Childhood obesity prevention programs impact LDL-C, HDL-C

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Photo: U.S. Centers for Disease Control and Prevention

(HealthDay)—Childhood obesity prevention programs are beneficial for low-density lipoprotein cholesterol (LDL-C) and high-density lipoprotein cholesterol (HDL-C), according to a systematic review and meta-analysis published in the December issue of *Obesity Reviews*.

Li Cai, from Sun Yat-sen University in China, and colleagues examined the effects of childhood obesity prevention programs on blood lipids in high-income countries. Data were obtained from 17 relevant randomized controlled trials, quasi-experimental studies, and natural experiments that implemented diet and/or physical activity interventions in 2- to 18-year-olds.

The researchers found that the pooled intervention effect was −0.97

mg/dL^{-1} for total cholesterol (P = 0.408); −6.06 mg/dL^{-1} for LDL-C (P = 0.018); 1.87 mg/dL^{-1} for HDL-C (P = 0.013); and −1.95 mg/dL^{-1} for triglycerides (P = 0.202). In 70 percent of interventions, there were similar significant or no effects on adiposity and lipid outcomes: Adiposity and lipid outcomes were improved in 15 percent of interventions, while there were no significant effects on either in 55 percent.

"Childhood obesity prevention programs had a significant desirable effect on LDL-C and HDL-C," the authors write. "Assessing lipids outcomes provides additional useful information on obesity prevention program benefits."

More information: Abstract
Full Text (subscription or payment may be required)