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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 preadolescent 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

Research Question

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

Design

Participatory action research proposal utilizing a quasiexperimental 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.

Page #1 of Nutritional Brochure for Girls

Be Aware of HOW Your Food is

Cooked!

How your food is cooked can sometimes affect how

good it is for you. An example of this is an egg for preakfast. An egg can be a good choice or a bad

hoice, depending on how it is cooked. A fried egg is high in fat and cholesterol, but a boiled egg is nutritious and high in protein. Another example would be

ish, such as salmon or tuna. If you bread the outside, then deep fry it, the fish is no longer healthy, but

grilled or baked fish is an excellent choice for a healthy

ood. Limit the number of foods that you eat that are

prepared with grease and oil or butter. Choose more

foods that are baked in the oven, boiled in water or

cooked on the grill.

Healthy Foods

Nutrition lesson

Making the right

choices.

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Put an "X" over the Unhealth

Foods

example of this would be the choice between a fresh apple or an apple pie The fresh apple is in it's most natural form. The apple pie has had many things added to it and has been touched by many hands to make it into a pie. influences your choices in the breakfast and lunch Therefore, the apple would be healthier lines at school, or when picking a snack at home? than the apple pie. Another example of a food choice you might have would be It is important to understand that the choices you a choice between two snacks, such as a carrot cake muffin or carrot slices with your life. Learning to make good choices when it ranch dip. The carrot cake muffin would have many things added to it to make comes to food can contribute to a long, happy, the muffin, but the carrot slices, even healthy life. The goal of this brochure is to assist with the ranch dip, have fewer things you when making food choices, so that you will added and the carrots are in the most natural form. Therefore, the carrots understand what is a healthy food and what is an with dip would be a better choice than the carrot cake muffins.

You want to choose food that have not

been overly processed. This means, the

food is in it's most natural form. An













Foods that are high in calories, but low in nutrients should be avoided. Some of these foods include foods that are high in sugar, high in fats, and high in cholesterol. Examples of foods to avoid would be cakes, pies, candies, fried foods, and sodas.









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 preadolescent. Research has not been done on the effectiveness of using a brochure to teach preadolescent 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

Design

Does This Mean I Can Never Ea

Cookies or Pie?

The thing to remember is that it is OK to

have some foods that are not the healthiest

choices, like candy and pies, but you want

sions. If it is your birthday, it is OK to have

want to choose cake every day of the week.

healthy snack like fresh fruit, almonds, ber-

yourself to a sugary snack once in a while as

long at that is not what you eat on a daily

to only have those foods on special occa-

a piece of birthday cake, but you don't

nstead, you would want to choose a

ries or low-fat cheese. It is OK to treat

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 5th 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
1 Doughnut			unnealthy
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			

Data Analysis

es you make.

What Makes a Food "Healthy"

Why do you eat the foods that you do? What

make now will affect your health throughout

Can you recognize foods that are healthy for you

to eat? Does eating healthy mean you can never

eat foods that are unhealthy again? Read on to

find the answers to these questions and to be-

come more knowledgeable about the food choic

unhealthy food.

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. Preadolescent 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.



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.





Paired Samples Statistics						
					Std. Error	
		Mean	Ν	Std. Deviation	Mean	
Pair 1	correct pretest	19.5714	14	3.45775	.92412	
	correct	21.1429	14	2.38125	.63641	
	posttest					



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