

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
702	Requirements and Function of Nutrients and Other Food Components	10%		70%	
703	Nutrition Education and Behavior	60%		15%	
724	Healthy Lifestyle	30%		15%	
	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	20.0	0.0	1.0	0.0
Actual Paid Professional	8.0	0.0	1.3	0.0
Actual Volunteer	1.0	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
463427	0	152997	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
463427	0	117798	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

Obesity research includes food science, plant sciences, and consumer research related to human health and obesity. Parallel Extension programs that address health and wellness, life styles, and consumer choice are included in this Planned Program as well. Given the complex nature of obesity as a subject, the areas is broadly supported in scientific areas ranging from genetics for breeding plants and animals that can be processed into healthier food products, to education of school children about eating healthy. Thus not all impacts relating to obesity, per se, are found in this Planned Program. OARDC and OSU Extension offer programs that ensure nutritious foods are affordable and available, and provide guidance so that individuals and families are able to make informed, science-based decisions about their health and well-being.

2. Brief description of the target audience

Within the Childhood Obesity Planned Program targeted audiences include, but are not limited to: specific individuals, families, and groups who have an expressed a need, or where there are latent needs, for related research and Extension information that is to be derived through new research, extracted from on-going research, or is derived from scientific literature; fellow academic units that partner with OARDC and OSU Extension to support not only the research, but also the adoption of the research findings by stakeholders; fellow agencies or support organizations who will not only use the information but will also be brokers of that information, including embedding it into groups to encourage change; populations who have not requested the information but will likely benefit from that information, e.g. obese children; other scientists and scientific groups; political entities; school administrators; students from pre-school to post doctorate studies; news organizations; and business and industrial groups concerned about obesity in their workforce or who are producers of foods and food additives that can help reduce obesity and its side effects.

3. How was eXtension used?

OSU Extension used eXtension as a source of additional information and support for program participants, emphasizing the Families, Food & Fitness area.

V(E). Planned Program (Outputs)

1. Standard output measures

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	17519	50631	12345	46529

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	2	2

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of graduate students competed
Not reporting on this Output for this Annual Report

Output #2

Output Measure

- number of educational sessions held

Year	Actual
2012	571

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	To better understand human decision making; specifically with reference to how individuals make food consumption decisions.
2	Apply new knowledge to programs at the field level with a goal of significant long term weight loss and overall improvement of health in those who participate.
3	To identify research activities such as new data sources, improved techniques for data analysis, and improved hypotheses for obesity research questions.
4	Advance extension activities ranging from how to provide policymakers better insight about how to help individuals overcome their inability to adhere to weight-loss plans to impacts on individual and groups' lives, both in terms of weight loss and in overall improvements in health.
5	Number of participants who learned new information from this program. (OSUE)
6	Number of participants who plan to increase their level of daily physical activity. (OSUE)
7	Number of participants who plan to increase their consumption of fruits and vegetables. (OSUE)

Outcome #1

1. Outcome Measures

To better understand human decision making; specifically with reference to how individuals make food consumption decisions.

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Apply new knowledge to programs at the field level with a goal of significant long term weight loss and overall improvement of health in those who participate.

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

To identify research activities such as new data sources, improved techniques for data analysis, and improved hypotheses for obesity research questions.

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

Advance extension activities ranging from how to provide policymakers better insight about how to help individuals overcome their inability to adhere to weight-loss plans to impacts on individual and groups' lives, both in terms of weight loss and in overall improvements in health.

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

Number of participants who learned new information from this program. (OSUE)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	17519

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The rate of childhood obesity has tripled in the last 30 years. Obesity in childhood can result in future heart problems, bone and joint issues, social problems, sleep apnea, and many other adult health issues. Many schools have reduced the number of hours of gym and recess offered to students, which can negatively contribute to the obesity issue.

What has been done

A wide variety of Extension educational programs offered are designed to help participants acquire the knowledge, skills, attitudes and behaviors necessary for nutritionally sound diets. We present new / alternative approaches for a healthier lifestyle via demonstration, hands-on participation, and lecture. The long term goal of this program is for individuals to change their eating habits and become more physically active.

Results

Participants increased their awareness, knowledge, skills, improved their attitudes, and indicated an intent to change behaviors regarding the importance of making healthful food purchases, more healthy food preparation methods, adequate (vs. too large) portion sizes, and the role exercise and daily physical activity play in promoting and maintaining good health.

4. Associated Knowledge Areas

KA Code	Knowledge Area
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #6

1. Outcome Measures

Number of participants who plan to increase their level of daily physical activity. (OSUE)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	11213

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle

Outcome #7

1. Outcome Measures

Number of participants who plan to increase their consumption of fruits and vegetables. (OSUE)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	9830

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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4. Associated Knowledge Areas

KA Code	Knowledge Area
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724	Healthy Lifestyle

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.)
- Other (Support in schools for programs)

Brief Explanation

All items indicated above are still important factors impacting childhood obesity. Funds for research and Extension programming are a key limiting factor. Even where Extension programs are in place, support from families and schools to implement, adopt, and/or participate is still problematic. Of course poverty and lack of access to proper foods are still key limiting factors to program success.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

OSU Extension (OSUE) has had a long-standing program addressing obesity. OSU Extension has seen positive results from the evaluations issues to participants of programming related to Childhood Obesity. The following evaluation studies were used in conjunction with OSUE programming: after-only (post-program), retrospective (post-program), before-after, and case studies. The following is an example of the information yielded from assessments done by OSUE.

Participants gained knowledge of the following topics: different foods and their benefits, the need for balance of all the food groups, appropriate portion sizes and the amount of physical activity needed daily. These skills will assist participants in obtaining a balanced diet and engaging in daily physical activity to achieve and maintain a healthy weight.

In 2012, leadership of Ohio's "Farm to School" program was transferred from the Ohio Department of Education to OSU Extension. The goal of the "Farm to School" program is to bring healthy food to school cafeterias, while simultaneously supporting local farmers. Students who are touched by the program gain healthy eating habits that will set the foundation for a healthier lifestyle.

One success story of the "Farm to School" program is in the Granville school district. Their business operations director stated, "We realized our cafeteria didn't match our wellness policy. We wanted to provide our students with fresh-cooked meals with local products. Before the Farm to School initiative, only 22% of our students purchased school meals. We now serve 65% of our kids. I firmly believe every school district can do this to some extent."

Building institutional capacity to assess needs and respond is key to success. At this point, OSU is building great capacity to both assess and respond. Over the past several years, the OSU Food Innovation Center (OSU-FIC) has built capacity in this area as

well. OSU-FIC, of which the College of Food, Agriculture and Environmental Sciences (CFAES) is a primary participant, is investing in transdisciplinary solutions to address the obesity epidemic. To make significant progress, they seek to engage agricultural, behavioral, biological, environmental, medical, policy, and socioeconomic experts. FIC members from across Ohio State University and Nationwide Children's Hospital are collaborating to tackle this epidemic. Key programs are:

1. A Transdisciplinary Approach to Obesity Prevention in Preschool Age Children
2. Zinc Deficiency Enhances Chronic Systemic Inflammation in Obesity
3. Simple Suppers: A Novel Approach to Childhood Obesity Prevention
4. Maternal Obesity and Child Temperament as Predictors of Childhood Obesity: Mediating Role of the Intestinal Microbiota
5. The Primary Care Obesity Network (PCON): Incorporating principles of self-regulation of intake
6. Creating Healthy Habits Index for Kids (CHHIK)

To build greater capacity, an e-newsletter of OSU-FIC provides a periodic obesity update to scholars from across the university with references and links to scholarly articles, lay press articles, grant opportunities, webinars, and conference information subscribe. Additionally a database of obesity investigators within The Ohio State University is being created.

Educating the next generation is key within OSU-FIC. Leaders of the FIC Obesity initiative are exploring the creation of a Graduate Interdisciplinary Studies program in Obesity Sciences. The program would allow Ohio State graduate students to take courses and explore topics outside of their own field of study and view the obesity epidemic through multiple perspectives. This program will engage interdisciplinary collaborations that set out to solve real world problems in obesity science from farm to fork.

Each of these efforts is considered a way of gathering and sharing data, each building greater capacity for us to assess outputs and impacts.

Key Items of Evaluation

As a result of OSUE evaluations, it was determined that 95% of participants of programming related to Childhood Obesity learned "some" or "a lot" of new information, while 86% reported planning to make "some" or "a lot" of changes after coming to OSUE programs.