

# Diabetes Education

Diabetes Education

## V(A). Planned Program (Summary)

### 1. Name of the Planned Program

Diabetes Education

## V(B). Program Knowledge Area(s)

### 1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
724	Healthy Lifestyle	100%		100%	
	<b>Total</b>	100%		100%	

## V(C). Planned Program (Inputs)

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

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	17.7	0.0	1.2	0.0
<b>Actual</b>	20.2	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 269765	1890 Extension	Hatch	Evans-Allen
	0	0	0
1862 Matching 269765	1890 Matching	1862 Matching	1890 Matching
	0	0	0
1862 All Other 1639553	1890 All Other	1862 All Other	1890 All Other
	0	405	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

1.4 million adult Texans are diagnosed with diabetes with the annual cost estimated at \$12.5 billion. With the increased Hispanic population at a higher risk for diabetes, projections indicate a greater incidence rate and increased future costs in Texas. Health costs increase with lack of diabetes management. Diabetic individuals can manage their disease with education, but it is not readily available. Health professional faculty developed an educational series (five class nutrition and self-care lessons aimed toward lasting lifestyle changes related to nutrition, exercise, monitoring blood sugar levels, managing medications, and other topics, plus a second phase of four diabetes cooking lessons—the practical application of phase one. Leadership for the marketing, registration, data collection, food preparation demonstrations, procurement of medical supplies, and finding community locations is through the county Extension agents who partner with local health care professionals to teach the classes. On-line data collection of the registration, wrap-up and reunion surveys for both programs is used and is providing results.

**2. Brief description of the target audience**

The target audience is all people with type 2 diabetes who need training to learn self-care management skills such as nutrition (limiting carbohydrates, fat, sodium, and increasing fiber intake), increasing physical activity, taking prescribed medications, checking blood glucose levels, and regularly visiting health care providers. Within the State of Texas, the population is diverse and with the rising Hispanic population, comes a need to include programs addressing the needs of this under-served population.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	12700	41250	0	0
2007	25594	77269	1798	0

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

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007:	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	3	3	6

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

# of research-related publications.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	5	3

**Output #2**

**Output Measure**

# of group educational sessions conducted.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	1125	1530

**Output #3**

**Output Measure**

# of research-related projects.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	1	1

**V(G). State Defined Outcomes**

<b>O No.</b>	<b>Outcome Name</b>
1	# of participants who report improved before meals blood glucose levels after attending 5 of the six classes.
2	# who complete the first diabetes series of 5 lessons.
3	Number of nurses trained on diabetes education.

**Outcome #1**

**1. Outcome Measures**

*Not reporting on this Outcome for this Annual Report*

**2. Associated Institution Types**

**3a. Outcome Type:**

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
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**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
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**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

Economy

**Brief Explanation**

Annual health care costs for people without diabetes are estimated between \$2,560 and \$5,642, and at \$13,243 for people with diabetes. Proper self-management enables people with diabetes to reduce their health care costs to close to non-diabetes levels. Participants in Extension self-care and nutrition lessons improved their self-management skills. For the 1,724 participants in 2007, the total potential economic impact is estimated at \$119.9 million.

Participation in Extension educational nutrition and self-care program and diabetes cooking school provides for communities the following: reaching communities and individuals who do not have access to diabetes education; enabling a better quality of life and productivity level for people with diabetes; and reducing the strain on medical services and state funding, such as Medicaid.

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

**1. Evaluation Studies Planned**

Other (Registration (before), After and Reunion)

### **Evaluation Results**

During 2004 to 2007, some 92 trained agents conducted diabetes cooking schools.

Some of the most significant of those results are listed below:

•Since 2004, 2,154 diabetic individuals completed registration surveys; 1,534, wrap-up surveys; and 1,021 reunion surveys providing 1021 sets valid data. •Average age was 62.5 years with 1,747 females (81%) and 407 males (19%). •Some 90.5 % respondents never previously participated in a cooking school. •Average hemoglobin A1C was reported at 7.0. •When asked about type of meal plan they followed, some 13.0 % (237) answered diabetes food exchanges; carbohydrate counting, 20.4%(484); plate method, 4.2 % (81); 9.2 % (179) other meal plans; and 42.4 % (827) receiving no meal plan at all. •Responses on the registration, wrap-up, and reunion surveys documented increased overall knowledge increase in lifestyle choices (for example, modifying recipes to cut fat, sugar, and salt, and increase fiber). •2007 evaluations revealed: 78.8% (519) could recognize starchy vegetables; at least 72.7 % (456) knew how to make foods taste sweeter by adding vanilla; 92.6% (641) knew which cooking method would not reduce the fat content of the food.

### **Key Items of Evaluation**

One class member in both AgriLife Extension diabetes programs lost 130 pounds. The message was very clear-a need to make lifestyle changes. Both his wife and daughter have also joined him in eating more healthful foods and increasing daily activities. He told his county agent: "The work that you do has saved my life and that of my family. Besides, now we are much happier, feel better about ourselves, and enjoy life to the fullest."