

V(A). Planned Program (Summary)

Program # 5

1. Name of the Planned Program

Health and Wellness of Hawaii's Families and Communities

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
131	Alternative Uses of Land	0%		3%	
607	Consumer Economics	5%		3%	
608	Community Resource Planning and Development	10%		0%	
701	Nutrient Composition of Food	9%		10%	
702	Requirements and Function of Nutrients and Other Food Components	5%		24%	
703	Nutrition Education and Behavior	14%		15%	
704	Nutrition and Hunger in the Population	2%		3%	
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources	5%		0%	
723	Hazards to Human Health and Safety	6%		0%	
724	Healthy Lifestyle	22%		10%	
802	Human Development and Family Well-Being	10%		15%	
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	12%		10%	
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures	0%		7%	
	Total	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	5.0	0.0	4.0	0.0

Actual Paid Professional	4.6	0.0	3.8	0.0
Actual Volunteer	3.8	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
52396	0	118169	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
446220	0	584954	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
154001	0	78702	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The 2003 Hawai'i health survey revealed that more than half of Hawai'i's adults are overweight or obese. The rate of obesity in children ages 6 to 11 is twice the national average. About three-quarters of Hawai'i residents do not eat enough fruits and vegetables, and many suffer from diabetes, heart disease, high blood pressure, or diet-related cancers. To combine their strengths and enhance their effectiveness, CTAHR extension faculty in all four counties and two college departments (Human Nutrition, Food, and Animal Sciences and Family and Consumer Sciences) have joined together to coordinate their outreach in the areas of food, nutrition, and health under an umbrella program called Nutrition Education for Wellness, or NEW.

Nutrition education for improved health and wellness was accomplished through multiple college programs, including 4-H (such as "Get Moving for Health" and "Get Fueling for Health" Projects), the Nutrition Education for Wellness program (NEW), as well as the extramurally funded programs EFNEP (Expanded Food and Nutrition Education Program) and SNAP-Ed (Supplemental Nutrition Assistance Program-Education). EFNEP and SNAP-Ed nutrition educators report directly educating 652 families, which included 2680 adults and 1276 children. Through these contacts 74% of participants reported improvement in one or more food resource management practices, 86% reporting improvement in one or more nutrition practices, 56% reporting improvement in one or more of the food safety practices, 95% reporting positive change in any food group at exit (ie. food intake on exiting the program was nearer the recommended amount), and 23% reporting positive change in physical activity.

The Nutrition Education for Wellness (NEW) Program strengthens families and communities by increasing knowledge and skills in food, nutrition and health. Toward this goal, NEW strives to 1) provide educational programs that increase the likelihood of healthy food choices consistent with the most recent dietary advice as reflected in the Dietary Guidelines for Americans, MyPlate and Nutrition Facts; 2) provide practical foods and nutrition education training via training and technical assistance and services delivery, materials adaptation and development, resources support, development of practical applied research, evaluation, and collaboration facilitation; 3) safeguard the health and well-being of limited income households by promoting skills building and access to a healthy diet; and 4) provide statewide leadership and work with a diversity of organizations to achieve common goals. NEW participates in the national

eXtension project "Families, Food & Fitness" through which web based information is available from CES nationwide.

An aging population, economic duress, and social and cultural factors affecting food choice all contribute to social, environmental, and health stress in Hawaii. Iron deficiency, obesity, and diabetes are common conditions in Pacific populations; and appropriate choice, handling and preparation of locally available foods are topics requiring integrated research and extension efforts. Seaweed (limu) is an under-utilized vegetable in Hawaii, and measurement of iron content identified 10 seaweeds demonstrated greater iron content per gram than spinach; with nori containing twice the iron of spinach, and locally grown red ogo containing 10-fold more iron. Bioavailability tests are highly warranted with these seaweeds. Bitter melon was found to inhibit secretion of inflammatory molecules such as tumor necrosis factor alpha implicated in diabetes development, and studies are continuing on the molecular and cellular anti-inflammatory mechanisms of under-utilized vegetables found in local farmers' markets. Rice is the most common carbohydrate in local diets, and research in FY2012 established that refrigeration increases the content of metabolism-resistant starch in selected brown rice varieties, indicating that handling and storage can affect selection of appropriate varieties for glycemic control and weight management.

The Hawaii Diabetes Detection and Prevention Project reaches adults with diabetes and those who may be at risk through community screening events and diabetes education programs. During FY2012, most of the project outreach has been on the island of Hawai'i, with one community event on Molokai for Native Hawaiian residents. Twenty (20) community screening events were held in partnership with local businesses, government agencies, and health centers. 1,099 adults were screened for average blood sugar (A1C), with 316 (29%) having results at or above 6%, indicating diabetes or pre-diabetes. Median age of those screened was 54 years, about two-thirds were ethnically non-White, 39% of participants had a close relative with diabetes, 33% were diagnosed with hypertension, and 22% were diagnosed with diabetes or pre-diabetes. Project staff gave 13 presentations on diabetes (nutrition and management, 234 people), and participated in 8 health fairs with diabetes information. The third annual Diabetes Summit was coordinated and held in collaboration with the Joslin Diabetes Center, reaching 102 adults with workshops for patients and family members and health care professionals. Inquiries about diabetes have also been answered via phone calls and email. The diabetes screening events, health fairs, and presentations have increased awareness of diabetes, the risk factors associated with diabetes, and how one can live well with diabetes. Employers who have participated in events have increased their understanding of diabetes and the importance of diabetes management. Participants with diabetes and family members at the Diabetes Summit learned about simple approaches to meal planning, role of physical activity in diabetes management, barriers and solutions to being physically active, and diabetes treatment based on key diabetes tests.

2. Brief description of the target audience

The target clients are the general public. However, some programs, such as the expanded Food and Nutrition Program and the Supplemental Nutrition Assistance program were geared toward specific groups such as low income families and families on food stamps. Specialized programs are also targeting seniors and youth. High risk groups include minority populations, Pacific Islanders, obese and diabetic individuals.

3. How was eXtension used?

The CTAHR Nutrition Education for Wellness (NEW) Program participates in the national eXtension project "Families, Food & Fitness" through which web based information is available from CES nationwide by incorporating the program's 6 focus messages in statewide training.

V(E). Planned Program (Outputs)

1. Standard output measures

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	14961	35402	6511	20642

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	57	9	68

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of outreach activities and events conducted

Year	Actual
2012	923

Output #2

Output Measure

- Presentations at international and national meetings.

Year	Actual
2012	24

Output #3

Output Measure

- Grant proposals submitted.

Year	Actual
2012	14

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of people trained and who receive their pesticide applicators license
2	Number of people who changed their behavior to better their health
3	Number of people who increased their knowledge in health and wellness through outreach activities
4	Total dollar value of grants and contracts obtained.

Outcome #1

1. Outcome Measures

Number of people trained and who receive their pesticide applicators license

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	167

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Resident who want or are required to know how to apply pesticides properly.

What has been done

Short courses, newsletters, and study guides educated people about proper pesticide use.

Results

Residents use pesticide correctly and 167 people received training and new licenses or recertification.

4. Associated Knowledge Areas

KA Code	Knowledge Area
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources
723	Hazards to Human Health and Safety

Outcome #2

1. Outcome Measures

Number of people who changed their behavior to better their health

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	1430

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Residents who want healthier lifestyles.

What has been done

Workshops, demonstrations, and presentations educate people about how to have a healthy lifestyle

Results

Residents improve their health through adoption of improved health practices.

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
703	Nutrition Education and Behavior
723	Hazards to Human Health and Safety
724	Healthy Lifestyle
802	Human Development and Family Well-Being

Outcome #3

1. Outcome Measures

Number of people who increased their knowledge in health and wellness through outreach activities

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	4944

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Health and wellness of families and communities requires that scientific information be presented to the public in ways that they can grasp and use to modify their behavior.

What has been done

Workshops, extension publications, informal training and we-based information has been developed and implemented.

Results

Hawaii's families and communities have the opportunity to achieve healthier lifestyle and improve wellness.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
701	Nutrient Composition of Food
703	Nutrition Education and Behavior
723	Hazards to Human Health and Safety
724	Healthy Lifestyle

Outcome #4

1. Outcome Measures

Total dollar value of grants and contracts obtained.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	1175384

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Extramural funding is needed to augment program funds for health and wellness.

What has been done

Grant funds were applied for and received.

Results

Health and wellness programs and extension outreach were expanded with the additional grant funds.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
703	Nutrition Education and Behavior
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources
723	Hazards to Human Health and Safety
724	Healthy Lifestyle
802	Human Development and Family Well-Being
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and

Commercial Structures

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

Brief Explanation

- When the economy is weak, public and private funding decreases and is more difficult to obtain.
- When funding has decreased, other issues may be considered priorities and compete for available funds.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

All projects conducted under this program were peer-reviewed before initiation. Annual progress reports were collected and evaluated by Associate Deans for research and extension. Funds were not released for those projects which did not show tangible progress.

Key Items of Evaluation

None.