

Diabetes: knowing your risk matters

In the third year of the Access to Diabetes Care campaign, World Diabetes Day on Nov 14 highlights the importance of knowing your risk of type 2 diabetes. Under the slogan—Know your risk, Know your response—people are encouraged to use the online type 2 diabetes risk assessment tool developed by the International Diabetes Federation (IDF) to identify and understand their individual risk factors and, where possible, take positive steps to reduce those risks. Not all risk factors for type 2 diabetes are modifiable (age, ethnicity, and family history of diabetes) but many of the key drivers are (such as overweight and obesity, an unhealthy diet, and physical inactivity). By empowering people to adopt and maintain healthy lifestyle habits, type 2 diabetes can, in many cases, be prevented or delayed, or even go into remission, and diabetes-related complications avoided or reduced.

One in ten adults worldwide are now living with diabetes, 90% of whom have type 2 diabetes. According to the tenth edition of the IDF Diabetes Atlas, in 2021, diabetes was responsible for 6.7 million deaths around the world and accounted for US\$966 billion in global health expenditure. People living with diabetes are at risk of diabetes-related complications: diabetes is associated with a three-fold increased risk of developing cardiovascular disease and a ten-fold increased risk of developing kidney disease; a third of people living with diabetes will develop some form of vision loss during their lifetime; and a lower limb is lost due to diabetes somewhere in the world every 30 seconds. In addition, a 2023 study by the Emerging Risk Factors Collaboration estimated that every decade of earlier diagnosis of type 2 diabetes is associated with 3–4 years of lower life expectancy.

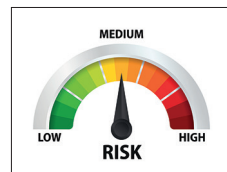
The sheer number of people affected by type 2 diabetes and the high burden it confers on the individual and society warrants immediate action on risk reduction to support prevention, early diagnosis, and timely treatment. A recent Country Focus article in this journal—Obesity in the USA: diet and lifestyle key to prevention—concluded that although effective treatment options are available for obesity, “it is imperative that diet and lifestyle modifications remain a cornerstone of obesity prevention and management”. The same is true for type 2 diabetes.

Effective treatments are available, but their high costs often pose barriers to access (especially in low-income and middle-income countries), further accentuating existing inequities in care. With future therapies likely even more expensive, the words of Bill Gates should be kept in mind: “Treatment without prevention is simply unsustainable.” Mitigation and prevention are not separate endeavours, they go hand in hand.

Unlike type 2 diabetes, people are not able to reduce their risk of developing type 1 diabetes by lifestyle modification. However, some risks associated with complications and progression of type 1 diabetes can be reduced. A 2022 study by the Type 1 Diabetes Intelligence Study Group demonstrated that 82% of children who developed type 1 diabetes by age 15 years could be predicted by islet-autoantibody screening at two ages—2 years and 6 years. Screening programmes for islet autoantibodies in children have the potential to prevent life-threatening episodes of diabetic ketoacidosis that can precede diagnosis of type 1 diabetes. In addition, timely identification of individuals with stage 2 type 1 diabetes (ie, pre-symptomatic; two or more islet autoantibodies and dysglycaemia) by screening would allow intervention with teplizumab—the first immunotherapy for type 1 diabetes approved by the US Food and Drug Administration in November, 2022—to delay progression to stage 3 (symptomatic) type 1 diabetes.

A step forward for universal screening for type 1 diabetes was taken by Italy on Sept 27 this year, when it passed a law to launch a national screening programme for type 1 diabetes and coeliac disease in 2024, which aims to screen children and adolescents aged 1–17 years in the general population every couple of years. The type 1 diabetes community and allied stakeholders will be keenly watching the roll-out of Italy’s programme, the obstacles that arise, and if and how they are overcome. Above all else, cost-effectiveness will need to be demonstrated.

Reducing the risks of and associated with all types of diabetes is vital if we are to help people with these conditions live as long and healthy a life as possible. This World Diabetes Day, take the opportunity to learn more about your risk. ■ [The Lancet Diabetes & Endocrinology](#)



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For more on **World Diabetes Day** see <https://worlddiabetesday.org/>

For the **type 2 diabetes risk assessment tool** see <https://worlddiabetesday.org/type-2-diabetes-risk-assessment/>

For the **IDF Diabetes Atlas** see <https://diabetesatlas.org/>

For more on **diabetes-related complications** see <https://idf.org/about-diabetes/diabetes-complications/>

For the **2023 study on life expectancy with earlier age of type 2 diabetes diagnosis** see **Articles** [Lancet Diabetes Endocrinol 2023; 11: 732–42](#)

For more on **obesity in the USA** see **Country Focus** [Lancet Diabetes Endocrinol 2023; 11: 642–43](#)

For the **2022 study on islet-autoantibody screening for childhood type 1 diabetes** see **Articles** [Lancet Diabetes Endocrinol 2022; 10: 589–96](#)

For more on **teplizumab** see **In Focus** [Lancet Diabetes Endocrinol 2023; 11: 18](#)

For more on the **Italian national screening programme for type 1 diabetes** see https://www.quotidianosanita.it/governo-e-parlamento/articolo.php?articolo_id=116986