



RANCHO CIELO YOUTH CAMPUS, Drummond Culinary Academy

SPRING NUTRITION EDUCATION COURSE

January 11th – May 5th, 2011

PROGRAM EVALUATION

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Instructional Program Evaluation

Overview

From January 11th to May 5th 2011, Healthy Eating Lifestyle Principles (HELP) conducted nutrition education classes at the Rancho Cielo Youth Campus Drummond Culinary Academy. The purpose of the program was to provide the students with basic knowledge and skills to enable positive changes in their nutrition behaviors as well as develop an understanding of the nutritional needs of the general population. Classes were based on the *Come and Get it!* Curriculum, specifically designed for high school students in Alternative Education Programs. Lesson topics included *Essential Nutrients, The Food Pyramid, Refined versus Whole Grains, Label Reading, Fats, Caloric Needs, Physical Activity, and Unhealthy Dieting Behaviors*. Classes were held Tuesdays and Thursdays from 12:30 to 1:30 pm. Students were divided into two groups; each group was scheduled to attend class once a week. The class started with all the students enrolled in the Culinary Academy, twenty-seven in total. By the end of the course there were 21 students enrolled in the Academy and attending the nutrition class.

Evaluation

Students were given a 15 question pre/post multiple choice test based on the content of the course. Additionally, upon completion of the course, students were given an exit survey designed to gauge attendance, interest in the course content, behavioral changes and intention to change. All twenty-seven students took the pre-test. Due to attrition, internships, and poor attendance near the end of the semester, the instructor was only able to collect fourteen post-tests.

Results

A review of the results of the pre/post test demonstrates substantial growth in the following areas:

By the end of the course:

- Answers to content-based questions improved 25% in overall accuracy.
- 78% of students surveyed were able to identify carbohydrate as the body's main source of energy.
- 85% of the students recognized that most Americans consume too much protein.
- 92% of the students were able to identify saturated fat as "unhealthy."
- 92% of the students knew the caloric needs of the average teenager.

The correct response is "False."

Lesson objectives:

- Students will be able to identify key nutrients the body needs and describe their function and importance.
- Students will understand that all nutrients play an equally important role in good health.
- Students will understand that bodies are affected by the types of nutrients taken in by food and drink.

The correct response is "Carbohydrates."

Lesson objectives:

- Students will be able to identify key nutrients the body needs and describe their function and importance.
- Students will understand that all nutrients play an equally important role in good health.
- Students will understand that bodies are affected by the types of nutrients taken in by food and drink.

The correct response is "True."

Lesson objectives:

- Students will be able to identify key nutrients the body needs and describe their function and importance.
- Students will understand that bodies are affected by the types of nutrients taken in by food and drink.
- Students will understand that all nutrients play an equally important role in good health.

The correct response is “20% to 30%.”

Lesson objectives:

- Students will be able to distinguish between “healthy” and “unhealthy” fats.
- Students will be able to identify the recommended dietary allowance for fats.
- Students will understand the health risks associated with over-consumption of certain fats.

The correct response is “Saturated Fats.”

Lesson objectives:

- Students will be able to distinguish between “healthy” and “unhealthy” fats.
- Students will be able to identify the recommended dietary allowance for fats.
- Students will understand the health risks associated with over-consumption of certain fats.

The correct response is “Five Servings.”

Lesson objective:

- Students will be able to identify the recommended daily amounts from each food group.

The correct response is “Fruits and Vegetables.”

Lesson objective:

- Students will understand the health benefits of fruit and vegetable consumption.

The correct response was “White Rice.”

Lesson objectives:

- Students will understand the role of fiber in a healthy diet.
- Students will learn the difference between refined and whole grains.

The correct response was “360 Calories” (ninety calories per serving, four servings per package).

Lesson objectives:

- Students will gain a better understanding of Food Labels by reading and comparing them.
- Students will understand what types of foods are high or low in certain nutrients based on Food Label information.

The correct response was “No” (Dietary Fiber= 3 grams; 12% DV).

Lesson objectives:

- Students will gain a better understanding of Food Labels by reading and comparing them.
- Students will understand what types of foods are high or low in certain nutrients based on Food Label information.

The correct response is “True.”

Lesson objectives:

- Identify and understand the basic concepts of the Food Pyramid.
- Understand how nutrients relate to the Food Pyramid.
- Identify the different food groups.
- Understand the concepts of balance, variety and moderation.

The correct response is “Five.”

Lesson objectives:

- Identify and understand the basic concepts of the Food Pyramid.
- Understand how nutrients relate to the Food Pyramid.
- Identify the different food groups.
- Understand the concepts of balance, variety and moderation.

The correct response is 2000 to 2600 calories.

Lesson objective:

- Students will know how many calories per day are appropriate for them to eat based on their activity level, age and gender.

The correct response is “cardio- respiratory/aerobic.”

Lesson objective:

- Be able to identify the four components of being physically fit: cardio- respiratory/aerobic fitness, muscular strength, muscular endurance and flexibility.

The correct response is “False.”

Lesson objective:

- Students will be able to identify healthy and unhealthy ways to manage weight.

Comments

It appears that the greatest gains in knowledge occurred in the content that was taught earlier in the course. Although the instructor did not keep attendance records for the entire semester, it was evident that attendance became less consistent as the semester progressed.

Challenges

As this course was conducted at an Alternative Education Campus, the nature and structure of the school system alone provides for many educational challenges:

- This was the first year of operation for the Drummond Culinary Academy.
- Only 50% of the original pre-tested students completed the post-test.
- As an alternative education program for at-risk youth, Rancho Cielo presents unique challenges. Reaching these youth and creating buy-in is difficult, especially as a push-in educator who does not have the allotted time to develop a relationship with the students.
- Attendance was inconsistent, potentially creating gaps in learning.

Six week sample of attendance: Over a six week period where attendance was tracked, 23 students attended at least one class:

Number of classes attended over a six week period	Number of students
Attended 1 class	1
Attended 2 classes	0
Attended 3 classes	6
Attended 4 classes	5
Attended 5 classes	3
Attended 6 classes	7

Less than one-third of the students attended all six classes during the period measured.

The course exit survey consisted of seven questions. Sixteen surveys were completed. Responses were as follows:

Nutrition Course Assessment – Exit Survey

Please answer the following questions honestly and thoughtfully. Your answers are anonymous.

How often did you attend this class?

Usually once a week 12

Not very often 1

Rarely 3

How interested are you in learning about nutrition and health?

Very interested 7

Somewhat interested 5

Not at all interested 4

I feel the content of this class is relevant to my life.

Strongly agree 4

Agree 5

Neutral 6

Disagree 0

Strongly disagree 1

I have, or plan to, change my eating or exercise habits based on what I've learned in this class.

Yes 7

No 2

Maybe 7

What did you like about this class? (Sample comments)

"I liked that it made me realize healthy is the way to live."

"Learning all the new things."

"The info I got from it."

"Learning things that will better the way I eat and exercise."

What did you not like about this class? (Sample comments)

"The work"

"Learning about things that are bad for you."

"I knew all the info given."

What would make this class better? (Sample comments)

"More hands on activities."

"...a hike...or a run."

"Everything was great."

"Outdoor activities."

*Surveys available upon request.

Conclusions

Working with the youth at Rancho Cielo presents unique challenges. Implementing the HELP nutrition program in the first year of the new Drummond Culinary Academy added its own challenges. Despite some difficulties, the students demonstrated significant growth in knowledge. This evaluation, along with a post-program process evaluation with the Culinary Academy staff, has provided useful information that will be used in future implementation cycles.

2011-2012 Academic Year

In order to address some of the challenges noted above, HELP is working closely with Culinary Academy staff to ensure a successful 2011-2012 school year. Collaboration has resulted in the following conclusions:

- Culinary Academy staff view the nutrition class as a valuable addition to their curriculum and want the partnership to continue.
- The Academy learned valuable lessons about their own program during the first year; operational changes within their program are expected to enhance the learning environment as a whole.
- The nutrition educator will align lessons/activities with student activities in the kitchen, when possible.
- Opportunities will be provided for students to prepare and try healthy dishes in the kitchen.
- Last year the HELP nutrition class was added during the second semester. This year HELP will begin classes at the Academy in early September. This continuity will allow HELP to build stronger relationships with the students and staff, further enhancing the learning environment.

Students work on posters that describe the six essential nutrients.

Students sharing what they have learned.

