

# Diabetes complications

## Know the signs, know the response



world diabetes day  
14 November

Diabetes is expected to affect 1 in 9 people (640 million) by 2030.

Almost half of people living with diabetes are undiagnosed.

When diabetes is undetected and not well managed, it can lead to **serious and potentially life-threatening complications**.



CARDIOVASCULAR DISEASE



LOSS OF VISION



KIDNEY DISEASE



NERVE DAMAGE



ORAL COMPLICATIONS



COMPLICATIONS IN PREGNANCY

A recent IDF survey\* conducted among people living with diabetes, found that:

- 7 in 10 respondents were diagnosed as a result of complications.
- Over 9 in 10 had experienced at least one diabetes-related complication.
- Many were unaware of common complications like heart disease (47%) and stroke (65%).

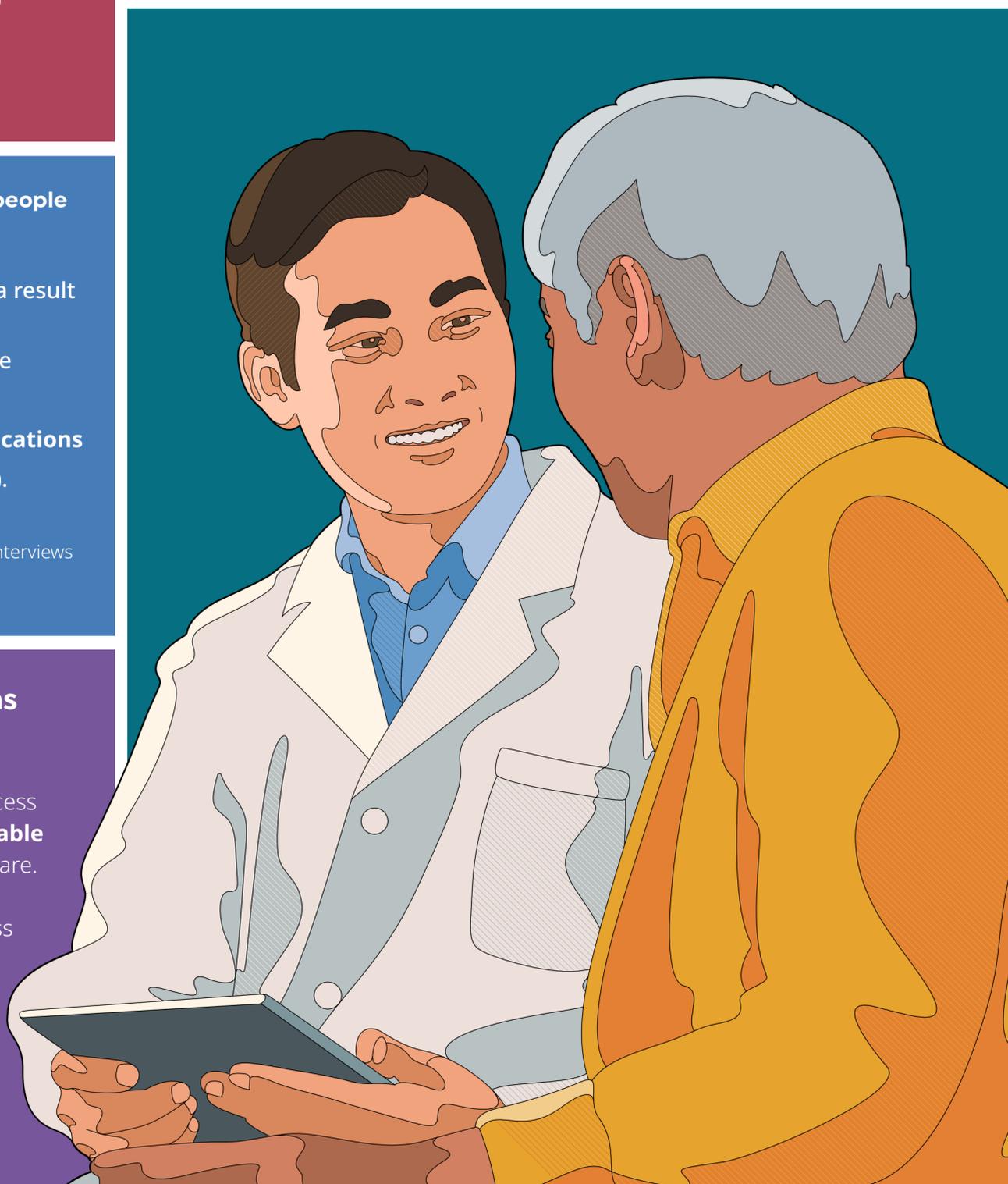
\*Research conducted in May 2023, consisting of 700 interviews with people living with diabetes in seven countries.

Diabetes-related complications can be prevented.

People living with diabetes must have access to **correct information** and the **best available medicines and tools** to support their self-care.

Healthcare professionals must have access to **sufficient training and resources** to detect diabetes and its complications early.

Achieving **Universal Health Coverage** is key to **reducing the impact of diabetes and its complications**.



Improve your diabetes knowledge at:  
[worlddiabetesday.org/understandingdiabetes](https://worlddiabetesday.org/understandingdiabetes)

#WorldDiabetesDay #KnowYourRisk



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# Type 2 Diabetes

## Know your risk, know your response



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Type 2 diabetes accounts for more than 90% of all diabetes. It can develop silently, with symptoms that go unnoticed.

When diabetes is not detected and treated early, it can lead to serious complications.

There are several **risk factors** that increase the chance of developing type 2 diabetes. **Knowing what these are and what to do can delay or prevent the onset of the condition.**



Almost 1 in 2 people with diabetes do not know they have it.



### Understand your risk



**Family history:** If you have a parent or sibling with diabetes, your risk increases.



**Weight:** Being overweight or obese increases your risk of developing type 2 diabetes.



**Age:** The risk of developing type 2 diabetes increases with age, particularly after 45.



**Ethnicity:** Certain ethnicities are more at risk, including Black Africans, African Caribbeans and South Asians.



**Inactivity:** Physical inactivity can contribute to weight gain and insulin resistance.



**Gestational Diabetes:** Women who have had diabetes during pregnancy are at increased risk.

### Know how to respond

In many cases, **healthy eating habits and regular physical activity** can help lower the risk of type 2 diabetes.

**Diet:** Choose whole grains, lean proteins, and plenty of fruits and vegetables. Limit sugars and saturated fats (e.g. cream, cheese, butter).

**Physical activity:** Spend less time sitting down and more time moving. Aim for at least 150 minutes of moderate-intensity activity per week (e.g. brisk walking, jogging, cycling).

**Monitor:** Look out for possible signs of diabetes such as excessive thirst, frequent urination, unexplained weight loss, slow healing wounds, blurred vision and lack of energy. If you have any of these symptoms or belong to a high-risk group, consult a healthcare professional.



Do you know your risk?

[worlddiabetesday.org/prevention](http://worlddiabetesday.org/prevention)

#WorldDiabetesDay #KnowYourRisk



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# BLUEBERRIES AND DIABETES MANAGEMENT



According to the Centers for Disease Control and Prevention, 34.2 million Americans (10.5% of the U.S. population) have diabetes and 88 million people aged 18+ years have prediabetes (34.5% of the U.S. adult population). Approximately 90–95% of those with diabetes have type 2 diabetes, which occurs when the body's cells do not respond to insulin, the hormone produced in the pancreas which helps blood sugar enter the cells. The prevalence of type 2 diabetes is increasing in the U.S. population. As a result of aging, risk factors such as physical inactivity and a high prevalence of being overweight and obese, increase.<sup>2</sup>

The American Diabetes Association® notes that fruit can fit into a diabetes-friendly meal plan, help to satisfy a sweet tooth and provide extra nutrition. **Blueberries are a great way to add natural sweetness to your favorite foods including cereal, yogurt, salads and smoothies.** Not only can they help satisfy your sweet tooth, but they provide the added benefit of essential nutrients like fiber, vitamin C, manganese and vitamin K.<sup>3</sup> **In fact, including blueberries in your diet may offer health benefits and help manage your diabetes.<sup>4</sup>**

Scientific evidence supports the role blueberries play in diabetes management, from helping to improve metabolic syndrome risk factors like cholesterol and blood pressure to helping to modestly lower hemoglobin A1C (average blood sugar level over three months) as a good source of fiber. Importantly, the science to date suggests dietary changes are effective and low-cost ways to improve blood sugar levels, manage weight, and reduce cardiovascular risk factors for people with diabetes.<sup>4-6</sup>

One serving, or a cup of blueberries:

- 1 Is considered one serving of fruit.
- 2 Contains just 80 calories and is a good source of fiber.
- 3 Contributes essential nutrients including vitamin C, vitamin K, manganese and phytonutrients called polyphenols.
- 4 Contains anthocyanins, which are compounds that give blueberries their blue color.

## EASY, NO-FUSS RECIPES TO GRAB A BOOST OF BLUE



Blueberry Greek Salad in a Jar



5 Ingredient Blueberry Swiss Melts



Salmon and Blueberry Salad with Red Onion Vinaigrette

## REFERENCES

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5. Carvalho MF, Lucca ABA, Ribeiro e Silva, VR, Macedo, LRD, Silva, M. [Blueberry intervention improves metabolic syndrome risk factors: Systematic review and meta-analysis](#). *Nutrition Research*. 91. 10.1016/j.nutres.2021.04.006.
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