Brisk walking and vigorous exercise provide similar cardiovascular disease benefits

Most people, especially with advancing age, seem to prefer prescription of pills to proscription of harmful lifestyles to reduce their risk of cardiovascular disease. Yet, in virtually all instances, except perhaps the use of statins to lower cholesterol, avoiding harmful lifestyles will yield greater benefits. Even in cholesterol lowering, however, statins should be an adjunct, not an alternative, to lifestyle change.

With respect to lifestyle changes, physical activity has long been recognized as an independent measure, which lowers the risk of coronary heart disease by 35% to 55%. Most recent guidelines suggest at least 30 min of moderate intensity physical activity on most, preferably all, days. However, 60% of Americans do not exercise regularly. Further, it is unclear whether vigorous activity is necessary to reduce risks or whether brisk walking would be sufficient.

The Nurses Health Study has recently contributed important relevant and complementary information to the totality of evidence on exercise and coronary heart disease in women. Previous observations in women derive from the Iowa Women’s Health Study, the Finnish Twin Cohort and two recent studies in the elderly. More than a few dozen epidemiological studies have reported on exercise and the risk of coronary heart disease but few have included women or collected information about walking or repeated measures of activity.

In the Nurses Health Study, there was a strong, graded inverse association between physical activity and the risk of coronary events. As compared with women in the lowest quintile group for energy expenditure (expressed as the metabolic-equivalent [MET] score), women in increasing quintile groups had age-adjusted relative risks of 0.77, 0.65, 0.54, and 0.46 for coronary events ($P$ for trend $<0.001$). In multivariate analyses, the inverse gradient remained strong (relative risks, 0.88, 0.81, 0.74, and 0.66 for women in increasing quintile groups as compared with those in the lowest quintile group; $P$ for trend $=0.002$). Walking was inversely associated with the risk of coronary events; women in the highest quintile group for walking, who walked the equivalent of three or more hours per week at a brisk pace, had a multivariate relative risk of 0.65 (95% confidence interval, 0.47 to 0.91) as compared with women who walked infrequently. Regular vigorous exercise ($\geq6$ MET) was associated with similar risk reductions (30% to 40%). Sedentary women who became active in middle adulthood or later, had a lower risk of coronary events than their counterparts who remained sedentary.

Thus, there appears to be a clear and comparable cardiovascular disease benefit of 30% to 40% from both walking and vigorous exercise. While vigorous exercise is likely to yield important benefits over and above coronary heart disease, moderately intense exercise remains safe, achievable, and feasible for the majority of the population, including older age groups. Thus, the adoption of moderately intense exercise, specifically brisk walking, by the sedentary majority would yield benefits in terms of cardiovascular disease comparable to what can be achieved by vigorous exercise. This message has important clinical implications for health care providers, and policy implications for the health of the general public.

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Reference