

How can you recognize success? Individual responses to food system policy aimed at children.

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How can you recognize success? Individual responses to food system programming aimed at children.

Communication Goal: To present an evidence base of the impacts of food system programming aimed at children that are theory based and applicable locally, nationally, and globally.

Farm-to-school (FTS) programs and similar programs are gaining attention for many reasons, one of which is the recognition that they could help stem the increase in childhood overweight and obesity. Most programs that have been evaluated have increased students' selection or intake of fruits and vegetables following the incorporation of FTS components. However, the wide range of activities that are typically part of FTS programs make it difficult to pinpoint which components have the greatest potential to improve students' health behaviors. Within the field of nutrition education, theory-based interventions that target the key underlying factors influencing health behavior offer the most promise (1).

The farm-to-school (FTS) movement gained traction during the 1990s, and then flourished over the next decade, resulting in an estimated 2,000 programs in nearly 9,000 schools across the country by 2008 (2). Lacking a precise definition, FTS programs are characterized as linking farmers and K-12 schools with the primary purposes of contributing to nutritious meals and education for youth and better incomes for farmers who market locally. Additional goals include enhancing youth's appreciation and awareness of agriculture, food, and nutrition, strengthening local economies, and furthering youth's sense of connectedness to the community (3,4).

The Farm-to-School movement can be described as a system comprised of discrete actors operating at varying levels of geographic scale, social sector, and network function (5). As a result of FTS programs' diverse purposes and grassroots nature, the types of activities they encompass vary considerably from program to program. This variety may be due to a view that FTS efforts appear to be best designed from the ground up. Despite this diversity, most FTS programs serve locally produced foods in the school cafeteria (6,7) often highlighting fresh or processed fruits and vegetables (eg, kale, squash, tomato sauce), dairy and meat products, eggs, beans, and other value-added items (eg, pesto, granola, cider). In addition to locally sourced food served in the cafeteria, components of FTS activities common to many programs include taste tests, lessons on healthful food choices, farm visits, school gardens, recycling activities, and composting systems. Programming aimed directly at children can have many impacts, from "close in" such as enhancing knowledge and skills, to "far out" including decreasing childhood obesity (8).

In this presentation, we review methodology and results of several studies aimed at measuring the impact of child oriented programming in food systems. We begin with FEED, Food Education Every Day (9). This is Vermont's version of Farm to School and a network of researchers has been working to evaluate its' impact for several years. In many ways, VT FEED has formed the basis for many other programs and the USDA's Farm to School initiative (<http://www.fns.usda.gov/farmentoschool/farm-school>). We move on to research that evaluates American Heart Association's National Teaching Garden Program (10). This curriculum has been implemented across the country in 18 different school districts. We end with the recently awarded national Farm to School evaluation for programming funded by the United States Department of Agriculture (USDA).

The presentation will begin by introducing two models relevant to studying the impact of food systems programming to children: The Social Ecological Model and the Social-Cognitive Theory (11, 12, 13). Second, we will present methods and measures, and the problems faced when using community based research (CPAR). Third, we will present findings from our spectrum of work throughout the U.S. Fourth, we will present the plan for the national evaluation of USDA funded farm to school programming. Finally, we will discuss triggers and barriers to successful research, grounded in theory and applied in nature, aimed at showing the impact of food systems programming aimed at children locally, nationally, and globally.

Note: This presentation includes material that has been previously published in peer reviewed journals, material based on reports to funders, and research in progress.

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