

Food insecurity linked to adolescent obesity, metabolic syndrome

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New research indicates that household food insecurity dramatically increases the likelihood of metabolic diseases in children, with many showing chronic disease markers before they graduate from high school. The study published today in the *Journal of the American Osteopathic Association*.

Food insecurity, defined as lacking access to [food](#) for an active, healthy life, is a preventable health threat. Yet, lack of basic access to food affects 14.3 percent of all U.S. households and 19.5 percent of households with children.

"This is a looming health issue for the nation. The number of households with severely low levels of [food security](#) among children almost doubled between 2003 to 2010," said lead researcher David Holben, PhD, professor and department chair of nutrition and hospitality management at the University of Mississippi.

To study the potential effects of [food insecurity](#), Dr. Holben and colleagues from the University of Mississippi and Ohio State University administered the National Health and Nutritional Examination Survey to a cross-sectional sample of adolescents ages 12 to 18. More than 7,500 participants were interviewed in their homes and given physical examinations between 1999 and 2006.

The data revealed that participants from households with marginally low, low and very low food security were 33 to 44 percent more likely than

their high food secure counterparts to be overweight.

Children with very low to marginal food security were also 1.5 times more likely to meet the criteria for central obesity, defined as having excessive fat around the stomach and abdomen. Central obesity is linked to heart disease and metabolic disorders such as diabetes.

"These families often have to make the difficult decision of choosing to buy [healthy food](#) or buying food they can afford," said co-author Christopher Taylor, PhD, associate professor of medical dietetics and family medicine at Ohio State University. "Physicians can help their patients identify resources such as local food banks or the Federal Supplemental Nutrition Assistance Program to help bridge that gap."

Dr. Ulrick Vieux, DO, MS, an American Osteopathic Association health policy fellow and psychiatry residency program director at Orange Regional Medical Center in Middletown, N.Y., explains that improving access to adequate, nutrient-based food starts at school, where children can potentially have access to all three meals which they might not have at home.

"Many children rely on school meals to provide healthier meals that they may not be exposed to at home or the community." said Dr. Vieux. "Policies such as the Healthy Hunger-Free Kids Act of 2010 set nutrition standards and increase access to such meals. It's important that we advocate for policies like this to ensure our nation's children are getting the nutrition they need to minimize future obesity-related complications."

The [study](#) is accessible online until October 31, 2015.

Provided by American Osteopathic Association

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