

**V(A). Planned Program (Summary)**

**Program # 3**

**1. Name of the Planned Program**

Improve Health and Wellness of the Residents of Washington

**V(B). Program Knowledge Area(s)**

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
703	Nutrition Education and Behavior	55%			
704	Nutrition and Hunger in the Population	10%			
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	15%			
724	Healthy Lifestyle	20%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	25.0	0.0	0.0	0.0
Actual	17.0	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
355400	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
355400	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
3665280	0	0	0

**V(D). Planned Program (Activity)**

1. Brief description of the Activity

WSU Extension will develop, evaluate and disseminate educational programs and curricula that increase health literacy and facilitate the adoption of health behaviors that lead to the prevention and effective management of chronic disease. The major components of our educational activities can be grouped into three areas: nutrition education, including dietary quality, healthy lifestyle promotion and food security issues; food safety, including safe food handling and preservation, and hand sanitation/hygiene; and chronic disease management, including self-management to reduce complications and prevention education to reduce future incidence.

Nutrition education activities are largely delivered in partnership with local institutions, including schools and social service agencies. Youth and adult participants are reached directly through workshops and lesson series, as well as indirectly through newsletters, media broadcasts and social marketing efforts. Innovative delivery methods such as public kiosks and web-based modules are also planned. Included in this work are activities focused on obesity prevention and intervention through changes in diet quality and physical activity levels.

Food safety activities include workshops/classes for consumers, commercial food safety training for food workers, phone hotlines, education booths at public venues, media features, and the Germ City: Clean Hands, Healthy People Program. Volunteers are engaged in food safety program delivery in some areas.

Chronic disease management programs will be delivered to individuals through workshops and series lessons, and also in partnership with health care providers and employers. Indirect methods will include newsletters, media, web-based information and social marketing efforts. While initial educational interventions in Washington have focused on diabetes, it is anticipated that over time our efforts will be expanded to address other chronic diseases.

**2. Brief description of the target audience**

Priority audiences are groups underserved by traditional health care systems because of low income, language barriers, geographic isolation or other challenges. Outreach to others serving these groups such as health care providers, employers, social service agency personnel, child care providers, school personnel and local decision-makers are an additional audience. Professionals in food service and processing industries are a specific audience for food safety efforts.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Plan</b>	50000	100000	25000	0
<b>Actual</b>	176168	61658	327170	15050

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

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2010	Extension	Research	Total
Plan	2	0	
Actual	2	1	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Percentage of culturally diverse participants in nutrition and chronic disease management programs.

Year	Target	Actual
2010	50	46

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Percentage of participants reporting improved nutritional quality of diet
2	Percentage of participants reporting improved food handling/hygiene practices

## **Outcome #1**

### **1. Outcome Measures**

Percentage of participants reporting improved nutritional quality of diet

### **2. Associated Institution Types**

- 1862 Extension

### **3a. Outcome Type:**

Change in Action Outcome Measure

### **3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2010	50	58

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

The child obesity epidemic is a product of the environments created for children - by their families, their communities, their schools, and the industries responsible for advertising to them. Today's children are likely to be the first generation to live shorter, less healthy lives than their parents. Research estimates individual behaviors and environmental factors are responsible for about seventy percent of all premature deaths in the United States. Health and well-being encompass a complex array of factors including physical, social and emotional health. Obesity and overweight not only impact the physical health of youth, increasing the risk of chronic diseases into adulthood, they also impact social and emotional development of children. Obesity has been linked to decreased self-efficacy, withdrawal from peers and rejection and academic achievement. Given the increased risk of obesity and the complexity of the problem, improving the physical health of our children is a high priority. In 2008, one out of four student in grades 8, 10 and 12, in Washington State were obese or at risk of becoming overweight. Adequate nutrition and physical activity are essential for maintaining health and well-being. Less than thirty percent (28.1%) of youth reported eating the recommended five servings of fruits and vegetables, and only 19% achieved the recommended levels of physical activity.

#### **What has been done**

In FY2010, Food \$ense (WSU Extension's name for SNAP-Ed and EFNEP) enrolled nearly 60,000 youth in nutrition education programs in 27 counties and 5 tribes. Youth were reached through partnerships with 316 schools, Head Start/ECEAP programs other youth services partners. Youth participants received an average of seven lessons per child. Children from preschool to age 17 were reached. Evaluation data was collected through multiple sources to assess impacts of the program on child behaviors. Instruments included a pre-post evaluation survey administered in the classroom; a parent survey administered to recipients of a newsletter for families of participating children; and a Teacher Observation Form for use in preschool through grade 2 to capture data for younger children who cannot reliably complete survey

instruments.

### **Results**

Self-reported knowledge, skill and behavior change indicators for youth grades 3 and above participating in Food Sense document improvements related to dietary quality and better health status.

-Fifty nine percent of youth (n=13,432) reported eating a variety of foods more often, with 57 percent (n=12,255) reporting daily consumption of fruits and vegetables.

-68 percent (n=14,310) increased their understanding of the relationship between nutrients and health.

-58 percent (n=13,388) were better able to identify the best food sources of leader nutrients, and

-67 percent (n=9,573) increased physical activity at the standard of at least 60 minutes daily for most days of the week.

For younger children (Pre-K to grade 2), teachers observed the following changes after participation in Food Sense lessons:

-69 percent (n=631 teachers) said that children made healthier meal and/or snack choices.

-70 percent (n=556 teachers) reported that children increased fruit and vegetable consumption.

-80 percent (n= 579 teachers) noted that children were more willing to try new foods.

Changes reported by parents were consistent with those reported by their children:

-73 percent (n=3953) report eating more fruits and vegetables.

-72 percent (n=3367) were buying healthier snacks for their children.

-65 percent (n=4144) were more physically active during the week.

-63 percent (n=862) said they are eating more meals together as a family, an activity that research links to improved nutritional status of children.

## **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population
724	Healthy Lifestyle

### **Outcome #2**

#### **1. Outcome Measures**

Percentage of participants reporting improved food handling/hygiene practices

#### **2. Associated Institution Types**

- 1862 Extension

#### **3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2010	35	68

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Consistent and careful hand washing is documented in the research literature as an effective strategy for preventing food-borne illness. These illnesses are both a result of improper hygiene/sanitation in homes and in retail settings. In a 2006 study of food-borne illness in Washington State, 36 of the 51 reported outbreaks (71%) involved restaurant settings. Ill food workers and bare-handed contact with retail foods are consistently the top factors contributing to food-borne illness outbreaks in the state. As a consequence, educating both consumers and retail food workers can have a significant impact on public health.

**What has been done**

WSU Extension's Food Sense program includes a food safety objective in which hand washing is one educational component. In addition, three counties in Washington (Clark, Cowlitz and Thurston) partner with local health departments to offer retail food safety education using a curriculum certified by the WA State Department of Health. The training was available in Spanish in two of the three counties. The food safety courses addressed the top food safety regulations and practices that prevent food-borne illness outbreaks. About 9950 food workers attended classes in 2010.

**Results**

- Food Sense evaluation data documented the following changes in hand washing practices:
- 81 percent (n=8354) of SNAP Ed youth participants reported washing hands before eating and preparing food.
- 80 percent (n=1211) of SNAP Ed parents said they washed their hands more often before eating and preparing foods as a result of the program.
- 82 percent (n=641 teachers making formal observations) of young children in the SNAP Ed program washed their hands more consistently before eating.
- In a post-training survey of the retail food education program (n=6995),
- 56 percent of food workers reported improvements in washing their hands the right way and at the right time.
- 53 percent also reported greater awareness of the importance of not working with food when they were sick.
- 54 percent also indicated they used utensils, deli papers, or single-use gloves to keep from touching ready-to-eat foods in their establishments.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
724	Healthy Lifestyle

## **V(H). Planned Program (External Factors)**

### **External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

### **Brief Explanation**

{No Data Entered}

## **V(I). Planned Program (Evaluation Studies and Data Collection)**

### **1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)

### **Evaluation Results**

{No Data Entered}

### **Key Items of Evaluation**

{No Data Entered}