

**Godziuk, K. Association between severity of obesity and cardiovascular and metabolic risk factors in children at a pediatric weight management clinic (Oral presentation)**

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**Introduction.** Severe obesity in children and adolescents is being recognized as a growing subcategory of childhood obesity. There is evidence that children with severe obesity have more cardiovascular and metabolic risk factors compared with obese children, but this is not a guaranteed consequence of obesity. Proportions of obese children remain free from risk factors and are considered metabolically healthy. With more awareness of metabolically healthy obesity in adults and its relevance to intervention outcomes, there is a need to further explore the occurrence of this healthy phenotype in children who attend pediatric weight management clinics.

**Objective.** To determine the occurrence of metabolically healthy obesity in obese and severely obese children and adolescents at a pediatric weight management clinic by examining the frequency and clustering of cardiovascular and metabolic risk factors of dyslipidemia, hyperinsulinemia, and elevated hepatic enzymes.

**Methods.** This study includes obese children and adolescents at a hospital based pediatric weight management clinic from 2008-2012. Children were included if their BMI at first clinic appointment was over the 95th percentile for age and gender based on the CDC growth charts. Twelve hour fasting blood test results were collected prior to the children attending the clinic.

**Significance.** If metabolically healthy obesity is occurring equally in obese and severely obese children in pediatric weight management care, then it will suggest that further investigation needs to determine what other factors may contribute to the metabolically healthy phenotype in childhood obesity and emphasize the need to develop weight management interventions and outcomes more specific to each subtype.