

V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Childhood Obesity

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
703	Nutrition Education and Behavior	25%		25%	
704	Nutrition and Hunger in the Population	25%		25%	
724	Healthy Lifestyle	25%		25%	
802	Human Development and Family Well-Being	25%		25%	
	Total	100%		100%	

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	4.0	0.0	1.5	0.0
Actual Paid	4.1	0.0	0.6	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
102563	0	29669	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
8912	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

PCC: There was a 10% decrease in obese/overweight children in Palau due to practicing healthy eating, engaging in healthy levels of physical activity, and having access to healthy foods. The college contributed to this decrease by conducting four Food Technology and Nutrition Education classes among school children and youths, benefiting 200 participants. Six books on local food processing were submitted for printing.

CMI: Surveys were conducted in ECE centers on four islands. It is now clear that many of the young students showing conditions when the body does not get the right amount of the vitamins, minerals, and other necessary nutrients.

COM-FSM: The program is all about healthy lifestyle, what you eat, and physical activities. It deals with prevention and reduction of NCD incidences. Workshops/trainings conducted in communities and schools increased knowledge and skills in the areas of nutrition and health.

Awareness programs for adults in the communities and schools included parents with children in the ECE program, youth and young adults. Topics included health benefits of eating fruits and vegetables, importance of local foods, sources of calories and requirements, and foods with less salt, fats and sugar. And intervention home visits of referrals from Public Health was conducted .

2. Brief description of the target audience

PCC: The targeted audiences include 2 to 8 year-old children and their teachers, parents, school administrators and policy makers. This is a coordinated effort among agencies such as Ministry Of Education, Ministry Of Health, Palau Community College, Bureau of Agriculture, Head Start, Council of Chiefs, and Association of School Principals.

CMI: Target audience includes parents, kinder, young mothers, and other school aged children.

COM-FSM: The general public is targeted, however, this year more focus was given to school children and referrals from the health services.

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	2000	3657	1442	1473

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

Patent Applications Submitted

Year: 2014
 Actual: 1

Patents listed

USP Library Cataloguing-in-Publication Data

Marero, Lydia.

Manual on food processing for Pacific: adaptation to climate change /

Lydia Marero. -- Koror, Palau : Palau Community College, 2014.

338 p. ; 15 x 18 cm.

ISBN 978-982-9801-98-2

1. Food industry and trade--Oceania. 2. Food security--Oceania. I. Title.

TP369.O3M37 2014

664.00995--dc23

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2014	Extension	Research	Total
Actual	2	7	9

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of conference papers and publications on childhood obesity.

Year	Actual
2014	7

Output #2

Output Measure

- Number of trainings conducted on childhood obesity and physical activity.

Year	Actual
2014	4

Output #3

Output Measure

- Number of extension publications on childhood obesity and physical activity.

Year	Actual
2014	4

Output #4

Output Measure

- Number of training conducted on proper diet and physical activity.

Year	Actual
2014	4

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of persons with increased knowledge in healthy food choices and physical activity.
2	Number of program participants adopting recommended practices on healthy food choices and physical activity.
3	Reduction in the number of obese children.

Outcome #1

1. Outcome Measures

Number of persons with increased knowledge in healthy food choices and physical activity.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	1331

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

PCC: Most Palauan children are not knowledgeable about eating more healthy foods and eating less salty, sweet and fatty foods, and not following healthy eating patterns.

CMI: Parents, young mothers and other family members does not understand the cause of childhood obesity and other related sicknesses that influence the human growth and development of a child.

COM-FSM: Limited knowledge about consequences and negative implications of unhealthy diet and lack of physical activity. There is an increasing awareness that NCDs are food-related nor an understanding of childhood obesity as it is often associated with enough food to eat.

What has been done

PCC: Multi-agency collaboration promoted eating healthy local foods and eating less salty, sweet, and fatty foods. Children were encouraged to eat breakfast and make healthy food choices.

CMI: Education and outreach activities carried out targeting families, communities and schools, especially the young and students? from kindergarten schools.

COM-FSM: Training, education, community events, one-to-one intervention, Body Mass Index (BMI), cooking demonstrations and recall for diets and physical activities were conducted. Food preparation using less salt, fats and sugar and more local food, fruits and vegetables, and yellow food varieties was taught.

Results

PCC: Of the 750 number of children informed, 179 of them gained knowledge about eating healthy foods, eating less salty/sweet/fatty foods and healthy eating patterns, while 571 children reported an intention to do the same.

CMI: Survey was conducted to identify information on children's diet, activities, height, weight and health. It was conducted on three island communities including the district center.

COM-FSM: Participants increased awareness about the health complications of childhood obesity and knowledge about balanced diet and healthy physical fitness for childhood obesity prevention. They learned how to prepare, eat healthy food and the value of physical activities. More than 867 participants learned the nutritive value and importance of yellow varieties of fruits and vegetables; proper food preparation using less salt, fats and sugar.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population
724	Healthy Lifestyle
802	Human Development and Family Well-Being

Outcome #2

1. Outcome Measures

Number of program participants adopting recommended practices on healthy food choices and physical activity.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	949

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

PCC: Obese/overweight children do not prepare nutritious local foods and make no effort to balance food intake and physical activity.

CMI: Parents of the young children has no clue as to what influenced their children?s physical condition.

COM-FSM: Limited number of persons adopting what they learned about healthy food and physical activity and relying on imported foods such as rice, ramen or canned meat because of convenience, low costs and storage.

What has been done

PCC: Trainings on the preparation of nutritious local foods were conducted among 200 participants and physical activities were encouraged among the participants.

CMI: Presentations and outreach activities carried out to parents, teachers and schools executives of what are the best educational and parenting approaches.

COM-FSM: Follow-up visits, monitoring and evaluation, intervention and encouragement, partnering with clients, continuing collaboration, and distribution of information materials on healthy meals and physical activities were conducted.

Results

PCC: Two hundred children and youths who were trained to produce and preserve healthy local foods were able to learn nutritious one-dish meals and 30 food products from local food sources. They were also encouraged to increase physical activity.

CMI: Parents of these young children institute corrective measures by following the advice and guidance of experts, with the right preventive measures.

COM-FSM: Increased number of individuals and families prepared healthy and balanced meals, started small family and school garden plots or walked around in their neighborhoods. More local food is now served at home, in public markets and in school cafeterias. More home gardens are in place and many families are eating fresh vegetables and less salt, fats and sugar used in cooking.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population
724	Healthy Lifestyle
802	Human Development and Family Well-Being

Outcome #3

1. Outcome Measures

Reduction in the number of obese children.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	648

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

PCC: Obese/overweight Palauan children and youths do not supplement their diets with healthy foods and do not engage in daily 60-minute or more of physical activity.

CMI: Lack of educational materials and trainings for all is a key issue for our children unhealthy diet.

COM-FSM: Childhood obesity may lead to more complications like diabetes, heart and chronic respiratory problems.

What has been done

PCC: Youth clients were taught to prepare healthy local foods and other stakeholders were served prepared food products and they were encouraged to practice increased physical activity.

CMI: Planned programs and trainings were done, targeting parents, young mothers and especially family members on healthy living and healthy lifestyles.

COM-FSM: In collaboration with Public Health conducted monitoring, evaluation, and referrals for specific intervention measures in communities, schools, and public areas reduce health problems such as obesity, hypertension, diabetes and other health issues.

Results

PCC: Of the 856 clients served, 200 children have practiced healthy eating and engaged in healthy levels of physical activity, while 656 have reported an intention to eat fruits, vegetables, fish, milk and local foods they have tasted from prepared foods that were served. This activity contributed to the overall decrease in childhood obesity in Palau.

CMI: Presentations in schools as well as trainings for staff have taken, targeting young children, parents and families. Preschool physical activities were scheduled and carried out.

COM-FSM: Reduction in obese children is evidence by feedback from families and through observations during follow-up visits. Parents and children supported each other by providing healthy food and snacks to eat, and doing physical activities, while education department banned the selling of junk food and snacks on school premises.

4. Associated Knowledge Areas

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

PCC: The increasing number of obese children in Palau may be caused by developments in technology like too much television viewing and playing games in the computers. Sedentary lifestyles like access to cars instead of walking, and convenience of eating imported foods which are oftentimes fattening and not eating healthy local foods also lead to obesity.

CMI: Experts to properly advice on good and better way forward as well as developing good curriculum on food and nutrition. Families continued acquiring unhealthy food and less on the healthy food. Bad influences of different lifestyles challenged the basic foundation of bringing good and well informed families on best diet for their children.

COM-FSM: Lack of public water transportation limits access to the program by numerous

scattered islands in the lagoon and outer islands. Generally, consumers' preference of imported canned and processed foods versus local healthy foods hinders in promoting eating healthy, balanced diets. Lack of healthy and cheap local produce also limits intake of nutritious and balanced diets. There were few things which affected the delivery of the program include weather, funerals in the communities, and transportation.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

PCC: Nutrition education programs are evaluated by the participants before and after the program through tests. Participants in the trainings were able to prepare diets from local foods resources. Reduction in childhood obesity is monitored by MOH. There was a decrease in childhood obesity by 10% in 2014.

CMI: The knowledge that was absent has gained tremendously. The survey gathered during the schools visitations show the needs to improve children health through proper diet and physical exercises. Teachers' trainings will continue increasing the physical activity programs in schools. Lessons shared with children have showed good progress.

COM-FSM: Childhood obesity could be prevented with consistent public awareness campaigns through training, education, demonstrations, dissemination of information materials, feedbacks from surveys and collaborative efforts of communities, especially the concerned families. As a result of interventions and follow up visits, more gardens are in place and new recipes are practiced using less salt, sugar and fats in cooking. The results showed that parents and children increased eating healthy food and doing physical activities.

Key Items of Evaluation

PCC: Palauan children have practiced consuming more healthy foods from local sources, have consumed less salty/sweet/fatty foods, have engaged in healthy levels of physical activity, and they belong to families who have access to more healthy foods.

CMI: Childhood obesity and malnutrition programs should continue, it gives the knowledge and understanding to all interested parties. It gives all the level of confidence that the children and parents have that was not very well taken in the beginning. With proper knowledge acquired everyone will realize that behaviors will need to be changed for better, especially for the health and wellbeing of the children.

COM-FSM: To sustain community interests and participation, stronger collaboration among programs with related concerns in preventing and/or reducing childhood obesity and developing volunteerism among trained participants are essential.

Focus on the role and responsibilities of families, communities, and schools to ensure continuing public awareness and adoption of recommended balanced diets and activities. Questions on the adult survey based on 24-hour food recall and behavior checklists needed to be prepared carefully. Students' survey based on the behavior, food recall, intake of fruits and vegetables and sugar drinks are needed.