

# School intervention may improve kids' heart health long term

May 13 2011

---

Middle school students who were offered healthier cafeteria food, more physical education and lessons about health choices improved their cholesterol levels and resting heart rates, according to research presented at the American Heart Association's Quality of Care and Outcomes Research 2011 Scientific Sessions.

"This four-year school intervention in Ann Arbor, Mich., was designed to promote healthier [lifestyle choices](#) and it shows that programs like this could have long-term impact on obesity and other health risks," said Elizabeth A. Jackson, M.D., M.P.H., co-author of the study and assistant professor of internal medicine at the University of Michigan. "Such changes may have sustained benefits in terms of reducing incidences of diabetes and cardiovascular disease as the students age."

The intervention was conducted through Project Healthy Schools, a coalition of the University of Michigan and local community and business organizations working to improve the health and behavior choices of [middle school students](#). It was considered so successful that it's now being expanded to about 20 middle schools in Michigan, Jackson said.

Specifically, the program goals for the students included:

- Eating more [fruits and vegetables](#);

- Eating less fatty foods;
- Making better beverage choices;
- Getting at least 150 minutes of physical activity each week; and
- Spending less time in front of the TV and computer.

To help determine whether the initiative could decrease future cardiovascular disease and diabetes risks, Jackson and colleagues studied 593 students. They collected data for four consecutive years on [body mass index](#), [cholesterol levels](#), blood pressure, [heart](#) rate and student self-evaluations of diet, exercise and other behaviors.

"Results of the wellness survey indicate that, after four years, students continued to make health-conscious decisions," Jackson said.

The researchers report:

- Average cholesterol, which was 167.39 milligrams per deciliter of blood (mg/dL) at the start of the study, was an average of 149.04 mg/dL at the end of four years.
- Low density lipoprotein (LDL) was an average 92.02 mg/dL at the study's start, versus 85.88 after four years.
- Resting heart rate (beats per minute) were an average 81.3 compared to 78.3 after four years.

A limitation of the study is that it does not compare [students](#) in the program to similar groups not participating. Such a comparison study would be the next step in determining an association between initiative

participation and health benefits, Jackson said.

Provided by American Heart Association

Citation: School intervention may improve kids' heart health long term (2011, May 13) retrieved 6 May 2024 from

<https://medicalxpress.com/news/2011-05-school-intervention-kids-heart-health.html>

<p>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.</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------