We appreciate Dr. Rey-López’s interest (1) in our study (2). In the 1970s, jogging became popular in the United States and other countries, including Denmark. In 1969, 2,344 participants finished the 12-km Eremitagelobet, the first large-scale jogging race in Denmark and one of the first in the world, during which a naval officer died at 46 years of age. In the following years, several reports of death during jogging were published. As a result, some physicians came to believe that jogging could be dangerous, even at a slow pace. In fact, slow jogging (at 8 km/hour, expending 600 kcal/hour) is considered a vigorous activity (with a metabolic equivalent task score of ≥6). Therefore, to study whether jogging could be harmful to health, we included questions about jogging in the first Copenhagen City Heart Study examination in 1976–1978.

We have previously investigated total leisure-time physical activity and the risk of death in 7,023 healthy individuals and found that both men and women who regularly engage in low levels of physical activity for less than 2 hours per week have a significantly higher risk of death than individuals who engage in 2–4 hours per week of leisure-time physical activity. Yet, no further risk reduction occurred when physical activity was increased to more than 4 hours per week (3), which does not support a linear relationship between the amount of weekly exercise and mortality. This could be caused by the inclusion of a much wider age span in our study (20–98 years) compared with that in the study by Manini et al. (4).

In our study, we found that the 1,878 joggers had significantly lower mortality than nonjoggers, with an age-adjusted hazard ratio of death of 0.56 (95% confidence interval: 0.46,
0.67) for male joggers and 0.56 (95% confidence interval: 0.40, 0.80) for female joggers (2). The age-adjusted increase in survival was 6.2 years for male joggers and 5.6 years for female joggers. Surprisingly, we found that 1–2.5 hours of jogging per week at a slow or average pace (based on the individual’s perception of pace) and a frequency of 1–3 times per week seemed to be associated with the lowest mortality. We believe that a relative scale of jogging pace (intensity) is more appropriate than an absolute scale when the age span of participants is very wide and when the participants have a wide range in their levels of physical fitness (5).

In our analyses, we adjusted for several potential confounders and mediators, including total leisure-time physical activity but, unfortunately, we were not able to adjust for diet because questions of diet were first included in the fourth examination in 2001–2003. Hopefully, we will be able to analyze the importance of diet in residents of Copenhagen in a few years but, on the basis of previous studies of the association of diet and survival, we would be surprised if the inclusion of diet significantly reduces the association between jogging and survival.

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REFERENCES


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