

SNAP-Ed Toolkit

This document was downloaded from <https://snapedtoolkit.org/interventions/programs/turtle-island-tales-family-wellness-program/>. Copyright © 2022 UNC Center for Health Promotion and Disease Prevention.

Turtle Island Tales Family Wellness Program

Montana State University, Center for American Indian and Rural Health Equity; Turtle Island Tales LLC

Overview

The Turtle Island Tales family wellness program is a home-based, family-level, direct education intervention designed to increase fruit and vegetable consumption, decrease added sugar intake, increase physical activity, decrease sedentary/screen time, promote healthy sleep, and promote emotional regulation, providing low-income, SNAP-eligible American Indian (AI) families with skills and tools needed to make healthy lifestyle choices. The year-long 12 lesson program is designed to be mailed into the home monthly as a kit focused on a particular topic each month. Each kit contains themed printed lessons for adults, a children's book on the topic, support items, and multiple activities for adults and children (3-8 years). Each lesson is designed for use in the home by families for approximately 1-2 hours each month; additional games and recipes in the kit and online encourage engagement throughout the month. The program is reinforced by social media (Instagram/Facebook) and a website that contains healthy recipes, active games, tips for wellness, and short character-based films, and complements and reinforces existing policy, systems, and environmental change interventions in Native communities, such as community gardens, traditional activities, and tribal wellness programs. **Target Behavior:** Healthy Eating, Physical Activity and Reduced Screen Time, Other: Sleep, emotional regulation **Intervention Type:** Direct Education

Intervention Reach and Adoption

Turtle Island Tales is designed to provide low-income, SNAP-eligible American Indian families with skills to make healthy lifestyle choices. The program addresses the need for family based culturally appropriate materials and combines Indigenous knowledge with US diet and physical activity guidelines. The program is designed for home use, which can eliminate barriers related to participation (e.g., transportation, scheduling). The program also can be delivered in group settings or family visits if more direct engagement is desired. The program has been successfully implemented as a mailed home-based program with 600 Native families in 5 states over the past 10 years. **Setting:** Child care, Health care, Indian Tribal Organizations, School, Non-profit organizations, Home-based settings **Target Audience:** Preschool (<5 years), Elementary School, Parents/Mothers/Fathers, Other: other adult caregivers **Race/Ethnicity:** American Indian or Alaskan Native communities

Intervention Components

The Turtle Island Tales program includes monthly mailed kits (lessons, children’s books, coloring worksheets, recipes, support items) that provide resources to improve the health of American Indian families with young children. The kits are the core components; an online platform with short films, recipes, games, and stories may increase engagement and long-term maintenance of program results but are not integral. Partners would recruit families to participate in the year-long mailed program. Mailed delivery was found to elicit excitement in response to receiving a tangible package, leading to increased program engagement. This delivery mechanism also minimizes points of coordination and staffing needs and is ideal and not to be modified. We recommend quarterly contact with participants via phone or Facebook to ensure materials are being received. Additional participant engagement via Facebook/Instagram is also recommended. A unique aspect of the program is our Native Advisory Group who add traditional wisdom to the lessons, and the creation of our characters, Grandma and Igmu, who is her bobcat puppet “grandson.” The wisdom of the advisors is featured along with these two characters throughout the kit materials and in our short films and on the web and social media platforms. The use of a Native grandmother to model and demonstrate healthy behaviors with her grandson is in keeping with Native values of passing on knowledge for the next 7 generations. These characters also create excitement and buy-in from the target audience of Native families with young children.

Intervention Materials

Materials do not exceed 6th grade reading level and meet target audience needs for an easily accessible program that engages all family members in healthy behavior change. Each Turtle Island Tales monthly kit consists of a parent/adult lesson, children’s books, and support items such as stickers, coloring sheets, a finger puppet, a recipe book featuring traditional foods, a dream catcher kit, and other items delivered monthly over one year. The website, www.turtleislandtales.org, includes short films based on traditional teachings, recipes, games, stories, and parenting support. Support is also provided via Instagram and Facebook.

Intervention Costs

The Turtle Island Tales program is a 12-month, mailed, home-based intervention costing \$30 per kit per month per family, plus shipping costs.

Evidence Summary

Healthy Children Strong Families, which informed Turtle Island Tales, was designed by multiple American Indian communities in partnership with academic researchers to promote family wellness. The program is based on the Native concept of elders teaching younger generations and is guided by Social Cognitive Theory and Family Systems Theory. The program addresses individual and interpersonal factors influencing diet, physical activity, sleep, screen time, and emotional regulation. Randomized controlled trial results revealed promising healthy behavior changes, improved readiness to change health behaviors, and high community acceptance. Significant improvements in adult and child healthy diet patterns, adult fruit/vegetable intake, adult moderate-to-vigorous physical activity, the home nutrition environment, and adult self-efficacy for health behavior change were observed. There was a trend toward reduced screen time in children ($p=.06$). Adult participants increased their fruit and vegetable consumption from an average of 16.2 to 18.5 servings per week and increased their moderate-to-vigorous physical activity from 3.6 to 4.9, 15-minute bouts per week from pre- to post-intervention, respectively. Adult readiness-to-change scores increased for increasing physical activity, fruit and

vegetable intake, and obtaining adequate sleep and for decreasing screen time. When assessing the home environment, scores in the nutrition domain increased post-intervention. These pre-post changes were all significantly greater ($p < .05$) than those observed in the control group of the clinical trial. Focus group findings showed great acceptance of the program with increased child-parent time spent together in program activities such as reading, physical activity, and cooking.

- Adams AK, LaRowe TL, Cronin KA, et al. The Healthy Children, Strong Families intervention: design and community participation. *J Prim Prev.* 2012;33(4):175-185. doi:10.1007/s10935-012-0275-y
 - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3904366/>
- Tomayko EJ, Prince RJ, Cronin KA, et al. Healthy Children, Strong Families 2: A randomized controlled trial of a healthy lifestyle intervention for American Indian families designed using community-based approaches. *Clin Trials.* 2017;14(2):152-161. doi:10.1177/1740774516685699
 - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5499663/>
- Tomayko EJ, Prince RJ, Cronin KA, Adams AK. The Healthy Children, Strong Families intervention promotes improvements in nutrition, activity and body weight in American Indian families with young children. *Public Health Nutr.* 2016;19(15):2850-2859. doi:10.1017/S1368980016001014
 - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5039403/>
- Tomayko EJ, Prince RJ, Cronin KA, Kim K, Parker T, Adams AK. The healthy Children, Strong Families 2 (HCSF2) randomized controlled trial improved healthy behaviors in American Indian families with young Children. *Curr Dev Nutr.* 2019;3(Suppl 2):53-62. doi:10.1093/cdn/nzy087
 - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6700460/>

Evidence-based Approach: Research-Tested

Evaluation Indicators

Based on the SNAP-Ed Evaluation Framework, the following outcome indicators can be used to evaluate intervention progress and success.

	Readiness and Capacity – Short Term (ST)	Changes – Medium Term (MT)	Effectiveness and Maintenance – Long Term (LT)	Population Results (R)
Individual	ST1 , ST3	MT1 , MT3		
Environmental Settings				
Sectors of Influence				

- ST1: Readiness to increase fruit and vegetable consumption; Readiness to decrease added sugar
- ST3: Readiness to increase physical activity; Readiness to reduce screen time
- MT1: Healthy diet pattern; Weekly fruit and vegetable (combined) consumption
- MT3: Moderate-Vigorous physical activity

Evaluation Materials

A pre-post evaluation survey for the Turtle Island Tales program is based on the Family Nutrition and Physical Activity survey, a validated 2 item food security screener, and two items from the SF-12. The research studies included adult/child physical measures and an extensive set of validated and researcher developed surveys addressing study targets; participant satisfaction surveys; and focus group discussion guides.

Additional Information

The Turtle Island Tales website, www.turtleislandtales.org, includes links to video materials, recipes, and additional activities. **Contact Person(s):** Emily Tomayko Email: emilytomayko@montana.edu Phone: 406-994-4191