

# Nutritional Guidance in Pre-Adolescent Female's Food Intake: Teaching Girls to Make Better Food Choices

## Introduction

The female population of the United States is becoming more obese each year. Many factors can be attributed to the growing number of women with weight issues. Young girls are not receiving proper education in nutrition, which results in adult females that are not able to distinguish between healthy food choices and non-healthy ones. With teachers having more and more responsibilities and having to teach more objectives each year, the challenge is to find time to fit nutrition into the curriculum in a fast, but effective way. Brochures can be an effective way to teach small bits of information in a clear, concise manner. When using a brochure to teach nutrition, information can be distributed and read in a short period of time. Students will retain those small bits of vital information much easier than lectures that provide pages of notes. Students do not have to read through the brochure to find the key points, because only the important parts have been included. When using this technique to teach nutrition to pre-adolescent females, the expectation is that students will quickly understand and retain the small amount of information provided, but that the information will be of such importance that it will make a change in the way students chose the foods they eat. Being able to quickly pick nutritious food choices could lead to an overall decrease in female obesity rates in adults. Having the information in the form of a brochure that is available for the student to keep and refer back to, could make the difference in information retention. The problem is that most studies to date have focused on adolescent and adult females with regard to food choices, but few studies have focused on the pre-adolescent. Research has not been done on the effectiveness of using a brochure to teach pre-adolescent girls about nutrition. The purpose of this participatory action research project is to determine if a brochure-based nutrition education program for pre-adolescent girls will impact the choice of nutritious food.

## Methodology

Learning to make informed decisions regarding food choices is important to pre-adolescent girls. This particular research design will delineate the impact of the intervention on girl's choice of food intake at lunch. The study will be conducted at Boone Trail Elementary School located in Lillington, North Carolina in a 5th grade classroom. This is a sample of convenience to assess the effects of an educational brochure and provide insight regarding participant's choice of food at lunch. Participants are volunteers and participate in a health education program. Girls will complete a food intake survey regarding healthy and unhealthy foods prior to and immediately following an educational program of nutrition information. The program includes asking girls to read a basic nutritional brochure that includes both words and pictures. There will also be a read-through of the brochure with the students to enhance girls understanding of the brochure and any words contained within. The survey instrument is the Healthy vs. Unhealthy Food Choices Survey. This instrument is a very simple indicator of whether or not students understand the difference between a healthy food choice and an unhealthy one.

## Research Question

What is the effect of a nutrition educational program, utilizing a picture brochure, on the food choice of pre-adolescent girls?

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## Design

This is a participatory action research proposal utilizing a quasi-experimental design to determine if a nutrition education program for pre-adolescent girls will impact the choice of nutritious food. The Healthy vs. Unhealthy Food Choices Survey will be administered to all study participants in a 5th grade class. Students answered the survey, read the brochure, then answered the same survey again in order to determine if the information was helpful and the young students were able to understand information in the form of a brochure

## Nutritional Survey for 5<sup>th</sup> Grade Girls:

### Which Foods Are Healthy?

Please check the box beside the food choice that you believe most correctly fits that food. If you believe the food is healthy to eat often, check the first box beside the food. If you believe the food is unhealthy and should only be eaten occasionally, check the second box beside the food. If you are unsure of what the food is, check the last box beside the food.

Food Name	Food is healthy to eat often	Food is unhealthy to eat and should only be eaten occasionally	I do not know what this food is or am not sure if it is healthy or unhealthy
1. Doughnut			
2. Hot Dog			
3. Potato Chips			
4. Chocolate			
5. Ice Cream			
6. Fried Chicken			
7. Cheese Burger			
8. Chocolate Chip Cookies			
9. Soft Drinks			
10. Apples			
11. Corn on the Cob			
12. Broccoli			
13. Carrots			
14. Orange Juice			
15. Watermelon			
16. Fish			
17. Eggs			
18. Nuts			
19. Beans			
20. Brown rice			
21. Bread			
22. Cereal (Corn Flakes)			
23. Yogurt			
24. Cheese			
25. Milk			

## Design

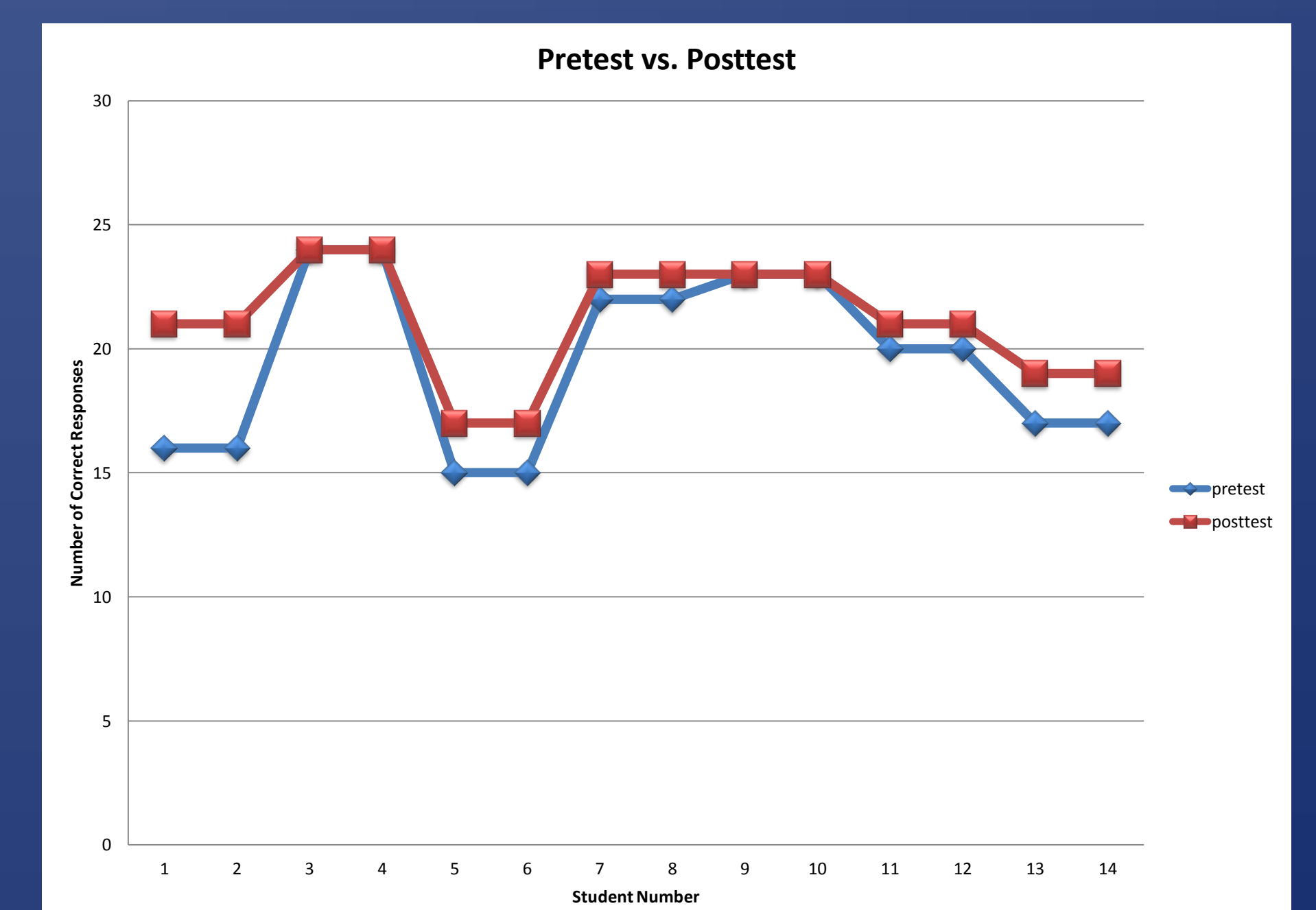
Participatory action research proposal utilizing a quasi-experimental design to determine if a nutrition education program for pre-adolescent girls will impact the choice of nutritious food. Students answered a survey, read the brochure, then answered the same survey again in order to determine if the information was helpful and the young girls were able to understand information in the form of a brochure.

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## Data Analysis

The data collected was from the perception scale survey. The scale was coded so as to have a quantitative value. Each question was analyzed by frequency, mean, median, and mode. A t-test determined there was a significant difference in means between the pre and post survey. Pre-adolescent girls in a 5th grade health class training group (n = 14) at Boone Trail Elementary School experienced a slight increase in knowledge after instruction using a brochure during a small nutrition class (M = 21.1429, SD = 2.38125) than prior to the training using the brochure (M = 19.5714, SD = 3.45775), t (13) = -3.562, p = .003. No other variables were considered.



		Paired Differences				95% Confidence Interval of the Difference			
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	correct - pretest - correct - posttest	-1.07143	3.62834	.44121	-2.02463	.48178	-2.428	13	.033

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	correct - pretest	19.5714	14	3.45775	.92412
	correct - posttest	21.1429	14	2.38125	.63641



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