant impact of physical activity for haemorrhagic or ischaemic stroke. However, the Nurses’ Health Study (Hu et al, 2000) demonstrated a reduced risk of ischaemic stroke with increased leisure-time physical activity. A meta-analysis of nine studies indicated that highly active individuals have a reduced risk of ischaemic and haemorrhagic strokes compared with individuals with low activity levels (Lee et al, 2003).

In a recent study (Hu et al, 2005) in 47 000 Finnish people aged 25–64 with no history of cardiovascular disease it was found that a high level of leisure-time physical activity reduced the risk of total stroke as well as different sub-types of stroke. Moderate levels of leisure-time physical activity also reduced the risk of intracerebral haemorrhage and ischaemic strokes. Most importantly, in these days of environmental issues, daily commuting physical activity on foot or bicycle reduced the risk of ischaemic stroke. Engagement in two or three types of physical activities demonstrated a stronger protective effect than having only one such activity.

Such a benefit is likely to have a multifactorial aetiology, with physical activity having a favourable effect on blood pressure, lipid profile, insulin sensitivity, body weight, coagulation and fibrinolytic factors, while also reducing the risk of hypertension and diabetes.

These data give rise to important messages for patients and healthcare professionals alike. More strength is given to the argument of cycling to work! We should all examine our own levels of physical activity, be they leisure, occupation or commuting related. So get on your bikes!

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