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## STUDENTS' CORNER

### The Current Relationship between Sedentary Behaviour and Obesity

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#### Abstract

Sedentary behaviour has been associated with a myriad of medical conditions including obesity. This commentary addresses the relationship between sedentary behaviour and obesity within contemporary society. We demonstrate how high levels of sedentary behaviour may explain (at least in part) the increasing prevalence of obesity in society. Health promotion programs that address sedentary behaviour (in addition to other healthy lifestyle behaviours) is recommended to address the burden of obesity. **Health & Fitness Journal of Canada 2016;9(1):25-27.**

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#### Introduction

The fact that Canada is facing the burden of obesity it is not new (Janssen, 2013). Also, considerable evidence exists regarding the efficacy of healthy eating to prevent and to treat obesity (Swinburn et al., 2004). Recent evidence has emerged that demonstrates the importance of addressing other lifestyle behaviours (such as physical activity and sedentary behaviours) (Malhotra et al., 2015).

Increasing evidence has highlighted the importance of reducing sedentary behaviour (particularly sitting) for the prevention or treatment of obesity. The burden of sedentary behaviour is so devastating that some authors have considered sitting the new smoking (Chia and Suppiah, 2013; O'Keefe and Lavie, 2013). However, some dose of caution is

needed here for at least two reasons: first, some sitting does not appear to be harmful, being imperative to some daily activities (Kralj et al., 1990; Schenkman et al., 1990); second, the exposure to one cigarette is sufficient to trigger health problems (Shaw et al., 2000), not to mention the chemical dependency and the fact that it can lead to the consumption of other drugs (Lai et al., 2000). In comparison, a few minutes of sitting has not been shown to lead to the same magnitude of harm. In fact, some people have a clear medical prescription to avoid standing for too long, as it is the case of those with varicose veins (Zotto, 2002).

It would appear that current strategies to reduce sedentary behaviour and the associated risks for obesity are suboptimal. For instance, it is not unusual for healthcare professionals suffer from the consequences of obesity and sedentary behaviour (Miller et al., 2008; Rogers et al., 2006; Zhu et al., 2011). In this sense, in practical terms, although certainly it is very important to study all the biological mechanisms involved in obesity and sedentary behaviour and the relations between them, it is urgent that effective initiatives, capable of reaching big populations, are launched, in order to reduce the harm caused by obesity and sedentariness.

### Conclusion

There is clear evidence that sedentary behaviour is associated with an increased risk for obesity. Large population-based studies that adopt language, tools, technology, and informatics that can be applied and incorporated on a large scale are warranted (Chan and Woo, 2010; Hutchesson et al., 2015).

### Authors' Qualifications

The author's qualifications are as follows: Juliano Schwartz, MSc, HFFC-CEP, and Darren Warburton, MSc, PhD, HFFC-CEP.

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