

# Type 2 Diabetes and Mental Health: Nurturing Emotional Well-being

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## Introduction

Type 2 diabetes is a chronic metabolic disorder characterized by high blood sugar levels due to either inadequate insulin production or the body's inability to use insulin effectively. It is the most common form of diabetes, accounting for around 90% to 95% of all diagnosed cases. In this comprehensive article, we will delve into the causes, symptoms, management strategies and prevention methods for type 2 diabetes. Obesity is a major risk factor for type 2 diabetes. Excess body weight, especially abdominal fat, contributes to insulin resistance and impairs glucose metabolism. Sedentary behavior and a lack of physical activity further increase the risk. In type 2 diabetes, the body's cells become resistant to the effects of insulin, leading to elevated blood sugar levels. This resistance can be influenced by various factors such as obesity, physical inactivity and certain hormonal imbalances. A family history of type 2 diabetes can increase an individual's risk of developing the condition. Specific gene variants related to insulin production and glucose metabolism have been identified as contributing factors. Advancing age is a risk factor for type 2 diabetes [1].

People over 45 years of age are more susceptible. Additionally, individuals of African, Hispanic, Native American, Asian, or Pacific Islander descent have a higher predisposition to the disease. Women who have experienced gestational diabetes during pregnancy are at an increased risk of developing type 2 diabetes later in life. Increased blood sugar levels cause the kidneys to work harder, resulting in frequent urination. This symptom is often more pronounced at night (nocturia). Frequent urination can lead to dehydration, triggering increased thirst. Insufficient glucose utilization by the body's cells can result in fatigue, weakness and reduced energy levels. Sudden weight loss may occur despite increased appetite, while some individuals may experience unexplained weight gain due to insulin resistance. High blood sugar levels can cause fluid to be pulled from the lenses of the eyes, resulting in blurred vision. Type 2 diabetes can impair the body's ability to heal wounds and infections.

Making healthy lifestyle choices is crucial in managing type 2 diabetes. This includes adopting a well-balanced diet rich in whole grains, lean proteins, fruits, vegetables and healthy fats. Regular physical activity, such as aerobic exercises and strength training, helps improve insulin sensitivity and control blood sugar levels. Some individuals with type 2 diabetes may require oral medications or insulin therapy to help regulate blood sugar levels. These medications work in various ways, such as stimulating insulin production, improving insulin sensitivity, or slowing down the absorption of carbohydrates. Regular monitoring of blood sugar levels is essential for individuals with type 2 diabetes. This enables them to make appropriate adjustments to their diet,

exercise and medication regimens to maintain stable blood sugar control. Achieving and maintaining a healthy weight is a crucial aspect of managing type 2 diabetes. Weight loss, especially in overweight or obese individuals, can significantly improve insulin sensitivity and glycemic control [2].

## Description

Routine medical check-ups are important to monitor blood sugar levels, assess the effectiveness of treatment plans and identify any potential complications associated with type 2 diabetes. Regular eye examinations, foot care and dental check-ups are also recommended. Adopting a healthy and balanced diet is crucial in reducing the risk of type 2 diabetes. Limiting the intake of processed foods, sugary beverages and unhealthy fats while increasing the consumption of whole foods can help maintain optimal body weight and prevent insulin resistance. Engaging in regular physical activity is vital for diabetes prevention. Aim for at least 150 minutes of moderate-intensity aerobic exercise per week, along with strength training exercises to enhance muscle strength and insulin sensitivity. Maintaining a healthy weight is essential for preventing type 2 diabetes. If overweight or obese, even modest weight loss can have significant benefits in reducing the risk. Smoking and excessive alcohol consumption increases the risk of developing type 2 diabetes. Quitting smoking and limiting alcohol intake are essential preventive measures. Chronic stress can contribute to insulin resistance. Incorporating stress management techniques such as mindfulness, meditation and relaxation exercises can be beneficial [3].

Type 2 diabetes increases the risk of developing heart disease, including coronary artery disease, heart attack and stroke. High blood sugar levels can damage blood vessels and lead to atherosclerosis, a condition characterized by the build-up of plaque in the arteries. Prolonged high blood sugar levels can damage the nerves, leading to peripheral neuropathy. This condition commonly affects the feet and legs, causing numbness, tingling, pain and weakness. In severe cases, it can lead to foot ulcers and infections. Diabetes is a leading cause of kidney disease. Persistent high blood sugar levels can damage the small blood vessels in the kidneys, impairing their ability to filter waste and fluids effectively. This can progress to chronic kidney disease and eventually end-stage renal disease, requiring dialysis or kidney transplantation. Diabetes can cause damage to the blood vessels in the retina, leading to diabetic retinopathy. It is a leading cause of vision loss and blindness in adults. Regular eye examinations and early intervention are crucial in preventing or minimizing vision-related complications [4].

Nerve damage and poor blood circulation in the feet can increase the risk of foot ulcers and infections in individuals with type 2 diabetes. Proper foot care, including regular examinations, appropriate footwear and prompt treatment of any foot issues, is essential to prevent serious complications. Type 2 diabetes can affect the skin, leading to conditions such as dry skin, bacterial and fungal infections and slow wound healing. Maintaining good blood sugar control and proper skincare can help prevent these complications. Education and support play a vital role in the management of type 2 diabetes. Healthcare professionals, such as doctors, diabetes educators and dietitians, can provide valuable information and guidance on diabetes self-management. They can help individuals understand the importance of lifestyle modifications, medication adherence, blood sugar monitoring and early intervention. Ongoing research in the field of type 2 diabetes aims to further understand its complex mechanisms and develop more effective treatment strategies.

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Type 2 diabetes and mental health conditions often coexist and there is a bidirectional relationship between the two. Individuals with type 2 diabetes have an increased risk of developing mental health disorders such as depression, anxiety and diabetes-related distress. The psychological impact of living with a chronic condition, the stress of managing diabetes self-care and the potential for complications can contribute to these mental health challenges. Conversely, mental health conditions can also impact diabetes management. Depression, for example, has been associated with poorer glycemic control, medication non-adherence and unhealthy lifestyle behaviours. Recognizing and addressing the link between type 2 diabetes and mental health is essential for comprehensive diabetes care. Integrated care models that incorporate mental health screening, counselling services and collaboration between healthcare professionals can improve outcomes for individuals with type 2 diabetes [5].

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## Conclusion

Type 2 diabetes is a complex condition influenced by a combination of genetic, lifestyle and environmental factors. Understanding the causes, symptoms and risk factors is crucial for early detection and effective management. By making healthy lifestyle choices, managing weight and adopting preventive measures, individuals can significantly reduce the risk of developing type 2 diabetes and its associated complications. Regular medical check-ups and adherence to prescribed treatment plans are essential for optimal diabetes management. Remember, knowledge is power and proactive steps toward prevention and management can lead to a healthier and fulfilling life for individuals living with type 2 diabetes.

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## Acknowledgement

None.

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## Conflict of Interest

None.

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## References

1. Mayer-Davis, Elizabeth J., Jean M. Lawrence, Dana Dabelea and Jasmin Divers, et al. "Incidence trends of type 1 and type 2 diabetes among youths, 2002–2012." *N Engl J Med* 376 (2017): 1419-1429.
2. Chao, Lily C., Alaina P. Vidmar and Senta Georgia. "Spike in diabetic ketoacidosis rates in pediatric type 2 diabetes during the COVID-19 pandemic." *Diabetes Care* 44 (2021): 1451-1453.
3. Moreno, Jennette P., Craig A. Johnston and Deborah Woehler. "Changes in weight over the school year and summer vacation: Results of a 5-year longitudinal study." *J Sch Health* 83 (2013): 473-477.
4. Kriska, Andrea, Linda Delahanty, Sharon Edelstein and Nancy Amodei, et al. "Sedentary behavior and physical activity in youth with recent onset of type 2 diabetes." *Pediatrics* 131 (2013): e850-e856.
5. Hill-Briggs, Felicia, Nancy E. Adler, Seth A. Berkowitz and Marshall H. Chin, et al. "Social determinants of health and diabetes: A scientific review." *Diabetes Care* 44 (2021): 258-279.

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