

impact

University of Idaho Extension programs that are making a difference in Idaho.

The effectiveness of a fruit and vegetable prescription program for at-risk children

AT A GLANCE

The Fruit and Vegetable Prescription Program improves dietary intake and health beliefs of at-risk pediatrics and caregivers in the Twin Falls areas.

The Situation

Higher fruit and vegetable consumption have been associated with reduced risk of chronic disease, including heart disease, stroke, high blood pressure, type 2 diabetes and some cancers. Yet, most children and adolescents do not consume the recommended amount. Several studies have found the use of fruit and vegetable prescription programs increase the affordability of healthy foods and improve fruit and vegetable consumption among participants. Additional research is needed to determine the effects of such programs on pediatric patients and their caregivers.

Our Response

From 2018-2019, University of Idaho Extension collaborated with Wholesome Wave, a national nonprofit organization on produce prescription programs to administer the Fruit and Vegetable Prescription Program (FV Rx) in Twin Falls County. The program was funded by Chobani.

The family and consumer sciences Extension educator in Twin Falls County partnered with Family Health Services to recruit pediatric patients deemed to be at risk of diet-related chronic disease, and their caregivers. A total of 133 pediatric patients aged 2-18 were



Caregivers participated in the grocery store tour. Photo credit: Wholesome Wave.

prescribed fruits and vegetables for six months (from October 2018 through March 2019). Caregivers received an FV Rx card to purchase fresh fruits and vegetables up to \$60 per month at participating stores. Also, caregivers were offered nutrition education and grocery shopping classes in partnership with Eat Smart Idaho during the program.

Program Outcomes

Ninety-four caregiver-and-child dyads completed pre- and post-surveys (children's mean age: 8.9 ± 5.0 , 50% males, 78.5% Hispanic). Most families (60%) were currently receiving or had received SNAP benefits in the past and used FV Rx cards once or twice a month (57%). Caregivers reported participating stores

were easy to get to (88%), and they felt comfortable using the card (69%).

Caregivers reported positive shifts in children’s dietary intake, including increased consumption of fruits (62%), green leafy salad (56%) and beans (45%) (see Table 1). There were also positive shifts in caregivers’ personal dietary intake, with more adults meeting the dietary guidelines for fruit (59%) and vegetable intake (25%) following the program than before (37% and 6% fruit and vegetable, respectively).

Table 1: Percent of caregivers reporting a shift in their child’s dietary intake following participation in the FV Rx program:

Dietary Item	Shift Lower	Shift Higher	No Change
100% Fruit Juice	23%	57%	19%
Fruit	20%	62%	18%
Green Leafy Salad	21%	56%	22%
Fried Potatoes	50%	21%	29%
Potatoes	30%	46%	24%
Beans	29%	45%	27%
Vegetables	29%	35%	36%
Pizza	39%	24%	36%
Tomato Sauces	31%	40%	29%

Caregivers reported positive shifts in perceived personal and child health and diet status (see Table 2). On a scale of poor to excellent, parents reported a positive shift toward excellent in their perception of their child’s health (43%) and diet (57%), as well as their own health (45%) and diet (56%). On a scale of strongly disagree to strongly agree, parents reported a positive shift toward strongly agree with the statements, “My child likes vegetables” (46%) and “My child likes fruit” (32%).

FOR MORE INFORMATION

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Table 2: Percent of caregivers reporting a shift in attitudes, beliefs or health status following participation in the FV Rx program:

	Response Range	Negative	Positive Shift	No Change
Child’s Health	Excellent – Poor	13%	43%	45%
Child’s Diet	Excellent – Poor	14%	57%	29%
Parent’s Health	Excellent – Poor	13%	45%	43%
Parent’s Diet	Excellent – Poor	12%	56%	32%
My child likes vegetables	Strongly agree – Strongly disagree	13%	46%	41%
My child likes fruits	Strongly agree – Strongly disagree	14%	32%	54%
Parent knowledge of fruit and vegetable preparation	Know a lot – Know nothing	10%	34%	56%
Parent knowledge of importance of fruits and vegetables	Know a lot – Know nothing	9%	41%	50%

The Future

By increasing access and affordability of healthy fruits and vegetables through an FV Rx program in clinical settings, children and their caregivers can make positive shifts to improve dietary intake and health beliefs, which may reduce the risk of chronic disease.