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## ORIGINAL ARTICLE

### Gender Differences in Clinical Characteristics and Lifestyle Behaviours of Overweight and Obese Adolescents

*Différences entre les Sexes dans les Caractéristiques Cliniques et les Habitudes de vie des Adolescents Obèses et en Surpoids*

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#### ABSTRACT

**BACKGROUND:** Energy intake and energy expenditure are different in boys and girls, especially during the adolescent period, a critical period for the development of obesity. However, gender-specific lifestyle behaviours that may influence the development of obesity among adolescent have not received sufficient attention.

**AIM:** To determine gender differences in male and female overweight/obese adolescents concerning their clinical parameters, dietary, sedentary and physical activity lifestyle behaviours.

**METHODS:** From a total of 1036 secondary school students aged 10–17 years, BMI percentile for age and gender was used to identify overweight and obese individuals. These adolescents were then questioned on dietary, sedentary and physical activity lifestyle behaviours via a structured self-administered questionnaire.

**RESULTS:** The overweight/obese adolescent identified were 92. Female adolescents were 1.5 times more than male adolescents. The male, overweight/obese adolescents were significantly younger than their female counterparts ( $11.9 \pm 1.0$  years vs  $13.2 \pm 2.0$  years  $p = 0.0001$ ). Female overweight/obese adolescents were significantly heavier ( $67.1 \pm 12.5$  kg vs  $59.6 \pm 8.6$  kg,  $p=0.003$ ), with higher BMI ( $25.7 \pm 3.7$  kg/m<sup>2</sup> vs  $24.0 \pm 2.3$  kg/m<sup>2</sup>,  $p=0.012$ ), and wider hip circumference ( $102.9 \pm 9.0$  cm vs  $95.7 \pm 6.7$  cm,  $p=0.002$ ). Regarding lifestyle behaviours, female overweight/obese adolescents consumed more fast foods compared to their male counterparts ( $p=0.012$ ). In contrast, significantly more male overweight/obese adolescents were driven to and from school compared to female adolescents ( $p=0.028$ ).

**CONCLUSION:** Gender differences exist between overweight/obese female and male adolescents. The females were older, heavier and consumed fast foods more frequently. While their male counterparts were younger and tended to engage in less physical exertion. These factors should be considered when planning adolescents' weight loss and prevention interventions. **WAJM 2023; 40(4): 438–444.**

**Keywords:** Gender differences, Lifestyle behaviours Overweight, Obese, Adolescents.

#### RÉSUMÉ

**CONTEXTE:** L'apport et la dépense énergétiques sont différents chez les garçons et les filles, en particulier pendant l'adolescence, une période critique pour le développement de l'obésité. Cependant, les comportements de style de vie spécifiques au sexe qui peuvent influencer le développement de l'obésité chez les adolescents n'ont pas fait l'objet d'une attention suffisante.

**OBJECTIF:** déterminer les différences entre les sexes chez les adolescents masculins et féminins en surpoids/obèses en ce qui concerne les paramètres cliniques, les habitudes alimentaires, la sédentarité et l'activité physique.

**MÉTHODES:** Sur un total de 1 036 élèves du secondaire âgés de 10 à 17 ans, le percentile de l'IMC pour l'âge et le sexe a été utilisé pour identifier les personnes en surpoids et obèses. Ces adolescents ont ensuite été interrogés sur leurs habitudes alimentaires, leur sédentarité et leur activité physique au moyen d'un questionnaire structuré auto-administré.

**RÉSULTATS:** 92 adolescents ont été identifiés comme étant en surpoids ou obèses, les adolescentes étant 1,5 fois plus nombreuses que les adolescents. Les adolescents en surpoids/obèses étaient significativement plus jeunes que leurs homologues féminines ( $11.9 \pm 1.0$  contre  $13.2 \pm 2.0$  p = 0,0001). Les adolescentes en surpoids/obèses étaient significativement plus lourdes ( $67.1 \pm 12.5$  vs  $59.6 \pm 8.6$ , p=0,003), avec un IMC plus élevé ( $25.7 \pm 3.7$  vs  $24.0 \pm 2.3$ , p=0,012), et un tour de hanche plus large ( $102.9 \pm 9.0$  cm vs  $95.7 \pm 6.7$  cm, p=0,002). En ce qui concerne les habitudes de vie, les adolescentes en surpoids/obèses consommaient plus de fast-foods que leurs homologues masculins (p=0,012). En revanche, les adolescents en surpoids/obèses de sexe masculin étaient significativement plus nombreux à se rendre à l'école en voiture que les adolescentes (p=0,028).

**CONCLUSION:** Il existe des différences entre les adolescents et les adolescentes obèses ou en surpoids. Les filles sont plus âgées, plus lourdes et consomment plus fréquemment des fast-foods. Leurs homologues masculins étaient plus jeunes et avaient tendance à faire moins d'efforts physiques. Ces facteurs devraient être pris en compte lors de la planification des interventions de prévention et de perte de poids chez les adolescents. **WAJM 2023; 40(4): 438–444.**

**Mots-clés:** Différences entre les sexes, Comportements liés au mode de vie Surpoids, Obésité, Adolescents.

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