

Acute hypoglycemia impairs executive cognitive function

27 June 2013



In adults with and without type 1 diabetes, executive cognitive function is impaired during hypoglycemia, according to research published online June 18 in *Diabetes Care*.

(HealthDay)—In adults with and without type 1 diabetes, executive cognitive function is impaired during hypoglycemia, according to research published online June 18 in *Diabetes Care*.

Alex J. Graveling, M.R.C.P., of the Royal Infirmary of Edinburgh in the United Kingdom, and colleagues studied the effect of acute hypoglycemia on executive function in 32 adults, 16 without diabetes and 16 with type 1 diabetes, who did not have vascular complications or impaired awareness of hypoglycemia. A glucose clamp technique was used to establish hypoglycemic and euglycemic conditions. A validated test suite (Delis-Kaplan Executive Function) was used to assess executive functions.

The researchers found that almost all executive functions were significantly impaired during hypoglycemia compared with euglycemia. Test scores were lower during hypoglycemia, and more time was required for completion of tasks and tests. For some tests, performance during hypoglycemia was worse for those with diabetes than for those without diabetes.

"Executive cognitive function, which is necessary

to carry out many everyday activities, is impaired during [hypoglycemia](#) in adults with and without [type 1 diabetes](#)," the authors write. "The effect size is large in terms of both accuracy and speed."

More information: [Abstract](#)
[Full Text \(subscription or payment may be required\)](#)

[Health News](#) Copyright © 2013 [HealthDay](#). All rights reserved.

APA citation: Acute hypoglycemia impairs executive cognitive function (2013, June 27) retrieved 22 October 2020 from <https://medicalxpress.com/news/2013-06-acute-hypoglycemia-impairs-cognitive-function.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.