

Diabetes: The Greatest Epidemic in the 21st Century?

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The number of people with diabetes mellitus has more than doubled over the last few decades. It has become one of the most important public health challenges faced globally. One of the most concerning aspects of the rapid increase has been the emergence of type 2 diabetes among children, adolescents and young adults. While there has been significant attention to traditional risk factors for type 2 diabetes – genetic, lifestyle and behavior, more recently attention has focused on epigenetic mechanisms and the impact of the intra-uterine environment as a future driver of this epidemic. The epidemiological data foreshadow an inexorable and unsustainable increase in global health expenditures attributable to diabetes making prevention a high priority. Prevention of type 2 diabetes requires an integrated approach recognizing its multiple pathophysiological origins and its heterogeneity. Thus research needs to be directed at a better understanding of the potential role of determinants such the maternal environment and other early life factors to help shape prevention programs as well as novel therapies.