Learning about Nutrition through Activities (LANA)

Minnesota Department of Health

Overview

Learning about Nutrition through Activities (LANA) is a direct education and PSE change intervention designed to create supportive environments and provide role models that encourage preschool children to enjoy eating fruits and vegetables. The LANA Preschool Program is based on well-established nutrition education and behavior-change theories. LANA helps children learn to eat more fruits and vegetables by increasing opportunities for children to taste and eat fruits and vegetables, providing opportunities for hands-on experiences with fruits and vegetables, creating a supportive environment for eating fruits and vegetables, providing children with role models who eat fruits and vegetables and connecting classroom or child care activities with their home environment. 

Target Behavior: Healthy Eating, Food Insecurity/Food Assistance

Intervention Type: Direct Education, PSE Change

Intervention Reach and Adoption

LANA targets children in preschool. Settings include family or center-based child care, Head Start, and Preschools. 

Setting: Child care  
Target Audience: Preschool (<5 years old)  
Race/Ethnicity: All

Intervention Components

LANA includes the following components:

- Daily Menu Changes
  - The menu changes increase children’s exposure to fruits and vegetables, introduce children to the eight targeted fruits and vegetables and establish eating fruits and vegetables as a regular part of the children’s daily routine. This includes incorporating the eight targeted fruits and vegetables into
your existing menus, reducing highly competitive foods and increasing opportunities for children to eat fruits and vegetables.

- **Weekly Cooking Activities**
  - Simple cooking activities done weekly during the program build children’s hands-on experience working with fruit and vegetables.

- **Weekly Tasting Activities**
  - The tasting activities introduce the targeted fruits and vegetables to children in a new, non-threatening context. During the first sixteen weeks of the program, weekly tasting activities in which small samples of the targeted fruits/vegetables are offered to the children. After the first sixteen weeks, the tasting activities occur only during theme weeks.

- **Monthly Curriculum Theme Units**
  - The LANA Preschool Program includes six week-long curriculum theme units offered once each month in place of your regular weekly curriculum. These theme units provide a special focus on fruits and vegetables by including related stories and classroom activities in addition to the weekly cooking and tasting activities. The theme units also provide family resources to help connect families with program messages.

- **Bi-Monthly Special Events**
  - Three special events during the LANA Preschool Program introduce families to the program and engage them in program activities.

### Intervention Materials

The Minnesota Department of Health LANA website includes six themed curriculums, sample menus, cooking activities, and recommended materials: [http://www.health.state.mn.us/divs/hpcd/chp/cdrr/nutrition/nutritioneducation/lana/themeUnits.html](http://www.health.state.mn.us/divs/hpcd/chp/cdrr/nutrition/nutritioneducation/lana/themeUnits.html)  

Learning ZoneXpress, publisher of the Learning About Nutrition through Activities (LANA) curriculum, provides a support website (www.lananutrition.com) with free downloadable tools, videos of LANA in action, and information on purchasing a kit complete with the LANA curriculum in a three-ring binder and carrying case, a training cd, storybooks, parent newsletters, Lana the Iguana puppet, “I Tried It” stickers, and a set of eight plush fruits and veggies: [http://lananutrition.com/](http://lananutrition.com/)

### Evidence Summary

The LANA Preschool Program began with a study conducted by The Minnesota Department of Health through a grant from The National Cancer Institute. The study was conducted with preschool children, their parents, and staff in twenty child care centers in the Minneapolis/St. Paul area of Minnesota. Comparing children that participated in the LANA Program to those that did not, it was found that those involved in the LANA program ate significantly more vegetables at lunch as well as more total fruits and vegetables throughout the day. Total vegetable intake was significantly higher at follow-up. Other results showed that the LANA program:

- Increased consumption of targeted fruits and vegetables in the childcare setting
- Increased servings of fruits and vegetables at home
- Reduced “pickiness” and fear of trying new foods

In addition, as a result of the LANA program:
- 76% of providers offer fruits and vegetables more often at snack time
- Parents offer targeted foods more often (81%)
- Parents are more likely to complement their children for tasting a new food (58.7%) and are more likely to say something positive about the food their child is eating (60%)

In 2009, 75 licensed home childcare providers in Dakota County (MN) were surveyed. They reported that after implementation of LANA, children in their care were:
- More likely to eat fruits (67%)
- More likely to eat vegetables (78%)
- More likely to try new food (92%)

**Classification:** Research-tested

### Evaluation Indicators

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

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### Evaluation Materials

Currently, no evaluation tools or materials are available.

### Additional Information

**Website:** The LANA website ([http://www.health.state.mn.us/divs/hpcd/chp/cdrr/nutrition/nutritioneducation/lana/index.html](http://www.health.state.mn.us/divs/hpcd/chp/cdrr/nutrition/nutritioneducation/lana/index.html)) includes information on tasting and cooking activities, themed units, training to implement the LANA program in childcare centers, and other helpful resources and guides. Learning ZoneXpress, publisher of the Learning About Nutrition through Activities (LANA) curriculum, provides a website ([http://lananutrition.com/](http://lananutrition.com/)) with free downloadable tools, videos of LANA in action, and information on purchasing a kit complete with the LANA curriculum in a three-ring binder and carrying case, a training cd, storybooks, parent newsletters, Lana the Iguana puppet, “I Tried It” stickers, and a set of eight plush fruits and veggies. **Contact Person:** Mary Beth Anderson Director of Educational Resources Phone: 1-888-455-7003 Email: marybeth@learningzonexpress.com