Letter by Hansel and Simon Regarding Article, “Body Mass Index and Vigorous Physical Activity and the Risk of Heart Failure Among Men”

To the Editor:

We read with interest the article “Body mass index and vigorous physical activity and the risk of heart failure among men” by Kenchaiah et al. This article has some interesting findings, but we believe that there are some shortcomings that we would like to address here. First, in our opinion a more appropriate title for this study might be “Body mass index and self-reported physical inactivity and the risk of heart failure among men.” Second, we find that the core statement of this study, that “any vigorous physical activity is an indicator of healthier lifestyle in men at risk of developing HF,” is rather misleading. The term “any vigorous physical activity” implies that different kinds of exercise intensities were objectively investigated in this study. In their study, Kenchaiah et al define vigorous exercise as self-reported exercise to the point of breaking a sweat and investigate the frequency categories “rarely/never, 1 to 3 times a month, 1 to 4 times a week, and 5 to 7 times a week.” In this study, we can assume that a substantial proportion of subjects experience sweating during habitual physical activities, such as a brisk walk or climbing stairs. In addition, even in well-trained men, moderate aerobic exercise is associated with moderate to substantial sweating. Therefore, it is arguable whether “breaking a sweat” can be a valid criterion for defining exercise intensity. This criterion does not enable the subjects to reliably report their exercise intensity and frequency. One critical point to consider is that some participants may categorize their exercise frequency on the basis of any physical activity that causes them to break a sweat. On the other hand, well-trained subjects may tend to substantially underreport their exercise frequency as defined in this study (eg, a 10k run lasting 50 minutes might not be reported). Subjects are only likely to realistically categorize their activity in the frequency category of rarely/never, which is supported by the results presented by Kenchaiah et al. The group of inactive men (15%) had an increased risk of heart failure of 22% compared with all other subjects. However, the self-reported frequency of sweating during exercise was not able to differentiate between the other subjects (85%). Kenchaiah et al state that “any” vigorous exercise is beneficial, although the results only show that self-reported physical inactivity is disadvantageous. In our opinion, given this clear result, a more pertinent core statement for this study would be as follows: “This finding implies that self-reported physical inactivity is an indicator of an unhealthier lifestyle in men at risk of developing HF.”

Disclosures

None.

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References

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