

V(A). Planned Program (Summary)

Program # 4

1. Name of the Planned Program

Childhood Obesity, Health, and Nutrition

Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
610	Domestic Policy Analysis	5%			
702	Requirements and Function of Nutrients and Other Food Components	25%			
703	Nutrition Education and Behavior	25%			
704	Nutrition and Hunger in the Population	15%			
724	Healthy Lifestyle	25%			
802	Human Development and Family Well-Being	5%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	1.0	0.0	0.0	0.0
Actual Paid Professional	9.2	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
256246	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
256246	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
234005	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Conduct research with respect to obesegenics, health, and nutrition.
- Develop, teach and evaluate research based programs focused on health and nutrition.
- Develop and contribute materials to eXtension COP and other national efforts in obesity, health and nutrition.
- Partner with professional educators to educate youth and families to improve health and nutrition.
- Publish curricula, journal articles, and fact sheets pertaining to health and nutrition.

2. Brief description of the target audience

The primary target audience is per-school youth and youth in elementary school along with their families. A secondary audience is those who teach youth health, nutrition and physical activity or care for youth - parents, teachers, child care providers, health educators, etc.

3. How was eXtension used?

Faculty involved in childhood obesity, health and nutrition related programming are actively involved in eXtension COP and other national efforts in this area. Two National eXtension electronic publications were reviewed and accepted. These include: Paying the Price for Caffeine: A Look at Energy Drinks. National eXtension Electronic Publications [<http://www.extension.org/pages/62629/paying-the-price-for-caffeine:-a-look-at-energy-drinks>] and Growth, Obesity and Energy Balance, Nevada Registry for Child Care Training via National eXtension.org [<http://www.nevadaregistry.org/blog/professional-development/obesity-training.html>].

V(E). Planned Program (Outputs)

1. Standard output measures

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	16729	0	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2012

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2012	Extension	Research	Total
Actual	10	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- {No Data Entered}

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Preschoolers improving physical skills for improved health and weight control(All 4 Kids).
2	Preschoolers who would choose a health snack over an unhealthy snack when present a choice (All 4 Kids).
3	First and second grade students learning healthy food choices and good physical activity choices (Chefs For Kids).
4	Youth learning to make healthy food choices and gaining physical activity through "hands on" school garden based educational programs.
5	American Indian youth increase awareness of and exposure to a variety of vegetables and fruits, including traditional American Indian varieties ("Veggies For Kids").
6	Number of individuals who gain knowledge about nutrition and health.
7	Number of individuals who implement behaviors to improve health and nutrition.

Outcome #1

1. Outcome Measures

Preschoolers improving physical skills for improved health and weight control(All 4 Kids).

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Preschoolers who would choose a health snack over an unhealthy snack when present a choice (All 4 Kids).

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

First and second grade students learning healthy food choices and good physical activity choices (Chefs For Kids).

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

Youth learning to make healthy food choices and gaining physical activity through "hands on" school garden based educational programs.

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

American Indian youth increase awareness of and exposure to a variety of vegetables and fruits, including traditional American Indian varieties ("Veggies For Kids").

Not Reporting on this Outcome Measure

Outcome #6

1. Outcome Measures

Number of individuals who gain knowledge about nutrition and health.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	385

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Onset of obesity in childhood accounts for 25% of adult obesity; but obesity that begins before age 8 and persists throughout childhood is associated with an even greater degree of adult obesity. According to the 2007 Nevada Youth Risk Behavior Survey (YRBS), 81% of students ate fruits and vegetables fewer than five servings a day (78.6 % of U.S. students). Picky eating behaviors are prevalent during childhood and are often linked to nutritional problems (dietary adequacy and body weight). Increasing evidence has also demonstrated parent feeding practices and style influence the development of young children's eating behaviors, food preferences and dietary patterns.

What has been done

UNCE faculty developed Little Books and Little Cooks, a 7-week parenting education program for preschool-age children (3-5 years old) and their parents designed to promote healthy eating, family literacy, parent-child interaction and child's school readiness skills. This program features a 182-page formal program curriculum (7 lesson plans) for use in program delivery. During the program, children and parents learn together about healthy eating and nutrition, gain positive parent-child interaction skills, and practice school readiness skills (cooking skills) by reading children's books about healthy eating/nutrition and cooking/eating. Each weekly session features a new book about healthy eating and a new recipe.

Results

In 2012, the Little Books and Little Cooks program (seven weekly sessions/ 1.5-2 hours per session) was provided at four community sites; 42 pilot classes (6 program series) were taught to 35 families, including both parents and preschoolers (20 Hispanic/ Latino, 5 Caucasian, 6 Asian/Pacific Islander and 4 African Americans).

4. Associated Knowledge Areas

KA Code	Knowledge Area
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population
724	Healthy Lifestyle
802	Human Development and Family Well-Being

Outcome #7

1. Outcome Measures

Number of individuals who implement behaviors to improve health and nutrition.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	24449

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Almost one-third of children in America are overweight or at risk for overweight, increasing their probability of developing chronic illnesses such as high blood pressure, high cholesterol, and Type 2 diabetes. Nevada estimates the costs associated with treating conditions related to overweight and obesity is \$337 million. A recent report released by the Nevada Institute for Children's Research and Policy on the health status of children entering kindergarten in the Nevada school system (n=3,597) stated 21% of the children in the study were obese and an additional 13% were overweight.

What has been done

All 4 Kids utilized an interdisciplinary approach to address child obesity. All 4 Kids staff teach 24, 30-minute lessons plans three times a week for eight weeks to preschoolers. Teachers participate in the lessons and parents are engaged in family activity nights. In 2012, 483 children and 328 parents participated in All 4 Kids. The program (120 lessons and 15 family events) was taught at 4 different child care sites. All 4 Kids staff distributed 8,298 Family Connection handouts (18 per family) and 164 Teacher Connection handouts (9 per teacher).

Results

After participating in the All 4 Kids sessions, pre-post measures and assessments indicate that 483 children significantly improved in all four major physical skill tests and preferred healthy snacks when given a choice. The All 4 Kids program team developed a service agreement with Acelero Learning Head Start. This required Acelero teachers to co-teach with the All 4 Kids team thereby increasing numbers of children/families reached. UNCE faculty also conducted teacher training to Head Start and Clark County School District teachers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population
724	Healthy Lifestyle

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)
- Other (Grant funding availability)

Brief Explanation

Each of these factors influenced programs in 2012.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Evaluations in 2012 of numerous UNCE programs that address this NIFA priority area include results of Little Books and Little Cooks and All 4 Kids. Evaluations are largely based on pre and post-intervention observation of targeted participant behaviors. In some cases, where appropriate, parent and teacher self-evaluations were used to document perceived knowledge gains and behavioral changes.

Key Items of Evaluation

Evaluation studies indicate that of the 223 children who attended the Little Books and Little Cooks classes, the majority showed statistically significant improvement in 15 cooking skills, which included measuring ingredients, cutting soft foods, and washing hands for 20 seconds. Children demonstrated they were more likely to eat fruits or vegetables if served and were less picky, trying different types of foods or new foods during mealtimes. By the last day of the program, the majority of the 162 parents who attended the classes were more likely to report that their children were less picky eaters. There was a significant improvement in positive parent-child interactions during cooking. After

participating in the program, parents were significantly more likely to report that they cooked more often for their families, cooked more often with their children, and consumed more fruits and vegetables than before completing the program. Parents were more likely to be more authoritative when feeding their children by encouraging and setting limits. By the last day of the program, all parents and children understood how to match each food with the food group to which it belongs. All parents and children mastered proper hand washing.

All 4 Kids pre-post evaluative measures indicate that 483 children significantly improved all four major physical skill tests. Preschoolers also demonstrated increased preference for healthy snacks. Children's ability to distinguish between healthy and unhealthy snacks improved by 21%.

These and additional study results indicate that All 4 Kids was an effective intervention program to change pre-school aged youth nutrition and health behaviors. Outcomes for 2012 include statistically significant improvements in children's ability to perform 12 fundamental movement tasks.

As an additional indicator of program quality and documented impacts, in 2012, All 4 Kids received numerous awards. These included: 1) USDA National Institute of Food and Agriculture (NIFA) Partnership Award for Mission Integration of Research, Education or Extension; 2) USDA-NIFA National Jeanne M. Priester Award for a statewide/multistate program; 3) Western Extension Directors Association Award (WEDA) of Excellence - Multistate research; 4) Family Health and Wellness Award, 3rd place National Award, National Extension Association of Family and Consumer Sciences; 5) Family Health and Wellness Award, 2nd place Western Regional Award, National Extension Association of Family and Consumer Sciences; and 6) Florence Hall Award, 3rd Place Western Regional Award, National Extension Association of Family and Consumer Sciences.