## **Abstract Title**

The relationship between weight-related behaviours and sleep characteristics in a sample of Canadian university students: Implications for dietitians

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## Abstract

Introduction: Sleep insufficiency, particularly among adult postsecondary students, is a major public health problem and is associated with a multitude of poor health outcomes including weight gain and obesity-related comorbidities.

Objectives: This study explored relationships between sleep characteristics (e.g., sleep quality and duration) and weight-related behaviours (e.g., diet, physical activity, weight challenges) in a sample of undergraduate students in Oshawa, ON.

Methods: Using a cross-sectional design, participants completed an on-line survey about their eating, sleep, and physical activity behaviours, along with sociodemographic characteristics and self-reported height and weight.

Results: Participants (n=257) were on average 23 years of age and female (83%), with the majority being full-time students (92%). Most participants had a healthy body weight (BMI: mean 24.58 SD 5.55) and low physical activity levels (65%). Mean Global sleep score was 7.4 (SD 3.3) indicating poor overall sleep quality (mean score  $\geq$ 5); however, most participants self-reported having very or fairly good (65%) sleep quality in the past month. Poorer sleep quality was associated with a higher BMI (r=.265, p<0.001) and those that reported longer sleep duration (<7hr or  $\geq$ 7hr) had higher odds of reporting higher internal eating regulation (OR 1.15 [95% CI: 1.01, 1.32], p<0.05).

Conclusion: Although most students (65%) report having very or fairly good sleep quality, the mean global sleep score of 7.4 was higher than the cut-off of 5 indicating poor sleep quality. Inadequate sleep was also associated with daytime sleepiness, less daily fruit and vegetable consumption and poor internal regulation in eating competence (i.e., attention and responsiveness to cycles of hunger, appetite, and satiety).

Significance to the Field of Dietetics: Findings highlight the need for dietitians to evaluate sleep behaviours as part of their nutritional assessments and care plans. Capacity-building strategies are called for to strengthen dietitians' capacities in this emerging area.

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