

JOURNAL WATCH

Our expert highlights the most important research articles across the spectrum of topics relevant to the field of diabetes management

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Dart AB, Sellers EA, Martens PJ, Rigatto C, Brownell MD, Dean HJ. High burden of kidney disease in youth-onset Type 2 diabetes. *Diabetes Care* 35(6), 1265–1271 (2012).

The incidence of Type 2 diabetes (T2D) among youth continues to rise with T2D now constituting a sizable proportion of new diabetes cases in children. Owing to the fact that childhood T2D is a relatively new disease, relatively little is known about its natural history, including the rate at which affected patients develop complications. The authors identified a population sample of 342 children with T2D in Manitoba province, Canada, seen between 1986 and 2007. Through record linkage, they then obtained information regarding renal disease outcomes over the ensuing 5–25 years and estimated rates of renal failure in these subjects, as well as in a comparison sample of children diagnosed with Type 1 diabetes identified in the same manner. Renal survival was 92% at 15 years and 55% at 20 years in the T2D children, corresponding to a four-times higher rate of developing renal failure in these patients compared with the Type 1 diabetes patients. This study demonstrates the high burden of renal complications accompanying youth-onset T2D and calls attention to the need for developing appropriate management and intervention practices.

Jääskeläinen P, Magnussen CG, Pahkala K et al. Childhood nutrition in predicting metabolic syndrome in adults: the cardiovascular risk in

young Finns study. *Diabetes Care* 35(9), 1937–1943 (2012).

The importance of childhood lifestyle exposures, such as diet and physical activity, on risk of metabolic disease in adulthood has not been firmly established in large prospective studies. Using the Cardiovascular Risk in Young Finns Study, the authors evaluated whether dietary patterns and physical activity levels measured in 2128 children, who were aged 3–18 years at their baseline examination in 1980, were associated with the development of metabolic syndrome when assessed at a follow-up examination at 27 years of age. While physical activity levels and some of the dietary behaviors were not correlated with subsequent development of metabolic syndrome, there was a significant correlation between lower vegetable consumption frequency in childhood and development of metabolic syndrome in adulthood. This association displayed a dose–response relationship and remained even after additional adjustment for adult measures of traditional cardiovascular risk factors. These findings reinforce the importance of a healthy diet in childhood.

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