

Poor nutrition contributes to poor mental health and risk of diabetes, research finds

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People with diabetes (diabetes mellitus) are 2–3 times more likely to have depression than people without, according to the <u>Centers for Disease Control</u>. Current treatment includes therapy, medicine, or both.



However, the understanding of the multifaceted relationship between nutrition, mental health, and DM is relatively new in scientific discourse. Mason researchers sought to learn about the connection between nutrition, diabetes, and mental health.

Two literature reviews from assistant professor Raedeh Basiri show that poor nutrition plays a dual role, contributing to both the risk of developing type 2 diabetes and impacting mental health, including anxiety and depression.

"Exploring the Interrelationships between Diabetes, Nutrition, Anxiety, and Depression: Implications for Treatment and Prevention Strategies" and "Key Nutrients for Optimal Blood Glucose Control and Mental Health in Individuals with Diabetes: A Review of the Evidence" were published in *Nutrients*.

According to the findings, mental disorders, such as depression and anxiety, increase the risk of developing type 2 diabetes, and diabetes is also linked with an increased risk of developing depression and anxiety. Nutrition interventions can aid in both of these health issues.

"Our findings underscore the pivotal role of dietary choices in reducing the risks associated with both diabetes and mental health. The implications of these findings extend beyond the <u>scientific community</u>, as they hold promise for informing public health policies, health care practices, and dietary recommendations that can positively impact the general population," said Basiri, the lead author of the papers.

"Ultimately, the research seeks to empower individuals to make informed and health-promoting dietary choices that can serve as a proactive strategy for the prevention and management of diabetes, as well as anxiety and depression," Basiri said.



More specifically, the team's findings provide a comprehensive view of the relationship between dietary patterns, health outcomes, and the critical role of eating behavior in the context of type 2 diabetes and mental health.

The team found that eating foods rich in fresh fruits and vegetables, whole grains, lean protein, and low-fat dairy is associated with a reduced risk of type 2 diabetes and mental health disorders such as depression and anxiety. Conversely, a diet with a large number of processed foods was found to have a negative effect, increasing the susceptibility to type 2 diabetes, depression, and anxiety.

Additionally, the research team found that a diet with energy-dense foods but lacking in <u>essential nutrients</u>, such as omega-3 <u>fatty acids</u>, vitamin D, vitamin E, vitamin B6, vitamin B12, folate, selenium, chromium, and magnesium, is associated with the exacerbation of unfavorable symptoms in both <u>mental health</u> and the development of type 2 diabetes. This connection emphasizes the importance of nutrient-rich dietary choices for overall health and well-being.

"Current scientific evidence underscores the <u>potential benefits</u> of adopting a well-balanced dietary regimen in decreasing anxiety and depression symptoms while enhancing glycemic control in individuals with diabetes," said Basiri.

More information: Raedeh Basiri et al, Exploring the Interrelationships between Diabetes, Nutrition, Anxiety, and Depression: Implications for Treatment and Prevention Strategies, *Nutrients* (2023). DOI: 10.3390/nu15194226

Raedeh Basiri et al, Key Nutrients for Optimal Blood Glucose Control and Mental Health in Individuals with Diabetes: A Review of the Evidence, *Nutrients* (2023). DOI: 10.3390/nu15183929



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