

Tropical Food Processing and Safety

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V(A). Planned Program (Summary)

1. Name of the Planned Program

Tropical Food Processing and Safety

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
501	New and Improved Food Processing Technologies	25%			
502	New and Improved Food Products	25%			
503	Quality Maintenance in Storing and Marketing Food Products	10%			
604	Marketing and Distribution Practices	5%			
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	30%			
806	Youth Development	5%			
Total		100%			

V(C). Planned Program (Inputs)

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

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	0.7	0.0	0.3	0.0
Actual	1.4	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 70985	1890 Extension	Hatch	Evans-Allen
	0	0	0
1862 Matching 51933	1890 Matching	1862 Matching	1890 Matching
	0	0	0
1862 All Other 10849	1890 All Other	1862 All Other	1890 All Other
	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

To achieve goals of increasing locally processed food products and assuring safe foods (reducing foodborne illnesses) on Guam, the following activities were conducted: Identification of pickles of mango, papaya and cucumber and sausage as initial products for home processing education in community. Selection of the medicine plant, noni (*Morinda citrifolia*), as a value-added product of dietary supplement for home processing. Additional activities included: one-on-one intervention to entrepreneurs and individuals, providing clients with information and materials on canning, dehydration, and tomato and jerk beef processing as well as noni processing; studied changes of the radical scavenging activity and antioxidants of noni juice prepared by enzyme liquefaction technology; developed a product of purple sweet potato chips, activities were reported by local newspaper and TV programs in community; developed food safety curriculum for general consumers, school children, and youth.

Food safety workshops for general consumers and children were provided to community. To ensure safe kelaguen (an ethnic food on Guam) preparation and storage, a minimum pH amount of lemon required was determined for safe storage which can served at parties and fiestas in tropical environment without temperature control for safety. Workshops of "Safe Kelaguen Preparation" were provided to general consumers, food workers, and food safety educators in community. Two fact sheets, "Key Food Handling Behaviors" and "Egg Safety in Easter" were disseminated in the community. A course in "Food Safety and Sanitation" was also provided to students at the University of Guam.

2. Brief description of the target audience

The outreach target audiences in this program included general consumers, children, youth, local farmers, food entrepreneurs, food safety educators, and employees in food establishments.

V(E). Planned Program (Outputs)**1. Standard output measures****Target for the number of persons (contacts) reached through direct and indirect contact methods**

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	150	500	150	500
2007	300	600	400	500

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

Year	Target
Plan:	0
2007:	0

Patents listed**3. Publications (Standard General Output Measure)****Number of Peer Reviewed Publications**

	Extension	Research	Total
Plan			
2007	1	1	2

V(F). State Defined Outputs**Output Target****Output #1****Output Measure**

of Research Paper

Year	Target	Actual
2007	1	1

Output #2**Output Measure**

of Research Citations

Year	Target	Actual
2007	0	0

Output #3**Output Measure**

of extension fact sheets or articles

Year	Target	Actual
2007	2	2

Output #4**Output Measure**

of workshops

Year	Target	Actual
2007	6	8

Output #5**Output Measure**

of brochures

Year	Target	Actual
2007	1	1

Output #6**Output Measure**

of dissemination of research results and new technology and information

Year	Target	Actual
2007	500	500

Output #7**Output Measure**

of one to one intervention

Year	Target	Actual
2007	1	2

Output #8**Output Measure**

of work with media

Year	Target	Actual
2007	1	1

V(G). State Defined Outcomes

O No.	Outcome Name
1	% of participants gaining food processing knowledge and skills
2	% of participants gaining food safety knowledge
3	% of participants adopting food processing techniques
4	% of participants adopting proper food handling practice
5	# of new value food products on the markets
6	% decrease in foodborne illness

Outcome #1

1. Outcome Measures

Not reporting on this Outcome for this Annual Report

2. Associated Institution Types

3a. Outcome Type:

3b. Quantitative Outcome

Year	Quantitative Target	Actual
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3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
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V(H). Planned Program (External Factors)

External factors which affected outcomes

- Competing Public priorities
- Competing Programmatic Challenges
- Other (Community Support)

Brief Explanation

Unmet outcomes #4 and #6. The planned activity of providing home food processing workshops in community was not done because competing program and research projects in food safety and functional food research projects took the priority within our limited resources. People increased intentness to change or improve the key food handling behaviors in food preparation. However, the behavior changes have not been evaluated. Decrease in foodborne illnesses has not yet been evaluated

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Case Study
- Comparisons between program participants (individuals, group, organizations) and non-participants

Evaluation Results

Key Items of Evaluation