

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

**Program # 3**

**1. Name of the Planned Program**

Food Safety

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
502	New and Improved Food Products		10%		10%
504	Home and Commercial Food Service		5%		5%
701	Nutrient Composition of Food		5%		5%
702	Requirements and Function of Nutrients and Other Food Components		10%		10%
703	Nutrition Education and Behavior		20%		20%
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources		10%		10%
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins		20%		20%
724	Healthy Lifestyle		20%		20%
	<b>Total</b>		100%		100%

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

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	7.0	0.0	6.0
Actual Paid Professional	0.0	6.0	0.0	7.5
Actual Volunteer	0.0	1.5	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
0	307710	0	373987
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	264000	0	524847
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	13000

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

#### 1. Brief description of the Activity

We carried out the following activities in FY 2012:

1. Collaborated and conducted research on food safety to include prevalent foodborne diseases.
2. Promoted focus group meetings; advisory committees; mentor program; use of food safety, safe school food nutrition curriculums; health tips to ensure food safety during school activities
3. We also used focus groups, advisory committees, mentor program, etc. to provide awareness to citizens about the negative impacts of tobacco and tobacco products.
4. Faculty & staff disseminate publications such as fact sheets, newsletters, technical bulletins, research reports, etc. dealing with proper food safety practices.
5. We provided research-based findings and other useful information to individuals, families, and food institutions through research & extension personnel in the form of publications, conferences, workshops, home/office visits, demonstrations and other educational resources.
6. Collaborated, cooperated and partnered with local, state and federal agencies, institutions, groups, private organizations/associations in seeking and delivering services to citizens.
7. We used grant funds to hire additional/experienced personnel to build capacity and respond to clientele needs.

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

There is a large number of low income and limited resource families in Louisiana that are found in target areas which SUAREC serves. Most of these families live below the poverty level. They lack knowledge, information, and skills to utilize existing resources to improve their diet and ensure food safety. Children and adolescents who are placed at risk and those that are potentially at risk will also be beneficiaries. Additionally, citizens with sedentary jobs who need information on the benefits of regular physical activity and healthy lifestyles were also targeted. The SU Ag Center continued to utilize data to identify and target other audiences.

#### 3. How was eXtension used?

A faculty member participated in providing information and answers to enquiries from users of eXtension. We also referred clients seeking solution to their food safety problems to the eXtension homepage or "ask an expert".

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

**1. Standard output measures**

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	28201	117615	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
<b>Actual</b>	0	1	0

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

**Output Target**

**Output #1**

**Output Measure**

- 1. Number of educational program activities

Year	Actual
2012	924

**Output #2**

**Output Measure**

- 2. Number of educational contacts

Year	Actual
2012	220100

**Output #3**

**Output Measure**

- 3. Number of published materials distributed

<b>Year</b>	<b>Actual</b>
2012	29104

**Output #4**

**Output Measure**

- 4. Number of research & extension outreach publications

<b>Year</b>	<b>Actual</b>
2012	51

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

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

O. No.	OUTCOME NAME
1	1. Percent of clients who gained new knowledge/skills, and awareness.
2	2. Percentage of clients who adopt healthy recommendations
3	3. Percentage of clients who changed behavior

## **Outcome #1**

### **1. Outcome Measures**

1. Percent of clients who gained new knowledge/skills, and awareness.

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

- 1890 Extension
- 1890 Research

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

Change in Knowledge Outcome Measure

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

<b>Year</b>	<b>Actual</b>
2012	80

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

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

Food-related diseases affect tens of millions of people and kill thousands. Increasingly, fresh fruit and vegetable products have been implicated as the source for foodborne pathogens causing foodborne illnesses. Outbreaks due to Salmonella and E-Coli contamination were reported during the year. This has led to the development of recommendations for some commodity producers, that precautions be taken in the fields and during post-harvest processing and handling to prevent pathogen contamination. Some Louisiana environmental conditions provide great opportunities for food borne illnesses particularly the hot humid climate. As a way of life, Louisiana citizens participate in many outdoor events where foods are pre-cooked, kept for a longer period and served outside.

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

Tracking single cases of foodborne illness and investigating outbreaks are critical public health functions in which Center for Disease Control (CDC) is deeply involved. Research scientists and extension personnel in the Nutrition and Health Program at the SU Ag Center collaborated and worked with the LSU Ag center and citizens of Louisiana to increase their understanding of the impacts of foodborne illnesses. The goal was to help citizens especially the elderly, low income, educationally disadvantaged and poor families enhance their skills in proper food selection, storage and preparation. To ensure a sustainable and safe food, research and educational information was also directed at producers, food businesses, food handlers, and youth. In collaboration with EFNEP staff, nutrition educators conducted food safety activities in four parishes (Avoyelles, Rapides, Lafayette, and St. Landry) and reached over 3,149 youth and 317 families through schools, head start sites, libraries, churches and community centers.

## **Results**

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Information on fresh food products implicated as the source for foodborne pathogens or causing foodborne illnesses and recent news about Salmonella and E-Coli contamination was disseminated. Participants at workshops and food demonstrations gained knowledge about food safety in the areas of fresh product harvest, post-harvest storage, food preparation, storage, right storage temperature, etc. Ninety-five percent of them learned how to make their own healthy snacks and how to ensure that food safety guidelines are adhered to while doing so. Two graduate and 10 undergraduate students gained knowledge and skills on how to conduct food safety research by working with project staff in collecting, storing and analyzing samples.

#### 4. Associated Knowledge Areas

<b>KA Code</b>	<b>Knowledge Area</b>
502	New and Improved Food Products
504	Home and Commercial Food Service
701	Nutrient Composition of Food
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
724	Healthy Lifestyle

#### **Outcome #2**

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

2. Percentage of clients who adopt healthy recommendations

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

- 1890 Extension
- 1890 Research

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

Change in Action Outcome Measure

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

<b>Year</b>	<b>Actual</b>
2012	65

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

**Issue (Who cares and Why)**

The CDC estimates that each year roughly 1 out of 6 Americans (or 48 million people) gets sick, 128,000 are hospitalized, and 3,000 die from foodborne diseases. Increasingly, fresh fruit and vegetable products have been implicated as the source for foodborne pathogens causing foodborne illnesses. This may be the result of increased consumption of fresh produce coupled with better understanding of pathogens and their capabilities to cause illness. Outbreaks due to Salmonella and E-Coli contamination are more frequent. These foodborne outbreaks have induced the FDA to look more closely at fresh produce processing; and to the development of recommendations for some commodity producers, that precautions be taken in the fields and during post-harvest processing and handling to prevent pathogen contamination. Louisiana environmental conditions provide great opportunities for some food borne illnesses particularly the hot humid climate. As a way of life, Louisiana citizens participate in many outdoor events where foods are pre-cooked, kept for a longer period and served outside. Sometimes, there are not enough facilities to keep such foods hot or cold (as the case may be) until all is consumed. Research indicates that handling food correctly can prevent 90 to 95% of food borne illnesses.

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

Southern University Agricultural Research and Extension Center is committed to providing education, training and certification programs through ServSafe in food safety. Dr. Fatemeh Malekian, research scientist and one of the few ServSafe trainers in Baton Rouge, conducted workshop sessions and ServSafe trainings that were accessible to extension agents in Louisiana and nationally. Also participating at the sessions were restaurants managers and staff, cafeteria staff, school staff, church and hospital cooking staff, families and farmers. Each workshop lasted for 1-2 days, whereby participants will take a test and ServSafe would issue the certification.

Another food safety session dealt with Better Processing School, Meat and poultry Hazard Analysis Critical Control Point (HACCP) and Retail HACCP for food processors in collaboration with LSU food safety extension program.

#### **Results**

One hundred percent of the 210 participants learned how to handle food safely to avoid contamination and how to ensure that food safety guidelines are adhered to while doing so. The successful rate for receiving certificate has been 90-95%. Some organizations who attended ServeSafe and HACCP sessions were: Extension agents and research faculty and staff, university cafeteria staff, chocolate factory staff, restaurants (fast food and traditional), bakeries and grocery stores staff, hotels, hospitals, churches, etc. These sessions were provided free of charge to attendees.

#### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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724 Naturally Occurring Toxins  
Healthy Lifestyle

### **Outcome #3**

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

3. Percentage of clients who changed behavior

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

- 1890 Extension
- 1890 Research

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

Change in Condition Outcome Measure

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

<b>Year</b>	<b>Actual</b>
2012	70

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

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

Food-related diseases affect tens of millions of people and kill thousands. Increasingly, fresh fruit and vegetable products have been implicated as the source for foodborne pathogens causing foodborne illnesses. Outbreaks due to Salmonella and E-Coli contamination were reported during the year. This has led to the development of recommendations for some commodity producers, that precautions be taken in the fields and during post-harvest processing and handling to prevent pathogen contamination. Some Louisiana environmental conditions provide great opportunities for food borne illnesses particularly the hot humid climate. As a way of life, Louisiana citizens participate in many outdoor events where foods are pre-cooked, kept for a longer period and served outside.

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

Research scientists and extension personnel in the Nutrition and Health Program at the SU Ag Center collaborated and worked with citizens of Louisiana to increase their understanding of the impacts of foodborne illnesses. The goal was to help citizens especially the elderly, low income, educationally disadvantaged and poor families enhance their skills in proper food selection, storage and preparation. To ensure a sustainable and safe food, research and educational information was also directed at producers, food businesses and food handlers. Research and extension staff provided nutritional instruction, food safety and food resource management workshops to the clientele throughout the state. In collaboration with FF-NEWS staff, nutrition educators reached over 2,965 families through schools, head start sites, libraries, churches and other community centers/events. With AFRI research grant, food safety researchers also worked with cow-calf farmers to reduce the transfer of foodborne pathogens associated with farm

animals.

### Results

The cow-calf project reached some 51 producers, shared information about production safety (such as detection, prevention, control, etc.) and collected samples for analyses. The producers indicated that information shared were relevant to their operations and that they would definitely use them.

The outreach program evaluation on understanding the impacts of foodborne illnesses showed that 95% of the participants learned how to make their own healthy snacks and how to ensure that food safety guidelines were adhered to while doing so. According to pre/post data 90 percent of all participants can correctly identify healthy foods; and 89 percent can correctly read the nutrition facts label.

## 4. Associated Knowledge Areas

<b>KA Code</b>	<b>Knowledge Area</b>
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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

Ongoing economic crisis caused serious setback on the availability of state funds in Louisiana in general and the SU Ag Center in particular. In FY 2012, state budgets were again drastically reduced at the beginning and in the middle of the fiscal year. This action resulted in severe loss of funding for planned activities which in turn negatively affected outcomes. Budget problems and government priority changes caused the relocation of

some program participants resulting in decline in number of citizens impacted. Additionally, there was a decline in Louisiana rural population which resulted in the state receiving less federal formula fund. Furthermore, the continuing recovery from previous hurricanes (2005 and 2008) and the 2010 oil spill caused much problems in the state and impacted outcomes

#### **V(I). Planned Program (Evaluation Studies)**

##### **Evaluation Results**

{No Data Entered}

##### **Key Items of Evaluation**

{No Data Entered}