



Letter to the Editor

Physical activity and weight loss

Based on a thorough review of the literature, Faulkner et al. showed little effect of moderate exercise on overweight in children and adolescents (Faulkner et al. 2009). The accompanying editorial (Morabia and Costanza, 2009) points out that it is “paradoxical” that students who walk more (e.g., to get to school), and who likely spend more energy, do not weigh less compared to more sedentary children. Three explanations are offered: short distance to school, heterogeneity among commuters as a category, and selection bias.

There is however a fourth explanation. Persons who walk or exercise more are also likely to eat more. The energy balance between expenditure and intake can therefore be kept constant among free living individuals irrespective of physical exercise (at least within the usual range of physical activity of most individuals).

One could even argue, at least for some people, that minimal physical activity may induce thirst and hunger that may easily be over-compensated, typically with a soft drink or a chocolate bar. This might provide more calories than what is actually spent during the exercise session in some instances, hence favor weight gain.

We are not aware of strong direct evidence that physical activity prevents overweight when food is easily available and intake is not controlled. As a matter of fact, there are a few studies suggesting the absence of a relationship between physical activity and body weight in such conditions (Snitker et al. 2003; Westertep and Speakman, 2008; Luke et al. 2009). The impact of physical activity on overweight in free living individuals remains to be demonstrated, as well as how much exercise would be needed for that purpose (Eckel, 2008). On the other hand, the good news is that the benefit

of physical activity on important diseases is convincing, e.g. cardiovascular diseases and diabetes (Snitker et al. 2003), (Li et al. 2008; Batty and Lee, 2004; Arrieta and Russel, 2008), with or without loss of weight.

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