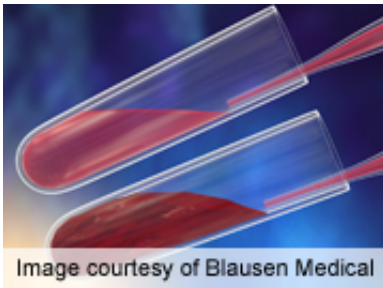


# Exercise stimulates adiponectin, raises HDL levels

October 18 2012

---



Intensive lifestyle intervention for weight loss significantly improves high-density lipoprotein cholesterol levels in overweight and obese individuals with type 2 diabetes, which is partially mediated by stimulation of adiponectin production, according to a study published online Sept. 5 in the *Journal of Lipid Research*.

(HealthDay)—Intensive lifestyle intervention for weight loss (ILI) significantly improves high-density lipoprotein cholesterol (HDL-C) levels in overweight and obese individuals with type 2 diabetes, which is partially mediated by stimulation of adiponectin production, according to a study published online Sept. 5 in the *Journal of Lipid Research*.

L. Maria Belalcazar, M.D., of the University of Texas Medical Branch in Galveston, and colleagues conducted the Look AHEAD study involving 1,397 overweight and obese adults with [type 2 diabetes mellitus](#) to determine whether ILI would alter adiponectin and potentially mediate the increase in low HDL-C compared with standard diabetes support and

education (DSE).

The researchers found that ILI correlated with a significant increase in baseline HDL-C and adiponectin, by 9.7 and 11.9 percent, respectively, compared with the 1.3 and 0.2 percent increases achieved with standard DSE. Adiponectin changes were significantly associated with HDL-C changes, even after adjustment for potentially confounding variables. The improvement in HDL-C achieved with ILI was attributed to changes in both high molecular weight (HMW) and non-HMW-adiponectin.

"In summary, we report that, when compared to usual care, ILI exerted important changes on HMW-adiponectin and non-HMW-adiponectin levels, and that their combined effect, easily assessed by measuring total adiponectin change, may partially mediate the increases in HDL-C with ILI, independently of changes in triglyceride, weight, fitness and [glucose control](#)," the authors write. "Our findings suggest an active role for adipose tissue function in the modulation of HDL metabolism."

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

Copyright © 2012 [HealthDay](#). All rights reserved.

Citation: Exercise stimulates adiponectin, raises HDL levels (2012, October 18) retrieved 25 April 2024 from <https://medicalxpress.com/news/2012-10-adiponectin-hdl.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.