#### LIFESTYLE YOUTH ENHANCEMENT PROJECT

A Program of Jackson Teen Parent Program, Inc. and Trudestiny

#### PROGRESS REPORT OF THE NUTRITION COMPONENT

The Lifestyle Youth Enhancement Project is conducted in a low-income neighborhood in Jackson, Mississippi. The project participants are 20 youth ranging in age from 12-19 and 5 parents ranging in age from 31-38 who meet weekly for instruction and activities that focus on lifestyle changes to promote physical and mental health and academic achievement. Snacks are provided for the weekly Wednesday meetings and for the bimonthly Sunday meetings. Because the project has had to rely on donated food, the snacks have been generally unhealthy. Occasionally fresh fruit and vegetables were donated by a local food pantry, but in late 2010 this food pantry ceased its operation.

The nutrition component of the Project started in January, 2011 to provide health screening, to teach healthy eating and to provide more healthy weekly snacks.

In order to determine their starting diets, students were asked to keep food diaries for the first 2 weeks of the program. The diaries were started on January 12, but did not continue for 2 weeks. The students were embarrassed to write what they actually ate and drank because for most of them their main meal was lunch at school, with mainly junk food or no food eaten at home. Therefore, instead of keeping diaries for 2 weeks, they kept them for 3 days—January 12, February 1, and April 13. Although the diaries were kept for only 3 days, they did reveal things we needed to teach in the Nutrition Spotlights which began the first week of February. We were able to compare the April diaries with the January and February diaries to see if the students were making changes in their diets as a result of the nutrition activities.

# Information Revealed in January 12 Diaries

- 2 youth ate breakfast
- 3 drank water once a day
- Other liquids drunk at home were mainly high sugar drinks or none at all
- A few drank milk and juice, but only at lunch at school
- Most of the foods eaten at home were high in sodium, fat, and high fructose corn syrup & sugar

#### **Screening Measurements**

On March 16 a volunteer registered nurse screened 15 youth, 5 parents, and 3 project staff for height, weight, body mass index (BMI) and blood pressure, and on May 14 a medical lab technician screened the same participants for blood glucose levels. In order to correlate this program with academics, a volunteer certified public accountant (CPA) from the community taught students and parents the health significance of the BMI, how to compute the BMI, and how to use a calculator. Participants computed their own BMIs, which were checked for accuracy by the CPA. Five students were not screened because they were absent on the screening dates.

# **Results of Screening**

Number in each weight group based on BMI:

- Underweight 2
- Normal 6
- Overweight 6
- Class 1 Obese 6
- Class 2 Obese 3

Number with glucose above normal level: 1

Number with blood pressure above normal level: 10

#### **Nutrition Instruction and Activities**

Originally we planned to present 15-minute Nutrition Spotlights on 3 Wednesdays of every month and a 1-hour session the last Wednesday of each month. However, the interest and enthusiasm of the parents and youth about the nutrition program was so great that we reduced the 15-minute sessions to twice a month and conducted the 1-hour sessions two times a month.

At each meeting participants have always been provided snacks prepared from donated food, most of which was high-sugar deserts such as Twinkies, candy, and non-fruit drinks, and high sodium/fat items like chips. As a result of the Consumer Wellness Center grant we are now providing more healthy snacks consisting of fresh fruits & vegetables, bottled water, raisins, unsalted nuts, peanut butter, whole wheat bread & crackers, and low-sodium baked chips. Snack items such as Cow Pals Cheese 'n Sticks have been

served instead of Twinkies. Using Cow Pals instead of Twinkies reduced sodium per serving from 420 to 230 mg, sugars from 35 to 3 g, total fat from 9 to 3 g, saturated fat from 5 to 1 g, and cholesterol from 35 to 5 mg.

Parents and 1 student have been involved in selecting and preparing the weekly snacks. Because we transport the students from their homes after school, we have not had enough time to have all of the students involved in food selection and preparation and still have enough time to provide instruction in basic nutrition. After the school year is over in early June, we can start transporting the children earlier in the evening. Beginning with the June 15 session, we will start having all of the students involved in the selection, preparation, and serving of the snacks, with a rotating schedule for students who will work in pairs.

From the grant funds we purchased a food blender, but we decided to wait until June to start having the students make fresh fruit and vegetable beverages using the blender. The food diaries revealed that all except 3 students were drinking no water all day, and these 3 were drinking only 1 cup of water a day. In order to increase their daily water intake and to develop a habit of drinking water, we decided to serve water instead of other beverages. With each snack they are now given a 16 oz bottle of water. Now most of them ask for their water when they first arrive at the meeting. At the first Wednesday meeting in June students will be taught how to use the blender and will make a fresh fruit and yogurt beverage. At all subsequent meetings 2 students will prepare the beverage for the day using fresh fruits or vegetables.

For the Sunday meetings the students have done the following:

- Learned how to bake whole wheat bread
- Learned how to steam vegetables
- Prepared and eaten a meal of steamed vegetables (carrots, white potatoes, broccoli) and whole wheat bread

The Sunday meetings are held at a church, which allowed the students to use their cooking utensils for steaming their veggies and baking their bread. Therefore, we have not yet purchased a food steamer.

In the Nutrition Spotlights we have focused on the following points and objectives:

- The relationship between good nutrition and health
- The relationship between poor nutrition and disease, especially diabetes, heart disease, and strokes
- Students shared information on how they have seen family members suffer because of diabetes and identified lifestyle choices of these family members that led to their diabetic problems
- The importance of eating breakfast for physical & emotional health and academic achievement
- The relationship between diet and BMI, blood pressure, and glucose level and the healthy range for each of these
  measures
- The importance of drinking water and the health consequences of drinking too little water
- Analyzed their own diets in terms of calories, portion sizes, sodium, sugars, total fat, saturated fat, cholesterol, meeting the daily Recommended Daily Allowance for basic nutrients, and using the Food Pyramid to evaluate and change their diets

Reading and Using Food Labels. The nutrition lessons and activities that generated the most interest on the part of parents and students were those devoted to Reading and Using Food Labels. To prepare participants for the hands-on and simulated activities, they were taught how to read food labels to determine food ingredients, the relative amount of ingredients in a food item, to determine the nutrients in a food item, serving sizes and the different words used for sugar, fats, and salt. Prior to this activity none of the parents or students had ever looked at a food label, and they were all amazed that so much information was on the labels.

To participate in the hands-on activities, parents and students were divided into 3 groups to complete the activities. Groups were rotated so that each participant was able to be involved in each of the 3 group activities.

**Group 1**. A pre-selected group of grocery store ads were placed on the walls and the group was instructed to use the ads to "shop" for and plan healthy meals for one week.

**Group 2**. The group was placed at a table on which had been placed a variety of grocery items. They were instructed to identify and choose the healthy items. Then they were asked to explain why they did or not choose each food item on the table.

**Group 3**. The group was given labels from many different food items. They were instructed to use the labels to complete a worksheet for each food item. Sample worksheet items were

- What is the serving size?
- What is the main ingredient in this item? The least ingredient?
- What percentage of the RDA does this food item contain for calories, various vitamins, sodium, fat, cholesterol, etc.
- Is this a healthy food?

After completing their activity, each group shared their findings with the entire class of participants, and participants were allowed to ask questions and discuss each activity.

# **Exercise**

Because of the number of overweight and obese participants, we taught the importance of exercise in a healthy lifestyle and added to the weekly activities an exercise class for parents and one for students.

#### Positive Changes Seen April 13

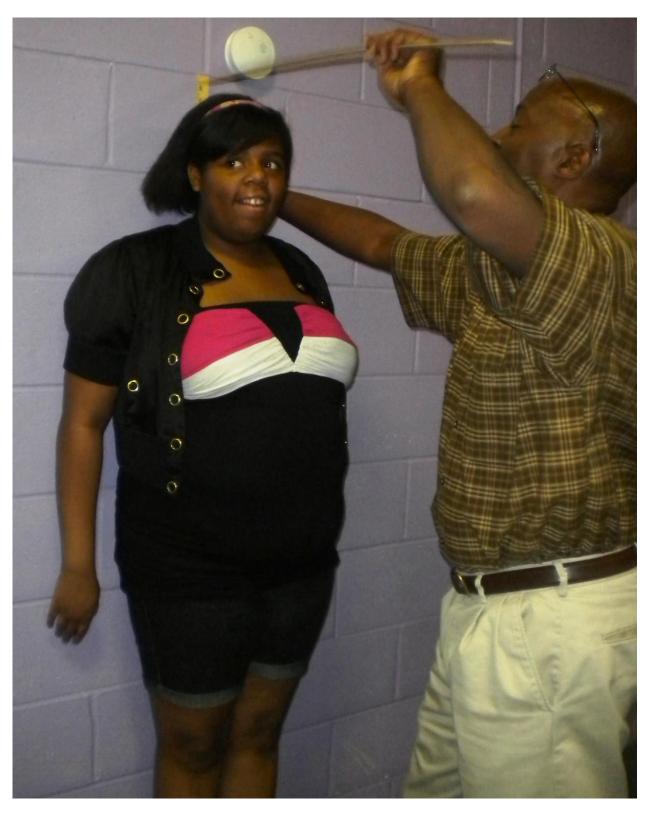
- Number of participants eating breakfast increased from 2 to 8
- Number of participants drinking water at home increased from 3 to 7

# **Additional Goals**

- To increase to 100%the number of participants eating breakfast
- To increase to 100% the number of participants drinking water at home
- Starting the June 15 to get the student participants involved in preparing snacks and fruit drinks for the weekly and Sunday sessions
- To eliminate purchased packaged snacks and replace them with fresh foods prepared by students and parents.

# **PHOTOS**



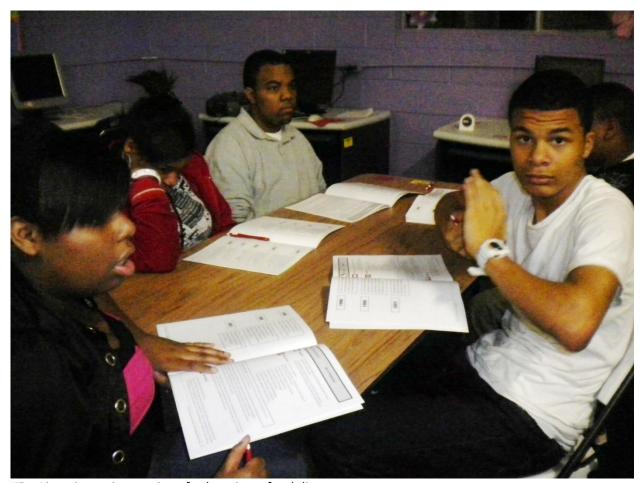


#2 – Student being measured for height & weight





#4 – Student getting BP measured



#5 – Listening to instructions for keeping a food diary

# #6 – Mrs. Henry explaining a food label





#7 – Mrs. Henry teaching how to read food labels

#8 - Parent/student group doing a food label activity





#9 – Student exercise class



#10 - Parent exercise class



#11 – A parent preparing a snack



#12 – Student-prepared fruit tray



#13 Student at table of snacks she prepared



#14 – Breadmaking class



#15 - Cooking class



16 - Cooking class



17- Cooking class