

Researching What Students Are Eating

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Abstract. This participatory action research identifies what a voluntary sample of students from Kestrel Heights Elementary School ate over the course of 24 hours. Primary data was collected and The MyPlate (<https://choosemyplate.gov>) was used to categorize the foods reported by the students. The research question: What are the students in Kestrel Heights Elementary School 5th grade health (group/class A) eating? A Population of five 5th grade students (N=5) at Kestrel Heights Elementary in Durham, North Carolina volunteered to be the focus of the research study. The population (N=5) was provided a research instrument which was used to record everything they consumed for 24 hours. The data was collected and interpreted to determine how many servings of healthy and unhealthy foods participants consumed. Participation in this study was voluntary. Population (N=5) began participating in this research on April 1st, 2016. It is fair to conclude from this study that students may not be eating as healthy as they should. How can schools and health programs contribute to better student nutrition?

Keywords: Nutrition, school children, lunch, health.

1 Introduction

It has been well documented that proper nutrition enhances brain function. Proper Nutrition also correlates with academic success and academic improvement. “Programs or policies that increase children's health status could also improve their education outcomes.” (Glewwe, 2007). Furthermore, “recent research has shown that poor health and nutrition among children reduces their time in school and their learning during that time.” (Glewwe, 2007). The foods that schools offer are regulated by federal law and are regarded as healthy or at least healthier than they once were. There are students who bring their school lunch from home. Students eat many of their meals somewhere other than school; there are students who are hungry and there are students eating unhealthy foods. With the abundance of commercial foods and food advertisements geared towards young people it is imperative that educational leaders are aware of what kind of foods students are eating. How can schools and health programs contribute to better student nutrition? The first thing to look at is what the students are eating.

Nutrition curriculums and educational tools such as the MyPlate (<https://choosemyplate.gov>) are great for teaching students about healthy food choices. However it is not realistic to assume that all students will always have access to the healthy food choices that they are learning about. Teaching students what is healthy to eat is simply not enough. Schools need to go beyond just teaching basic nutrition but go as far as researching what students are eating so that they can engage the whole school community in discussions about food choices and work towards intervention strategies that enhance student's nutrition and in turn increase academic productivity.

After observing the students at my school eat lunches and snacks, listening to students talk about their food choices and witnessing multiple students who did not have access to food it became evident that many of my students were not properly nourished. It raised the questions; in what ways is their lack of proper nutrition affecting them? Is lack of proper nutrition affecting their academics?

For many students the problem is not always the choice that they are making but rather the options that are made available to them. Packaged sugary, salty and fatty snacks are convenient and are often times more readily available than fresh fruits and vegetables, whole grains, lean meats etc. My observations led me to believe that in many cases students are suffering academically because of things that may be out of their control. This participatory action research identifies what a voluntary sample of the students in Kestrel Heights Elementary School 5th grade health (group/class A) ate over the

course of 24 hours. The MyPlate (<https://choosemyplate.gov>) was used to categorize the foods reported by the students. Teaching MyPlate (<https://choosemyplate.gov>) is required by Kestrel Heights School as an instructional responsibility of health teachers. The research question is: What are the students in Kestrel Heights Elementary School 5th grade health (group/class A) eating?

2 Review of Literature

The rising rates of obesity, diabetes, and other diseases linked to poor nutrition demonstrate an overall nutritional inadequacy in our society and a decline in healthy eating habits. With that being said, it has been proven that “Child health and nutrition are strongly associated with educational achievement” (Behrman, 1996). Schools are not doing enough to enhance the nutrition of young people. In many schools basic federally mandated nutritional education is the only nutritional service they receive.

Too many schools are satisfied with only teaching students how to make healthy food choices. The MyPlate (<https://choosemyplate.gov>) is an example of this. One study cited the use of a stoplight approach of green, yellow, and red colors with the green stoplight being the more healthy choice, the yellow being one the student should choose in moderation, and the red stoplight being something the student should avoid or consume in minimal amounts (Snelling & Kennard, 2009). While this is acceptable, it is simply not enough. They may know how to make a healthy choice, however they may not always have access to healthy options.

Research shows us that “access to food is primarily determined by income, and this is in turn closely related to physical resources available to access healthy food. There is an associated class bias over access to sources of healthy food” (Caraher, Dixon, Lang, & Carr-Hill, 1998). In other words, not all students will have access to the healthy foods they are being taught about. “Health promotion practice needs to address these structural issues as opposed to relying on psycho-social models of education based on the provision of information and choice” (Caraher, Dixon, Lang, & Carr-Hill, 1998). The main question for health promoters may be: “what healthy choices do young people need to make”. In an effort to get to the root of the nutrition related issues the first question for health promoters including the school community must ask is: what exactly are students eating? Intervention strategies, long term goals and coordinated programming can be developed if it is determined exactly what students are eating.

“Students from schools participating in a coordinated program that incorporated recommendations for school-based healthy eating programs exhibited significantly lower rates of overweight and obesity, had healthier diets, and reported more physical activities than students from schools without nutrition programs” (Veugeliers & Fitzgerald, 2005, p. 432). Despite all of the research linking proper nutrition to education research tells us that “school districts may be reluctant to release class time for non-academic activities such as wellness” (Carson & Reiboldt, 2011, p. 267).

3 Method

This participatory action research identifies what a voluntary sample population (N=5) of the students in Kestrel Heights Elementary School 5th grade health (group/class A) ate over the course of 24 hours. Primary data was collected and The MyPlate (<https://choosemyplate.gov>) was used to categorize the foods reported by the students. The study was conducted in a fifth grade classroom at Kestrel Heights Elementary School in Durham, North Carolina. Participants were volunteers and participate in a health education program at Kestrel Heights. Teaching MyPlate (<https://choosemyplate.gov>) is required by Kestrel Heights School as an instructional responsibility of health teachers.

3.1 Participants (Population)

A Population of five 5th grade students (N=5) at Kestrel Heights Elementary in Durham, North Carolina volunteered to be the focus of the research study. The author of this document served as conductor of this research. Only fifth grade volunteers will participate in this study. The school is located in an urban community of Durham County. Diversity of students: 43% African-American, 37% Caucasian, 9% Hispanic, 4% Asian and 4% Multiracial. The school is 55% male and 45% female.

There is no known physical, emotional, psychological, or economical risk. For the purpose of this study, minimal risk is defined as: the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.

3.2 Design

This descriptive study surveyed a sample of fifth grade boys and girls from Kestrel Heights Elementary School 5th grade health (group/class A). The population (N=5) was provided a research instrument which was used to record everything they consumed for 24 hours.

3.3 Procedures

Participation in this study was voluntary. Population (N=5) began participating in this research on April 1st, 2016. Participants were able to withdraw or decide that they no longer want to participate at any time without penalty. All research instruments were numbered to assure return to the researcher. The research instrument was not identifiable in any manner. There was no identifiable information on the research instrument.

3.4 Research Instruments and Data Collection Questionnaire

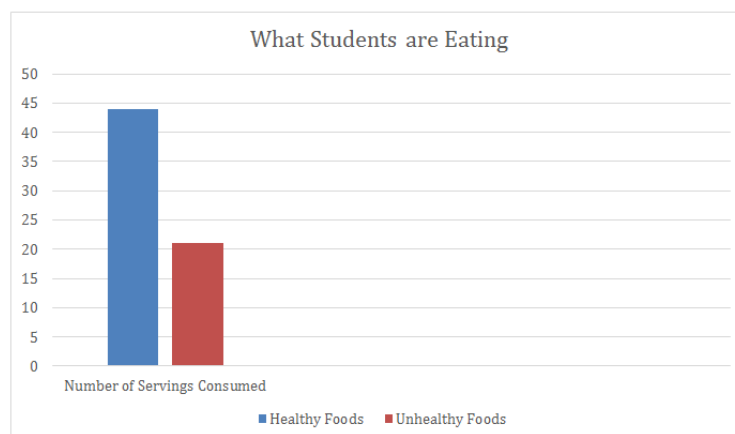
The research instrument used was a food log recorded by the participants, a recording of all food and water consumed in 24 hours. The food log was explained to each participant and they were given an opportunity to ask any questions regarding the food log to ensure they understood. The food log contained no identifying information. Recording of the food took place in a 5th grade classroom as well as at participant's homes.

Only the researcher was granted access to information. Information from the research instruments (food logs) was organized to demonstrate how many servings of healthy food population (N=5) consumed as compared to how many servings of unhealthy foods the population consumed. Servings were identified as healthy or unhealthy using

MyPlate (<https://choosemyplate.gov>). All research instruments were destroyed 3 days after the collection of the information. The research instrument was coded in a manner to facilitate quantitative analysis.

4 Results/ Data Analysis

The following descriptive statistics provide a summary of the food and water consumed by the participating population (N=5). Foods were identified as healthy or unhealthy using the MyPlate (<https://choosemyplate.gov>).



The sample population (N=5) consumed 44 servings of food or water which are identified as healthy using MyPlate (<https://choosemyplate.gov>). The population (N=5) consumed 21 servings of food which are identified as unhealthy using MyPlate (<https://choosemyplate.gov>).

5 Validity, Reliability and Trustworthiness

The validity of this study is based on how the researcher is able to use the information from the research. One form of internal validity is that this research has been collected and interpreted. The tool used was an already existing instrument, regarded as reliable. As the researcher is a novice, the interpretation of the data could potentially be questioned.

6 Conclusions

This study concludes that students may not be eating as healthy as they should. Simple follow up research using this information could statistically describe student's perceptions of what a healthy food is and what is not. The information from this study leads to questions such as: "Are the food options made available to my students at school and at home appropriate?", "Are students unknowingly consuming foods that are identified as unhealthy?", "What can we as professionals do to better inform our students about how to make healthier food choices?" and "What can we as a community do to provide our students with healthier food choices?".

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