

V(A). Planned Program (Summary)

Program # 4

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
502	New and Improved Food Products			7%	
702	Requirements and Function of Nutrients and Other Food Components			20%	
703	Nutrition Education and Behavior			73%	
	Total			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	0.0	1.1	0.0
Actual Paid Professional	0.0	0.0	0.7	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
0	0	45594	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	159216	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

Conduct scientific research projects. Publish peer-reviewed journal articles and other publications. Present findings at professional and public meetings and at other venues. Educate undergraduate and graduate students.

2. Brief description of the target audience

Other scientists, nutritionists, Cooperative Extension staff, state and federal policymakers, regulators, and legislators, classroom teachers, young adults

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	0	0	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
Actual	0	1	6

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of other publications

Year	Actual
2012	11

Output #2

Output Measure

- Number of completed research projects

Year	Actual
2012	1

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Better understanding of the usefulness of community based participatory research (CBPR) with a vulnerable population group--young adult college students,
2	Determine the usefulness of a new approach to preventing weight gain--the non-calorically restrictive, weight gain prevention intervention--with young adult college students
3	Improved weight-gain-prevention programs
4	Improve understanding of the role certain foods play human health

Outcome #1

1. Outcome Measures

Better understanding of the usefulness of community based participatory research (CBPR) with a vulnerable population group--young adult college students,

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Determine the usefulness of a new approach to preventing weight gain--the non-calorically restrictive, weight gain prevention intervention--with young adult college students

2. Associated Institution Types

- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Excessive weight gain is associated with increased risk of developing many serious diseases, including cardiovascular disease, hypertension, and type 2 diabetes. Young adults are at a uniquely increased risk for weight gain because of rapidly changing social situations that influence eating and exercise behaviors. Despite extensive efforts to promote weight management, these efforts only reach a small proportion of the population at risk and even effective programs promoting individual behavior change may have limited effectiveness in environments that promote weight gain.

What has been done

Maine led a multistate team in refining and testing the Campus Dining Environmental Audit Tool which will be part of the Healthy Campus Index tool, the focus of the five-year project NC1193. A serial process of testing and revising was used on the University of Maine campus during fall, 2011 and spring 2012. Information collected for each venue (i.e., student union, dining halls, grocery, pub, restaurant) included hours open and seating capacity of venues, number of healthy food options (e.g., no added sugar fruits, no added salt/fats vegetables; healthy cereals); signs encouraging healthful eating; and availability of nutrition information.

Results

There are no outputs/impacts for this first year of the study, but work is merging related to behavior and environmental supports for healthful behavior.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #3

1. Outcome Measures

Improved weight-gain-prevention programs

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

Improve understanding of the role certain foods play human health

2. Associated Institution Types

- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Obesity and other diet-related chronic diseases are major health problems in Maine and the rest of the nation. A better understanding of the role certain foods play human health will enable nutritionists to convey that information to consumers, thereby helping people to make better nutritional choices.

What has been done

University of Maine scientists evaluated of the fate of bioactive components, particularly anthocyanins and phenolic acids, during food processing and storage. They also conducted a

study on the post-prandial effects of blueberries and blueberry and cranberry juices on appetite and serum glucose and insulin levels.

Results

Their studies showed that anthocyanins and phenolic acids in purple corn were relatively stable during extrusion cooking, but these compounds also formed new complexes. For wild blueberries, their research found that minimal use of agricultural inputs results in higher levels of these phytochemicals in wild blueberries, but led to lower levels of consumer acceptability. Their study on the post-prandial effects of anthocyanin-rich foods showed that neither wild blueberries nor wild blueberry juice significantly affected satiety in overweight adults compared to placebos. Consumption of beverages containing 25% and 54% cranberry juice did not influence satiety in overweight adults, but the more concentrated juice did reduce postprandial glucose. Anthocyanin-rich foods should be studied further to understand their effect on human glucose levels.

4. Associated Knowledge Areas

KA Code	Knowledge Area
502	New and Improved Food Products
702	Requirements and Function of Nutrients and Other Food Components

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Evaluations are currently conducted at the project and program levels. At the project level, all projects are reviewed by an internal research council and external peer reviewers when initiated and again at completion by the research council. During the research council final evaluation, the focus is on determining if terminating projects met their stated objectives, secured extramural funding, and produced peer-reviewed publications. For FY12, one project went through the review process in this program area. As for other measures of successful research programs, faculty in this program area published six peer-reviewed articles and secured more than \$18,000 in extramural funding. Also during this time period, research results published by faculty in this program area were cited by peers

more than 100 times in other peer-reviewed journals.

Researchers use a variety of methods to evaluate their own research projects including evaluations retrospectively, before-after, and during the life of the project; case studies; and comparisons between treatment/intervention and nontreatment/nonintervention.

At the program level, external NIFA review teams are asked to review the research programs of schools/departments. These teams provide input on the impact and productivity of research programs supported through the station. The station is working to develop a standard program-level evaluation process, which will be used to evaluate each station program area. Our current plans include an approach based on use of expert panels as recommended by the federal Government Accounting Office with individual program evaluations occurring every four to five years on a staggered time table.

Key Items of Evaluation

Although there are only 0.7 SYs in this program, peer-reviewed research published by these faculty was cited more than 100 times in peer-reviewed journals this year.