

V(A). Planned Program (Summary)

Program # 9

1. Name of the Planned Program

Childhood Obesity

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	40%		35%	
724	Healthy Lifestyle	40%		32%	
801	Individual and Family Resource Management	10%		16%	
802	Human Development and Family Well-Being	10%		17%	
	Total	100%		100%	

V(C). Planned Program (Inputs)

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

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Actual	8.1	0.0	2.0	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
378195	0	119746	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
378195	0	119630	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	971222	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The U.S. childhood obesity rate -- which is now 17 percent -- has more than tripled during the past 35 years. Overweight kids have a 70 to 80 percent change of becoming overweight adults. In Michigan, almost two out of three Michigan residents are overweight or obese.

To address these challenges, research was undertaken to: disseminate science-based information to individuals and families so that they can make informed decisions about their health and well-being, especially related to obesity and overweight; identify and document environmental and cultural influences on health behaviors contributing to obesity and overweight in children that can be shared with individuals, families and communities; and develop effective community-based environmental and policy supports for physical activity and healthy eating.

Extension activities include: training for both youth and adults regarding the recommendations from the food guide pyramid on portions and the variety of food that should be eaten, training for youth on physical exercise and coping strategies to improve social/emotional health.

2. Brief description of the target audience

State and community healthcare agencies, schools and organizations that deal with healthy eating and physical activity as a pathway to wellness, pediatric caregivers, food marketers/retailers (especially those targeting children), producers and processors, other researchers and institutions conducting childhood obesity research, and individual consumers, particularly mothers.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	{NO DATA}	{NO DATA}	{NO DATA}	{NO DATA}
Actual	321	1000	356	712

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

Patent Applications Submitted

Year: 2010
 Plan:
 Actual: 0

Patents listed

None for this reporting year.

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	6	6

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of research programs that address obesity and diet quality and dietary attitudes and behavior of children and youth.

Year	Target	Actual
2010	{No Data Entered}	3

Output #2

Output Measure

- Number of research programs that address school and community-based supports for physical activity and healthy eating with a focus on children and youth.

Year	Target	Actual
2010	{No Data Entered}	2

Output #3

Output Measure

- Number of research programs that address the association between diet, obesity and disease.

Year	Target	Actual
2010	{No Data Entered}	1

Output #4

Output Measure

- Number of adults trained in controlling food portions.

Year	Target	Actual
2010	{No Data Entered}	321

Output #5

Output Measure

- Number of youth trained in controlling food portions.

Year	Target	Actual
2010	{No Data Entered}	211

Output #6

Output Measure

- Number of youth trained in healthy physical activities.

	Year	Target	Actual
	2010	{No Data Entered}	211

Output #7

Output Measure

- Number of youth trained in positive coping skills.

	Year	Target	Actual
	2010	{No Data Entered}	112

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of research programs that address obesity and diet quality, and dietary attitudes and behavior of children and youth.
2	Number of research programs that address school and community-based supports for physical activity and healthy eating, with a focus on children and youth.
3	Number of research programs that address the association between diet, obesity and disease.

Outcome #1

1. Outcome Measures

Number of research programs that address obesity and diet quality, and dietary attitudes and behavior of children and youth.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	3

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Overweight children are at serious risk for cardiovascular disease, diabetes and some forms of cancer, and the risk is life-long. The Surgeon General's call to Action to Prevent and Decrease Overweight and Obesity reports that overweight adolescents have a 70 percent change of becoming overweight or obese. Further, obesity-associated coronary heart disease is now the No. 1 cause of mortality in the United States. Parents can significantly improve the health of their children by initiating family lifestyle changes in eating behavior.

What has been done

Research to: examine and identify the current nutrition assessment protocols and dietary guidance practiced by pediatric residents and other health care providers; develop and implement an intervention to improve nutrition screening/participatory guidance regarding age appropriate food behaviors to optimize nutrition and reduce risk for childhood obesity; and determine the effects of food marketing practices targeting children on dietary attitudes and behaviors.

Results

Research evaluating 250 advergames targeted to children found that almost all of the foods featured were high in fat and sugar -- about 84 percent of advergame products were classified as low-nutrient foods, and that very few advergames educated children about nutrition and health issues. Research is now underway to better understand how the games work to see if the same techniques can be used to promote healthy eating habits.

4. Associated Knowledge Areas

KA Code	Knowledge Area
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703	Nutrition Education and Behavior
724	Healthy Lifestyle
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

Outcome #2

1. Outcome Measures

Number of research programs that address school and community-based supports for physical activity and healthy eating, with a focus on children and youth.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Americans are heavier than ever. According to the Centers for Disease Control and Prevention, obesity now affects about one-third of the U.S. population. Researchers cite diets of calorie-dense but nutrient deficient food, increasingly sedentary lifestyles and public planning strategies that favor motorists over walkers and cyclists as significant causes of what is being called an obesity epidemic. To help address this issue, researchers are teaming up with a variety of state and community partners to help make it easier for people to be physically active and eat healthier.

What has been done

Research to: assist schools, state and community-based groups, agencies and organizations with policy and environmental changes and nutrition and physical education to make it easier for children and adults to eat healthier and be physically active; evaluate interventions for schools that facilitate positive education, policy and environmental change for improved nutrition and physical activity among children; and investigate the associations between the proximity of fast food restaurants and convenience stores and school rates of overweight children.

Results

A two year initiative -- Project FIT was launched in four Grand Rapids elementary schools to promote student's health through increasing daily structured physical activity and healthy eating habits. School health teams were established at all four schools; Healthy Classrooms, Healthier

Kids Nutrition Education staff training was completed with all four schools; newsletters were distributed to educators with ideas for activities and education to do in their classrooms; teachers serving as "Healthy Eating Coaches" were placed in the cafeteria to eat with students and encouraged them to try healthy foods; and each school was provided with physical activity and nutrition education curricula.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #3

1. Outcome Measures

Number of research programs that address the association between diet, obesity and disease.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Obesity is directly associated with an increased risk of cancer at several organ sites, including the colon. Some 149,000 Americans will be diagnosed with colon cancer and 50,000 will die from it this year, according to the American Cancer Society. More than a million have been diagnosed with colon or rectal cancer in the U.S., the National Cancer Institute reported, making the issue of obesity and cancer a priority for the health of the nation.

What has been done

Research to: identify approaches and interventions to reduce the systemic inflammation associated with obesity to help prevent obesity-related cancer.

Results

The identification of a new link between body fat and cancer could lead to new cancer treatment and prevention strategies. Researchers examined a key hormone, leptin, found in fat tissue and thought to promote cancer. Leptin, a fat cell-derived hormone regulating body energy, is higher in

obese individuals. This study is the first to demonstrate that, at higher levels, leptin induces precancerous colon cells to produce more of a growth factor that can increase blood supply to early cancer cells, promoting tumor growth and cancer progression. This information will help researchers better understand the active signals and mechanisms involved so that opportunities can be created to prevent or interrupt cancer progression early in the process.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
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.)

Brief Explanation

The economic challenges being faced by Michigan continue to affect these programs, especially related to funding and staffing levels due to state budget cuts, appropriations changes and competing public priorities. In addition, because of the inclusion of the five new national priorities in this year's reporting, many of the projected and actual numbers in our original planned programs had to be revised. Five out of the six original planned programs are still in the report, but a significant number (about 35 percent) were cross-walked into the new planned programs.

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

1. Evaluation Studies Planned

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}