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Abstract of the Scientific Literature



Childhood Obesity and Type 2 Diabetes Mellitus

Until recently, the majority of cases of diabetes mellitus among children and adolescents were immune-mediated type 1a diabetes. Being obese or overweight is the most important risk factor for the development of type 2 diabetes (T2DM) among children and adolescents. The number of children diagnosed as being overweight has increased by more than 100% over the past 30 years. Children and adolescents with T2DM may experience the microvascular and macrovascular complications of this disease (including atherosclerotic cardiovascular disease, stroke, myocardial infarction and sudden death, renal insufficiency and chronic renal failure, limb-threatening neuropathy and vasculopathy, and retinopathy leading to blindness) at younger ages than individuals who develop diabetes in adulthood.

Comments: Dental practitioners often see older children and adolescents more frequently than physicians. Children and adolescents who are overweight or obese and, therefore, at increased risk of development of T2DM and/or "metabolic syndrome" (a constellation of metabolic abnormalities including insulin resistance, glucose intolerance, hypertension, and dyslipidemia, which promote long-term cardiovascular complications) should be identified and referred for appropriate medical intervention including exercise programs, reduction of sedentary activities, healthier diets (incorporating more fruits and vegetables and less highly processed, high-fat, or sweetened foods), and possibly medication. **GEM**

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Hannon TS, Rao G, Arslanian SA. Childhood obesity and type 2 diabetes mellitus. *Pediatrics* 2005;116:473-480.

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