

# Metformin may increase risk of cognitive impairment

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Metformin may increase the risk of cognitive impairment in patients with diabetes; however, calcium supplementation may attenuate this risk, according to research published online Sept. 5 in *Diabetes Care*.

(HealthDay)—Metformin may increase the risk of cognitive impairment in patients with diabetes; however, calcium supplementation may attenuate this risk, according to research published online Sept. 5 in *Diabetes Care*.

Eileen M. Moore, Ph.D., of the University of Melbourne in Australia, and colleagues conducted a subgroup analysis involving 104 patients with type 2 diabetes and 22 patients with impaired [glucose tolerance](#) who participated in the Australian Imaging, Biomarkers and Lifestyle study of aging. The authors sought to determine whether metformin, serum vitamin B<sub>12</sub>, or calcium supplements are associated with cognitive impairment in patients with diabetes.

The researchers found that, overall, patients with diabetes were 51 percent more likely to exhibit cognitive impairment than those without diabetes, and those taking metformin were more than twice as likely (2.23-fold) to exhibit cognitive impairment. After adjusting for age, sex, level of education, history of depression, serum vitamin B12, and metformin use, cognitive performance was improved for those patients who were also taking [calcium supplements](#).

"Adequately powered, prospective, controlled trials are warranted to investigate further the association between diabetes, [cognitive decline](#), and the effect of metformin therapy, as well as the possible amelioration using vitamin B<sub>12</sub> and/or [calcium supplementation](#)," the authors write.

Several authors disclosed financial ties the biotechnology industry.

**More information:** [Abstract](#)  
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