

RESEARCH PROJECT TITLE:

Strategies to Expand Use and Understanding of Food Labeling Information among Young Adults

INVESTIGATORS:

Patricia E. McLean-Meynsse, Ph.D. (Agricultural Economist)

Janet V. Gager, M.S. (Food Scientist)

ADMINISTRATIVE ASSISTANT:

Cheryl E. Ferrygood

PROBLEM STATEMENT:

Because of rising medical costs and research linking diet and health, Congress passed the Nutrition Labeling and Education Act (NLEA) in 1990 to provide consumers with easier access to nutritional information. This Act was different from previous legislation because it regulated nutrition labeling and nutritional claims such as fat free, or low in fat. Instead the new food labels provide Nutrition Facts and contain information on serving size, servings per container, and the amount per serving of calories, total fat, cholesterol, sodium, total carbohydrate, dietary fiber, sugars, protein, and other nutrients. Nutrition Facts have been on processed foods since 1994; however, the number of overweight and obese individuals in the United States has steadily increased and diet-related-healthcare costs have skyrocketed.

The project continues the ex-post evaluation of diet and nutritional awareness among a group of college students in Louisiana since the passage of NLEA. Students are a good target group because they are still young enough to make dietary changes that can ward off many of the health problems associated with poor eating habits.

PROJECT OBJECTIVES:

The project's goal is to gather information on and track college students' nutritional knowledge, and use of food labels. The specific objectives are as follows:

1. To determine levels of nutritional awareness, label use, and interest in using labels when shopping for food and/or in preparing meals;
2. To assess students' ability to read and understand nutrition information from food labels;
3. To analyze the effectiveness of labeling education on nutritional knowledge and food label use; and
4. To examine the role of socioeconomic and demographic characteristics on knowledge, attitudes, and behavior.

PRODUCTS:

To date the following products have emanated from the project.

1. A survey instrument measuring food label use and knowledge of labeling information was developed and executed to 336 students .
2. Two nutritional-related quizzes were executed to students.
3. One presentation was made at a professional meeting.
4. A paper is in the review process.
5. Greater nutritional awareness shown among participants who took the post-test quiz.

OUTCOME/IMPACT:

OUTCOME#1: Improving university students’ literacy and understanding of the Nutrition Facts

Define Outcome: Instruction will increase nutritional knowledge

List and Define Indicators:

1. Percentage of students who correctly answered questions on consuming the full supply of the following

	PRETEST	POSTTEST
a. 100% Daily Value of Total Fat	19.5%	31.1%
b. 100% Daily Value of Saturated Fat	29.3%	54.9%
c. 100% Daily Value of Cholesterol	30.8%	66.5%
d. 100% Daily Value of Calcium	45.1%	68.3%
e. 100 % Daily Value of Sodium	10.5%	54.3%
f. 100% Daily Value of Potassium	55.6%	76.8%
g. 100% Dietary Value of Dietary Fiber	11.3%	45.1%
h. 100% Daily Value of Total Carbohydrate	39.1%	62.2%

Participants in the introductory biology classes increased their literacy and understanding of food labeling information after they were taught how to read labels.

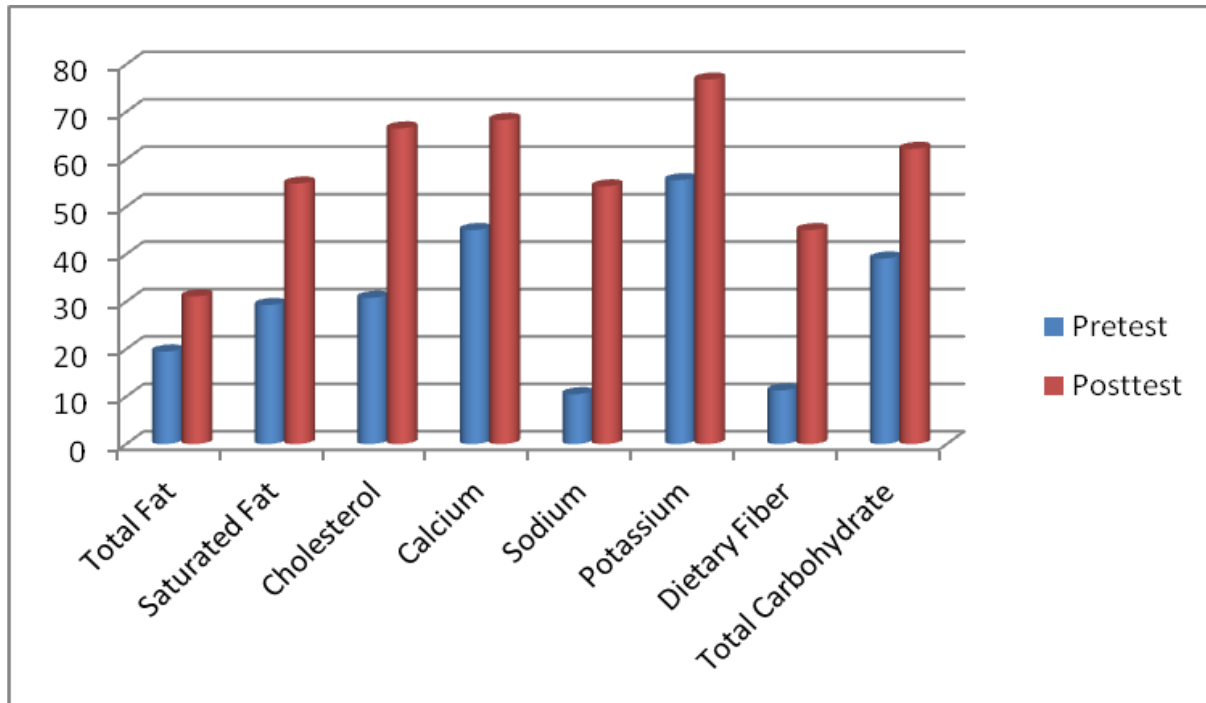


Figure 1: Pretest and Posttest Scores for Percentage Daily Values

OUTCOME#2: Increasing students' knowledge of the role vitamins and minerals play in the body

Define Outcome: Instruction will increase participants' knowledge of the role of vitamins and calcium in the body.

List and Define Indicators:

	PRETEST	POSTTEST
1. VITAMINS		
a. Vitamin A	49.6%	45.7%
b. Vitamin B	51.9%	51.8%
c. Vitamin C	53.4%	53.0%
d. Vitamin D	62.1%	53.7%

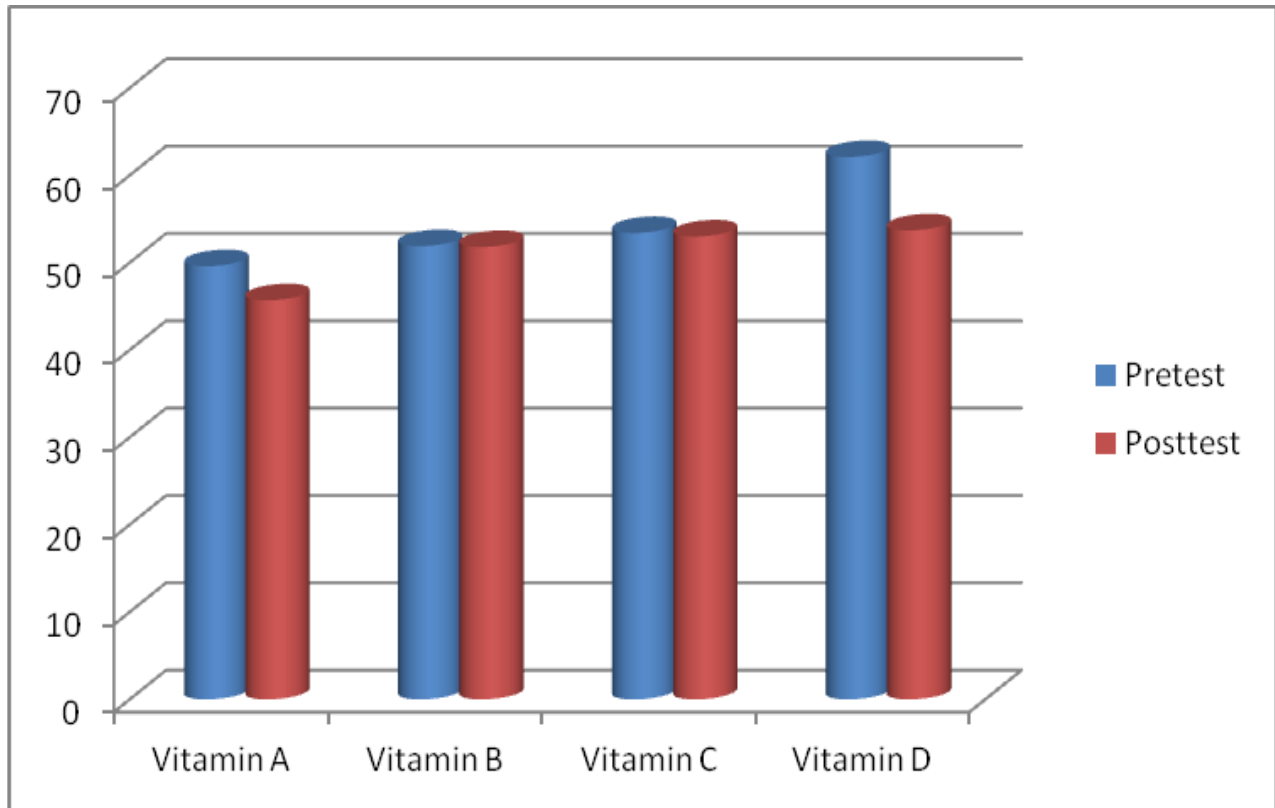


Figure 2: Pretest and Posttest Scores for Knowledge on Vitamins

	PRETEST	POSTTEST
2. CALCIUM		
a. Health effects of low calcium consumption	86.5%	86.0%
b. Calcium-rich Foods	51.9%	50.6%

The data suggest that instruction did not increase students' nutritional knowledge of the role vitamins and calcium play in the body.

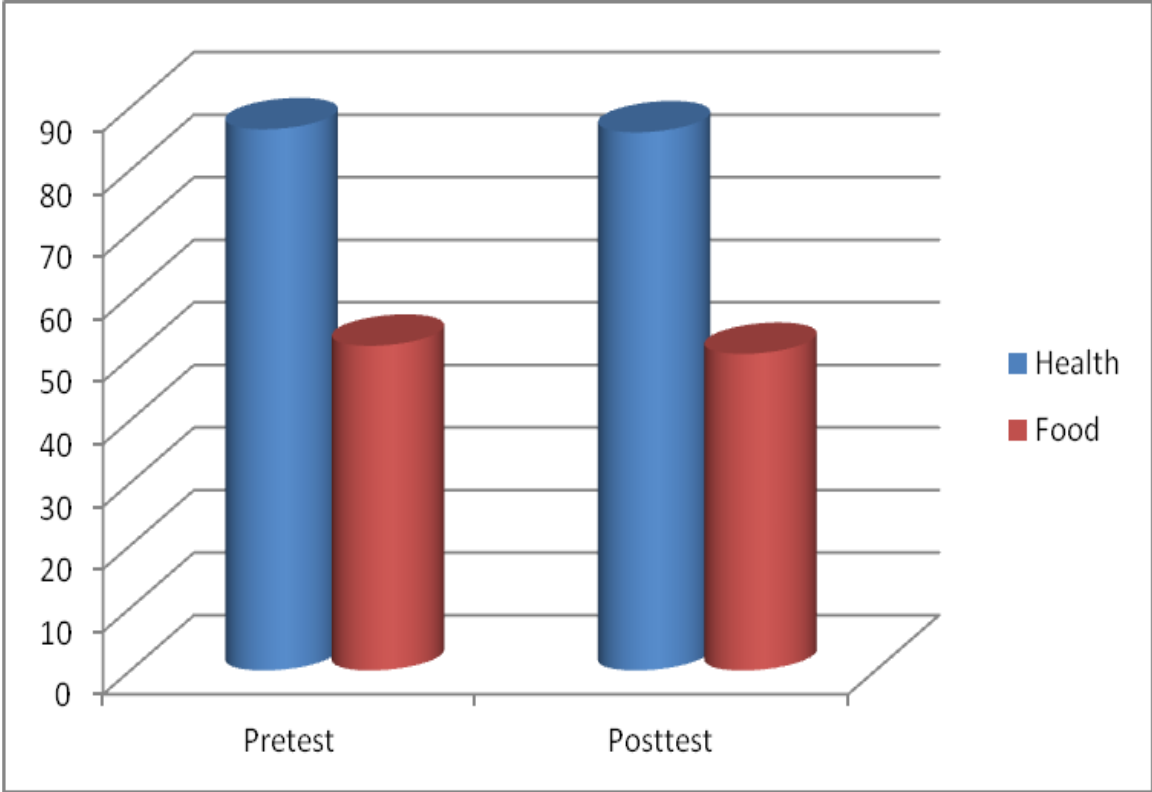


Figure 3: Pretest and Posttest Scores for Knowledge about Calcium