



Summary of Community Preventive Services Task Force Recommendation

The Community Preventive Services Task Force (CPSTF) recommends school-based gardening interventions in combination with nutrition education to increase children's vegetable consumption.

Major Findings

The CPSTF recommendation is based on evidence from a systematic review published in 2017.¹

- The CPSTF examined results from a subset of 14 studies that examined gardening interventions conducted with children ages 2 to 18 years.
 - Consumption of vegetables increased (12 studies) while fruit consumption did not change (10 studies).
 - Interventions including nutrition education in addition to gardening activities were more effective than gardening activities alone.



What are gardening interventions to increase vegetable consumption?

- Gardening interventions provide children with hands-on experience planting, growing, and harvesting fruits and vegetables in an effort to increase their consumption of fruits and vegetables.
- Interventions must include at least one of the following:
 - Outside gardens
 - Container gardens
 - Microfarms
 - Other alternative gardening methods
- Interventions may also include nutrition education or a parental component. They may be implemented in early care and education settings, schools, afterschool programs, or communities.

Facts about Nutrition

- Most people in the United States, including children and adolescents, do not eat enough fruits and vegetables.^{2,3}
- Eating a diet rich in fruits and vegetables can help reduce the risk of many leading causes of illness and death, such as cardiovascular disease, type 2 diabetes, some cancers, and obesity.⁴
- Gardening interventions have been shown to increase children's preferences for and willingness to try new fruits and vegetables.⁵

Learn More

Summary of Evidence and CPSTF Finding

<https://thecommunityguide.org/findings/nutrition-gardening-interventions-increase-vegetable-consumption-among-children>

CDC, Division of Population Health

<https://www.cdc.gov/healthyschools/nutrition/schoolnutrition.htm>

CDC, Division of Nutrition, Physical Activity, and Obesity

<https://www.cdc.gov/nccdphp/dnpao/index.html>

¹ Savo'e-Roskos MR, Wengreen H, Durward C. Increasing Fruit and Vegetable Intake among Children and Youth through Gardening-Based Interventions: A Systematic Review. *Journal of the Academy of Nutrition and Dietetics* 2017;11(2):240-50.

² CDC. (2017, April 10). Childhood Obesity Facts. Retrieved February 28, 2018, from <https://www.cdc.gov/obesity/data/childhood.html>.

³ CDC. State Indicator Report on Fruits and Vegetables 2013. Retrieved February 28, 2018, from <https://www.cdc.gov/nutrition/downloads/state-indicator-report-fruits-vegetables-2013.pdf>.

⁴ Division of Nutrition, Physical Activity, and Obesity. (2017, November 24). Retrieved March 01, 2018, from <https://www.cdc.gov/nccdphp/dnpao/division-information/media-tools/adults-fruits-veg-tables.html>.

⁵ Impact of Garden-Based Youth Nutrition Intervention Programs: A Review Ramona Robinson-O'Brien-Mary Story-Stephanie Heim - *Journal of the American Dietetic Association* - 2009.

Established in 1996 by the U.S. Department of Health and Human Services, the Community Preventive Services Task Force (CPSTF) is an independent, nonfederal panel of public health and prevention experts whose members are appointed by the director of CDC. The CPSTF provides information for a wide range of decision makers on programs, services, and other interventions aimed at improving population health. Although CDC provides administrative, scientific, and technical support for the CPSTF, the recommendations developed are those of the CPSTF and do not undergo review or approval by CDC. Find more information at www.thecommunityguide.org.