

## Diabetes and Depression Linked

An estimated 23.5 million U.S. adults have with diabetes, and nearly 15 million American adults are afflicted with major depressive disorder annually. Some experts have hypothesized that a bi-directional diabetes-depression relationship, and An Pan, from the Harvard School of Public Health (Massachusetts, USA), and colleagues have completed a study that assesses the relationship between the two diseases. The researchers studied 65,381 women, ages 50 to 75 years at the study's start in 1996. Participants were surveyed for medical history and health practices, and then follow-up questionnaires every two years through 2006. Subjects were classified as having depression if they reported symptoms of depression, using antidepressant medication or being given a diagnosis of depression by a physician. Women who reported a new diagnosis of diabetes completed a supplementary questionnaire about symptoms, diagnostic tests and treatments. During the 10-year follow-up, 2,844 women were diagnosed with type 2 diabetes and 7,415 developed depression. Women with depression were about 17% more likely to develop diabetes after controlling for other risk factors, such as physical activity and body mass index (BMI). Those who were taking antidepressants had a 25% higher risk of developing diabetes than those who did not have depression. After controlling for other risk factors for mood disorders, women with diabetes were 29% more likely to develop depression. Women who took insulin for diabetes had a further increased risk—53% higher than women without diabetes. The team concludes that: "Our results provide compelling evidence that the diabetes-depression association is bidirectional."

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An Pan; Michel Lucas; Qi Sun; Rob M. van Dam; Oscar H. Franco; JoAnn E. Manson; Walter C. Willett; Alberto Ascherio; Frank B. Hu. "Bidirectional Association Between Depression and Type 2 Diabetes Mellitus in Women." *Arch Intern Med*, Nov 2010; 170: 1884 - 1891.