
Capstone: Elementary
School Teachers'
Perceptions of
Classroom Nutrition
Education and
Cafeteria Food

Summer 2011

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Executive Summary

Project Overview

This study was undertaken due to an interest in volunteering with Fort Riley Public Health. Being an army spouse, I was curious how Army Public Health supports our unique and constantly changing community. LTC Paul Benne, chief of Fort Riley Public Health, expressed an interest for an MPH graduate student to address obesity of active duty military personnel and their beneficiaries from the standpoint of improving nutrition on post. This objective was initially given to LTC Benne from the Irwin Army Community Hospital commander COL Michael Heimall who would allocate any necessary funding for initiatives or staff. The following objectives evolved as the study progressed.

Objectives:

1. Conduct a literature review to determine an age demographic of the US population where obesity prevention/ intervention efforts should start.
2. Conduct descriptive epidemiology on Fort Riley, US Army post, to determine what nutrition initiatives are already in place and which areas have opportunities for improvement.
3. Develop, conduct and statistically analyze a survey on nutrition education and school cafeteria behaviors and use the results to make recommendations to invested partners.
4. Start the intervention.

Background

Initial literature reviews focused on 1) Whether childhood or adulthood was the most effective time to start nutrition interventions and 2) At what age obesity/overweight first becomes a problem in those at risk. I visited a variety of on-post establishments that serve/sell food that may or may not contribute to obesity. These visits included military dining facilities, commercial dining facilities (Burger King, Dominoes, etc), child development centers (infants-5 year olds), school cafeterias, and the commissary (grocery store). Upon visiting these sites and conducting the literature reviews, I designed 3 courses of action to address obesity/nutrition focusing specifically on elementary schools, military dining facilities, and commercial dining facilities. These were presented to COL Heimall and the deputy commander for health services at the hospital, COL Reynold Mosier. They determined that all recommendations had value and that each should be pursued. Additionally, they wanted to expand elementary school nutrition initiatives to all of USD 383 and 475 school districts instead of schools specifically on post. LTC Benne and I therefore decided to start with the elementary schools because the literature reviews identified childhood as a time to focus interventions for proper nutrition and obesity prevention. Other courses of action will be pursued by future MPH interns as phases of a nutrition promotion initiative on post.

Introduction

According to the Centers for Disease Control and Prevention (CDC) approximately 17% of school-age children in the United States are obese. Data from the National Health and Examination Survey (NHANES), a series of studies used to assess the national health and nutritional status of children and adults in the United States, also indicated that the prevalence of obesity among children and adolescents has tripled since 1980. Projections from the CDC Division of Nutrition, Physical Activity and Obesity suggest that this prevalence is expected to continue to increase (CDC: Division of Nutrition, Physical Activity and Obesity, National Center for Chronic Disease Prevention and Health Promotion, 2011). Analysis of NHANES I (1971-1974), NHANES II (1976-1980), Hispanic Health and Nutrition Examination Survey (1982-1984), and NHANES III (1988-1994) showed that the prevalence of overweight children has increased in children as young as 4-5 years-old in the last 20 years but not among younger children. “These findings suggest that efforts to prevent overweight, including encouragement of physical activity and improved diets, should begin in early childhood” (Ogden et al., 1997). Based on these findings, pre-kindergarten and elementary age children were chosen as the target group for this project.

Obesity is typically assessed using body mass index (BMI). Research has shown that children with high BMI frequently become obese adults (Ogden, Carroll, Curtin, Lamb, & Flegal, 2010). Obesity has been shown to lead to many chronic conditions including type II diabetes, sleep apnea and respiratory problems, bone and joint problems, stroke, coronary heart disease, social and psychological problems, cancers (colon, breast, and endometrial), and gynecological problems (infertility and abnormal menses) (Centers for Disease Control and Prevention, 2011)(Ogden et al., 2010).

In addition to increasing body weights among children in North America, there is also a reduction in the quality of their diets. This growing health issue draws public health attention to the impact of diet on academic performance and future health (Florence, Asbridge, & Veugelers, 2008). Currently, the majority of research on nutrition and academic performance has focused on the impact of breakfast or on the role of individual nutrients or foods on academic performance, cognition, and behavior (Rampersaud, Pereira, Girard, Adams, & Metz, 2005; Taras & Potts-Datema, 2005).

Because individuals consume combinations of foods and not individual nutrients, researchers are now starting to look at the impact of overall diet quality using summary measures of food and nutrient intake (Florence et al., 2008). Florence et al measured diet quality using a Diet Quality Index-International scale ranging from 0-100 (higher scores represent better diet quality) to effectively compare cross-national adequacy, variety, balance, and moderation components of diet quality. They discovered that dietary adequacy and variety were specific aspects of diet quality that affect academic performance independent of gender or socioeconomic status. This finding highlights the value of consuming a selection of foods based on the recommended USDA *MyPlate* food group servings. Two critical nutritional concerns for children, fruit and vegetable consumption and dietary fat intake, were also found to be important to academic performance

(Florence et al., 2008). This and other research has established that children who are undernourished have decreased academic performance, attention, and attendance and have more health problems compared to children that are well nourished (Florence et al., 2008); (Taras, 2005)(Kleinman et al., 2000). These findings are supported by the earlier research on the importance of eating a nutritious breakfast to augment cognitive function and academic performance, but emphasize the significance of children's nutrition throughout the whole day (Rampersaud et al., 2005; Taras & Potts-Datema, 2005).

It is known that academic performance impacts future educational attainment and socioeconomic status which will subsequently affect future health and quality of life (Florence et al., 2008). This recognition of the long term health and economic benefits of adequate childhood nutrition is why programs such as Women, Infants, and Children (WIC) and the World Bank place a high priority on providing the disadvantaged with food (Del Rosso & Marek, 1996; GAO[U.S. General Accounting Office], 1992; Young, 1996). For children, current negative nutrition decisions can lead to lifelong health challenges. Therefore, establishing healthy nutritional habits in *childhood* is imperative for healthy development and improved educational attainment.

The Kansas Department of Education (KDE) and Kansas Department of Health and Environment (KDHE) have teamed up to form Kansas Coordinated School Health, which promotes school health initiatives because healthy children make better students. KDE has also developed a set of flexible wellness guidelines for schools that focus on nutrition, nutrition education, and physical activity: "Basic", "Advanced", and "Exemplary" (Kansas State Department of Education, 2005). The policy guidelines for nutrition pertain to food options offered during breakfast, lunch, vending machine items, a la carte foods and beverages, and school events (parties, fundraisers etc). These guidelines are used by school administrators and menu planners to progress from a school that meets minimum nutritional requirements (basic) to a school that goes above and beyond at promoting a nutritious environment (exemplary).

While conducting descriptive epidemiology of the available food sources for children on post, (fast food restaurants, military dining facilities, child development centers [infants-5 yrs], schools [5 yr to 12yr], or eating at home) a distinct difference between what children were eating in child development centers compared to elementary school lunches was observed by registered dietitians from Irwin Army Community Hospital and myself. Child development center (CDCs) children were observed eating all the food on their plates (including fruits, vegetables, and whole grain breads) while elementary school children were observed to waste approximately 60% of their food if not more and barely ate any of the fruits and vegetables. This was an important observation because 5- year old children in both settings were not consuming the same amounts of nutrients even though both menus were based off the USDA Child and Adult Care Food Program and the KDE regulations. During the visits, menus from all facilities were reviewed by the dietitians, who found ample room for improvement in some facilities. Dietitians and public health professionals also spoke with the school district menu planners and kitchen managers to determine specific struggles that they face in their jobs. USD 383 and 475

managers expressed a desire to move towards the exemplary level but were limited by budget constraints. Schools on Fort Riley are owned and operated by USD 475 and a large number of military beneficiaries attend school off post. Therefore, we decided to work with the local schools on and off post (USD 383 and 475) that educate a large portion of the active duty military beneficiary children. The ultimate goal of these interactions was to identify and implement steps to decrease childhood obesity as well as to establish healthy nutritional habits in children. Based on these observations it was decided that a survey on the perceptions of teachers on nutrition education and lunchroom behaviors in the schools was necessary to provide background information.

The goal of this survey was to measure the teachers' perceptions of 1) The importance of teaching nutrition to elementary students 2) To get a better understanding of how the school lunch does or does not correspond with what is taught and 3) Whether or not the school food appeals to the children and is therefore eaten. Survey participants were also able to provide any additional comments or opinions related to nutrition education in their classroom and food options at their schools.

Methods

Letters were initially sent to USD 383 and 475 superintendents explaining the public health significance of childhood obesity/overweight, the importance of healthy nutrition for developing children, and the desire of Fort Riley Public Health to partner with the schools (Appendix A). Following the letters, Fort Riley Public Health professionals and I met with invested school administrators of each district to discuss details for cooperation and conducting a survey. The survey (Appendix B) was developed with the collaboration of Dr. Sheryl Hodge and Dr. Tandalayo Kidd and was considered exempt upon review by the Kansas State University Committee on Research Involving Human Subjects/Institutional Review Board February 25, 2011. The survey was developed in Axio Survey and was sent to participating elementary school teachers in USD 383 and 475 via school email with a link to the survey. The survey took less than 15 minutes to complete and responses were anonymous. Subjects had 3 weeks to complete the survey. For questions 2, 3, 4, and 10 (Appendix B), point values of 1 (least important/least adequate) to 3 (most important/most adequate) were assigned to responses to calculate the mean and standard deviation. Questions 5, 6, and 8 responses were made to the most appropriate description of their activity/ opinion. These data are presented as percentages of the total responses. Results were analyzed using excel and IBM® SPSS® (originally Statistical Package for the Social Sciences) software. Basic statistics (mean, median, mode, standard error of the mean, and standard deviation) were calculated and presented graphically for ease of understanding by menu planners, school administrators, public health professionals and others involved in this project.

Results

Of the 371 total elementary school teachers within USD 383 and 475, there were 215 respondents to the survey for a 57.95% response rate. Of the 215 respondents, 18 stated they were not teachers and the schools had labeled them incorrectly (most of these were para-professionals and one was a social worker). These responses were included in the analysis because these individuals frequently see school food and classroom education despite not having a classroom. The number of respondents that chose to respond to each question was variable, so analysis of each question was based on the total number of respondents to that question only, not the total number of surveys received. There were 75.2% (158 out of 210) respondents who believed teaching nutrition in schools was “Very Important” compared to 24.8% (52 out of 210) that stated it was only “Somewhat Important”. No respondents stated they believed teaching nutrition was “Not important” (Figure 1).

When respondents were asked “How adequate do you feel your training is for teaching nutrition?”, only 27.1% (57 of 210) stated they felt it was “Very Adequate”; 56.2% (118 out of 210) stated it was “Somewhat Adequate” and 16.7% (35 out of 210) stated it was “Not at all Adequate” (Figure 2).

There were 43.6% (92 of 211) of respondents who said that their resources for teaching nutrition were “Not at all adequate”. Of the remaining respondents, 41.7% (88 out of 211) said they felt the resources were “Somewhat adequate” and only 14.7% (31 out of 211) stated that their resources were “Very adequate” (Figure 3).

Despite the previous results, 60.3% (129 out of 214) of respondents are teaching nutrition in their elementary school classrooms with 39.7% (85 out of 214) not teaching it (Figure 4). Of those that do not teach nutrition in their classroom, 36 (16.7%) stated “There was not enough time”, 34 (15.8%) said it “Was not part of the curriculum”, and 18 (8.4%) said “I don’t have the materials” (Figure 5). Some of these responses could have been from the 18 respondents who were not teachers; 8 of which indicated that they specifically worked only with reading or math.

53.7% (66 out of 123) or respondents taught nutrition less than 1 hour a month, 31.7% (39 out of 123) taught 1-2 hours per month, 8.1% (10 out of 123) taught 2-3 hours per month, 4.9% (6 out of 123) taught 3-4 hours per month, and 1.6% (2 out of 123) taught more than 4 hours of nutrition a month. This breaks down to 85.4% (105 out of 123) respondents stating they taught nutrition less than 1-2 hours and 93.5% (115 out of 123) of respondents taught nutrition less than 2-3 hours a month (Figure 6).

When asked which materials they use to teach nutrition in the classroom, 31% (39 out of 126) used USDA “Team Nutrition” or “Eat Smart. Play Hard” materials, 29% (36 out of 126) used Kansas State University Extension Nutrition Education materials, 15% (19 out of 126) used sources found on the internet, 13% (16 out of 126) used materials from an “other” source, 7% (9

out of 126) used the National Dairy Council Child Nutrition Education Kit, and 5% (7 out of 126) used materials provided to USD 475 through the SFA Reading program (Figure 7).

When asked how well the cafeteria food reflects nutritional concepts taught in the classroom, 84.9% (101 out of 119) of respondents stated that the nutrition concepts were either “Not at all reflected” or “Somewhat reflected” in the cafeteria food (Figure 8).

Only 91 respondents out of 215 (42.3%) chose to answer the question “On average, what percentage of meals prepared by the school cafeteria food service is eaten by the students”. 54% (49 out of 91) believed “Greater than 67%” of the meals are eaten (Figure 9). Additionally, nine comments expressing concern over waste were written in by respondents on the final question (Question 12, below).

On the final question of the survey “Please provide any comments you may have related to nutrition education in your classroom or the food options provided at your school.”, 59% (127 out of 215) of respondents chose to provide additional comments (Appendix C). This information was semi-quantified into 5 categories (Figure 10):

- 1) Food was unappetizing (specifically it was undercooked, unseasoned, or canned) (15 respondents).
- 2) School breakfast menus need work and have too much sugar (16 respondents).
- 3) School lunch menus aren’t good examples of proper nutrition (specifically they mimic fast food/convenience store food, are extremely over-processed, too high in carbohydrates, sodium, calories, and starches even if they are fortified, and other examples) (35 respondents).
- 4) Too much school lunch is wasted, especially the nutritious parts (9 respondents).
- 5) The Fresh Fruit and Vegetable grants are exposing kids to healthy foods in schools and produce opportunities for learning (5 respondents; responses are listed in Figure 10).

Other responses were not able to be categorized within one of these 5 categories, but provided useful insights to be shared with the Fort Riley Public Health department as well as USD 383 and 475 Wellness Committees. The results of the survey were used to guide Fort Riley Public Health officers, school teachers, and school administrators in their collaboration on how to make improvements to promote healthy nutrition habits in children. Data from the survey has been used to support the implementation of several ideas to promote these habits.

Discussion

Childhood obesity is a complex and multifactorial problem. These factors include sedentary life styles, socioeconomic status, education, and shifts in social norms, among others. In this study,

we addressed one possible component of childhood obesity: nutrition education and it's alignment with lunchroom behaviors and practices in elementary (K-6) schools.

There were several limitations of this study. The study focused predominately on perceptions of school teachers. The teacher perspective represents only a single source of observation, so the data likely includes bias that is specific to this group of individual involved in the K-6 educational system (eg: they are upset about lack of resources, so may respond in a negative sense even if there may be some good resources for nutrition, etc). It would be interesting to incorporate school food service professionals or other groups involved in K-6 education in school nutrition survey results. As mentioned above, 18 of the above respondents were not teachers with specific classrooms, but their input is still valid and valuable to health promotion in the school setting.

Despite being conducted while classes were in session, there was a high response rate to the survey (57.95%). This may reflect the level of concern they have for the topic and for their students. An average response rate for 31 published studies of email administration of surveys for similar studies was 37% (Henry, White, & Smith, 2010).

In many ways, the responses to this survey were not unanticipated but they do provide important base line data to share with the elementary schools. It was interesting to note that even though a majority of elementary school teachers believe teaching nutrition is very important, many of them feel that their training and their resources are inadequate. This was an unexpected result of the survey because public health officials and dietitians had previously only viewed the school meal options and heard concerns from food service personnel. The survey question referenced in figure 7 (source of nutrition resources) pointed teachers to some excellent nutrition resources that can be used in the classroom. Furthermore, it would be helpful for school wellness committees to work together to set goals for classroom nutrition education (eg: How many hours should be spent on this, when should it be taught, and which materials should teachers be using as resources?).

Lambert and Carr reported a survey of elementary school foodservice directors, teachers, and principals in Arkansas and Idaho during the spring semester of 2002-03. The survey was sent to 70 elementary schools randomly selected from various school districts in each state. The results of this study indicated that 93% of teachers thought that nutrition education should be incorporated into the elementary students' curriculum. However, only 66% of teachers provided one to two hours of nutrition education per school year (Lambert & Carr, 2006). The results of the USD 383 and USD 475 nutrition survey showed that 85.4% of the elementary school teachers in these districts taught nutrition less than 1-2 hours per month. Both of these studies indicate that despite teachers' belief in the importance of teaching nutrition, it is not a priority for classroom education time.

The top resources used by teachers in the Lambert and Carr study were the National Dairy Council education materials (55%), the school lunch menu (38%), and health texts (34%; specific texts used were not listed) (Lambert & Carr, 2006). In the current survey, the most frequently mentioned educational materials were USDA “Team Nutrition” or “Eat Smart. Play Hard.” materials. These materials were not specifically asked about in the Lambert and Carr study.

Seventy-three percent of teachers felt confident in providing nutrition education to their elementary students and 63% agreed that they had adequate training to provide this nutrition education (Lambert & Carr, 2006). This contrasted with the survey results discussed above where only 27.1% of teachers felt their training was “very adequate” for teaching nutrition in the elementary school classroom.

The Lambert and Carr survey also found that 56% of teachers believed that menu items served in the school lunch program reinforced nutrition education provided in the classroom to the elementary students (Lambert & Carr, 2006). This also was in contrast to the results above where only 14/119 respondents (11.8%) believed that school cafeteria food greatly reflected the nutrition concepts taught in the classroom.

Lambert and Carr also left available area for teacher comments and this survey encountered similar responses to the ones received from USD 383 and USD 475; a concern for the presence in school lunch programs of high starch, sugar, and pre-cooked foods with preservatives which do not support nutrition education (Lambert & Carr, 2006).

The Lambert and Carr teacher survey most closely mirrors the survey distributed in USD 383 and USD 475. However, there would be value to conduct this survey with all stakeholders in nutrition education (teachers, administration, school food service personnel, parents, and the school Wellness Committee). Cooperation of all of these stakeholders in establishing a standard for nutrition education would contribute to a more successful and accepted intervention.

School food service and classroom nutrition education are frequently controversial topics in this age of increasing prevalence of childhood obesity/overweight. The purpose of this survey was to provide the background data needed to explore ways to foster environments of learning in all ways for healthy nutrition. To attack such a societal public health problem, topics emphasized in the home environment (intrapersonal interactions, etc.) that impacts a child’s development as well as those topics addressed in institutions (schools), communities, and by federal policies must be considered. Time constraints, lack of funding, academic priorities, perceived responsibility, training, and support may seem like insurmountable obstacles when attempting school nutrition initiatives. However, a dedicated group of invested collaborators can make progress by addressing each obstacle one at a time. The reversal of childhood obesity will require a long-term and coordinated approach to reach and teach children where they live, learn, and play. Solid classroom nutrition education in the schools can further be augmented by

serving delicious and nutritious meals in the cafeterias and helping children acquire healthy eating habits. The collaboration of public health professionals and registered dietitians from Fort Riley are a great resource for the local school districts that are financially challenged but who want to work toward reaching the “Exemplary” level of the Kansas health guidelines.

Based on the literature review results, elementary school meal options, and survey results, several ideas have been suggested to the schools. These include:

- Grant writing to fund more fresh fruits and vegetables in the school diet (ie: USDA: Food and Nutrition Service for low-income public and nonprofit private elementary school and Kansas Coordinated School Health fresh fruit and vegetable grants)
- Use the Irwin Army Community Hospital dietitians part time to aid the USD 475 menu planner to plan healthier and appealing menus.
- Using child/teacher/kitchen managers’ feedback to serve meals that meet nutrition requirements yet taste good and are eaten by the children.
- Include seasonal variations in menu planning to expose children to different types of food while also being able to buy produce at cheaper prices.
- Discuss with superintendents the long term benefits of programs like “Farm to School” for long term acquisition of fresh fruits and vegetables.

Addressing childhood nutrition and obesity is an ongoing issue. In this study, we obtained background information on perceptions of teachers and met with superintendents and menu planners to hear their concerns. These results have provided foundational data that is being used for ongoing initiatives. Currently, Irwin Army Community Hospital dietitians are meeting with the USD 475 menu planner once a week to help in planning more nutritious and appealing meals. We have also suggested that both school districts apply for Fresh Fruit and Vegetable grants to help augment their limited budgets to provide fresh produce to children. The other phases (military dining facilities and restaurants) discussed in the background will also be implemented by future MPH interns.

Through this internship with Fort Riley Public Health, I have learned so much more about public health than what can be taught in the classroom. I experienced first-hand descriptive epidemiology of the available food sources on post, writing up an IRB form, developing a survey, and compiling statistics. I also got to see the daily struggles and impact of small budgets and individuals committed and passionate about improving the health of the population. In the public health curriculum, we tend to separate our learning into topics such as infectious diseases, community health, environmental health, occupational health, biostatistics, and epidemiology. I have learned through this experience that in a public health department, these topics commonly overlap and it is important to have an understanding of issues in all of these areas. The most important thing I have learned from this experience is the value of listening, collaboration, and cooperation with fellow public health professionals and the intended audience of the intervention. These traits were stressed in my education at George Washington University and I saw evidence of the importance of these traits first-hand during this experience in Kansas. This

experience has shown me that public health professionals cannot exist in a bubble of research but must get their hands “dirty” in understanding the health struggles and hurdles that stand in the way of people improving their health.

Figures

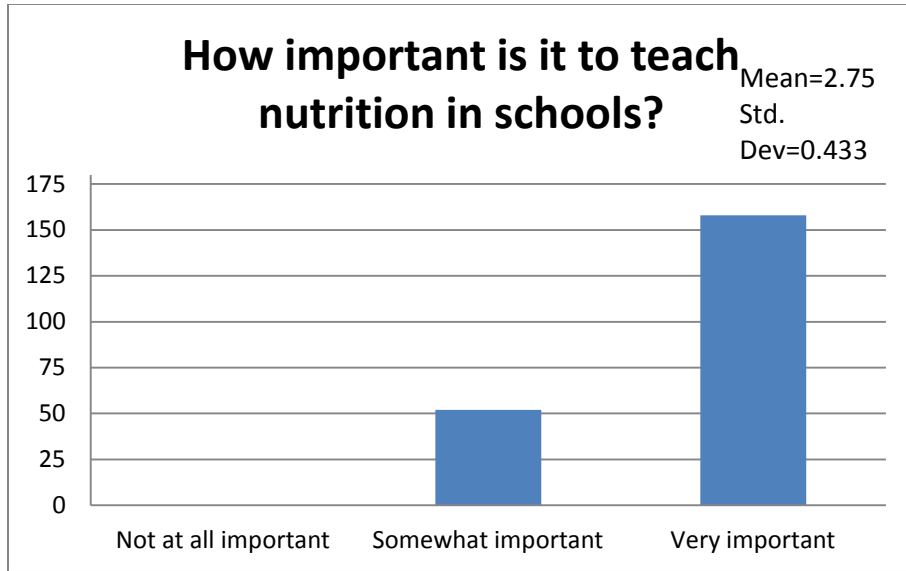


Figure 1: Elementary teacher perceptions of the importance of teaching nutrition. Point values of 1 (least important) to 3 (most important) were assigned to responses to calculate the mean and standard deviation.

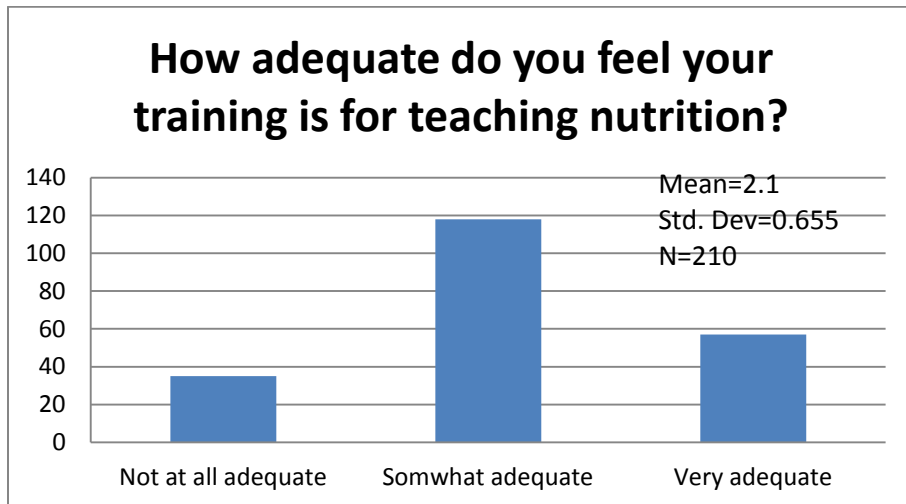


Figure 2: Adequacy of training for teaching nutrition. Point values of 1 (not at all adequate) to 3 (very adequate) were assigned to responses to calculate the mean and standard deviation.

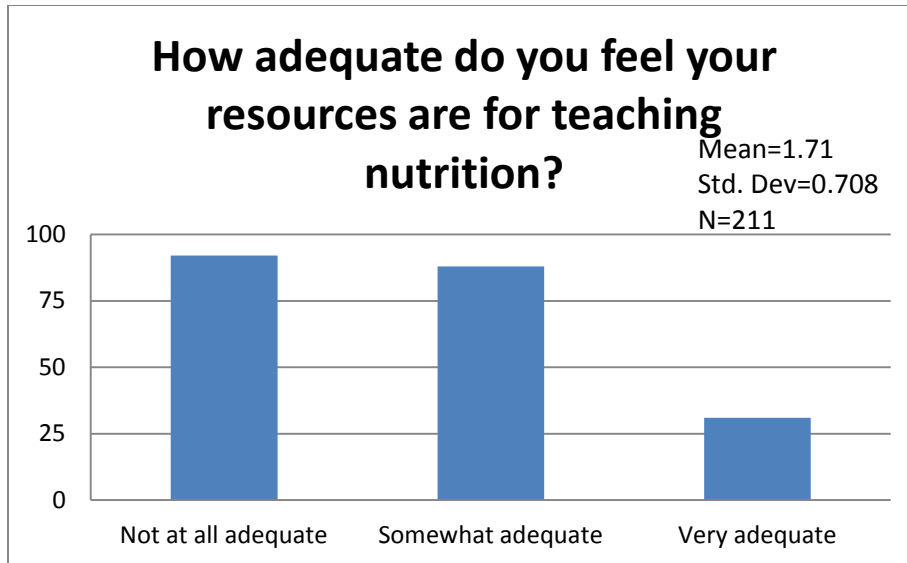


Figure 3: Adequacy of resources for teaching nutrition. Point values of 1 (not at all adequate) to 3 (very adequate) were assigned to responses to calculate the mean and standard deviation.

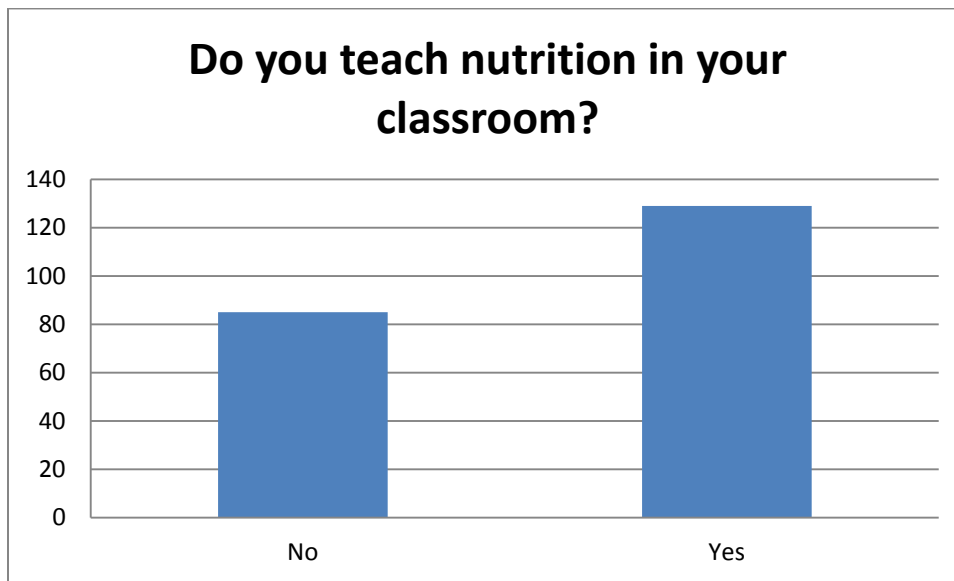


Figure 4: Is nutrition taught in the elementary teacher's classrooms.

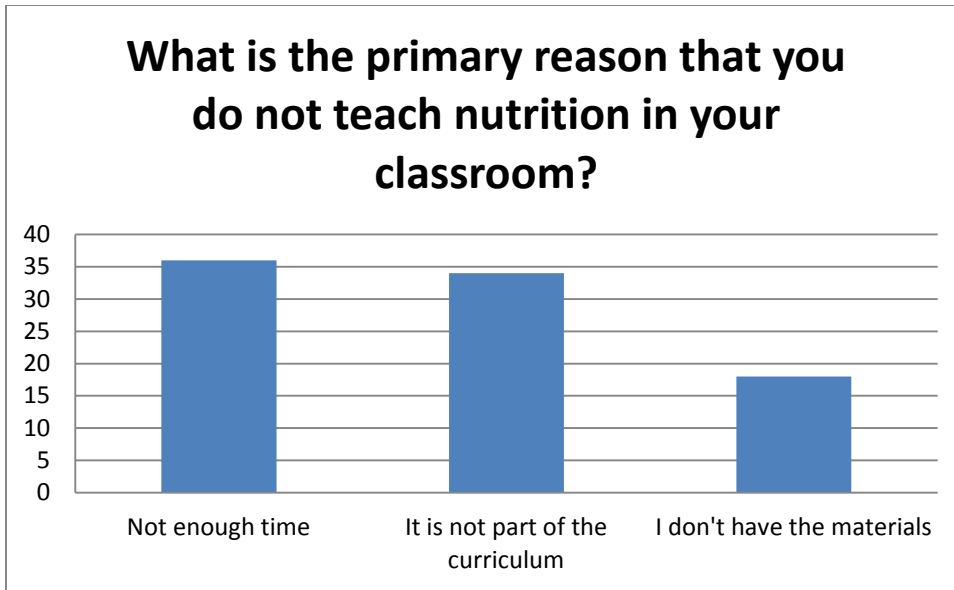


Figure 5: Primary reasons for not teaching nutrition in the classroom.

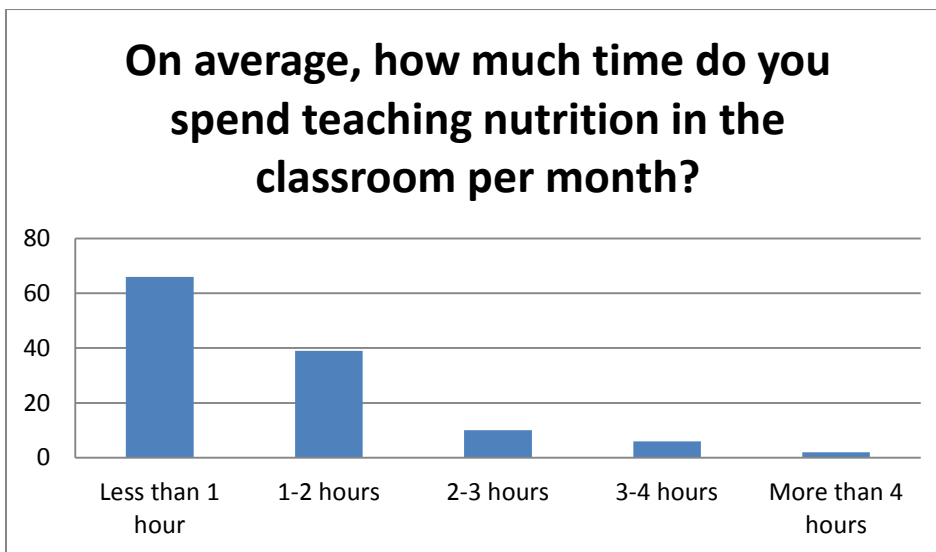


Figure 6: Average amount of time spent teaching nutrition per month.

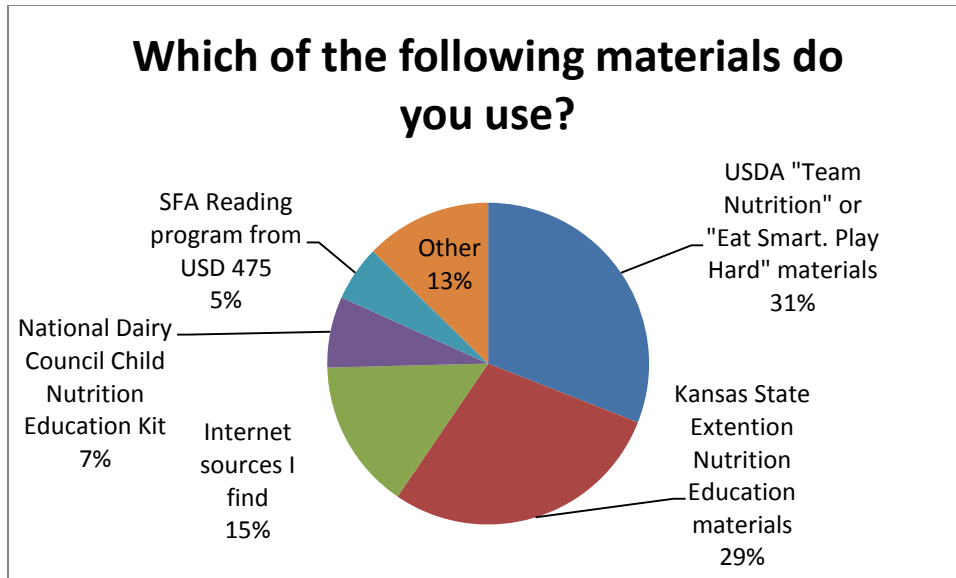


Figure 7: Source of classroom nutrition materials

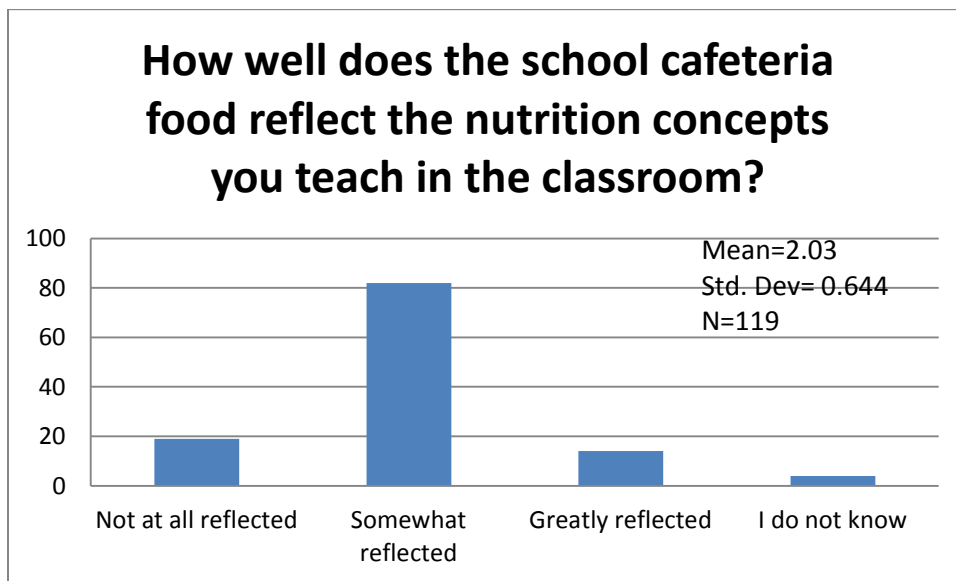


Figure 8: Reflection of nutrition concepts in cafeteria food. Point values of 1 (not at all reflected) to 3 (greatly reflected) were assigned to responses to calculate the mean and standard deviation.

On average, what percentage of meals prepared by the school cafeteria food service is eaten by the students?

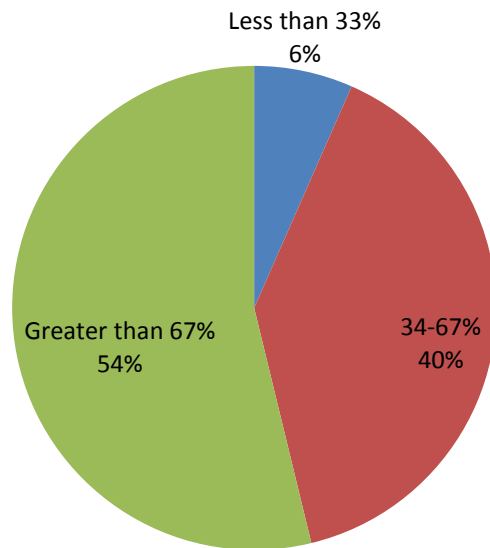


Figure 9: Percentage of school food eaten by students.

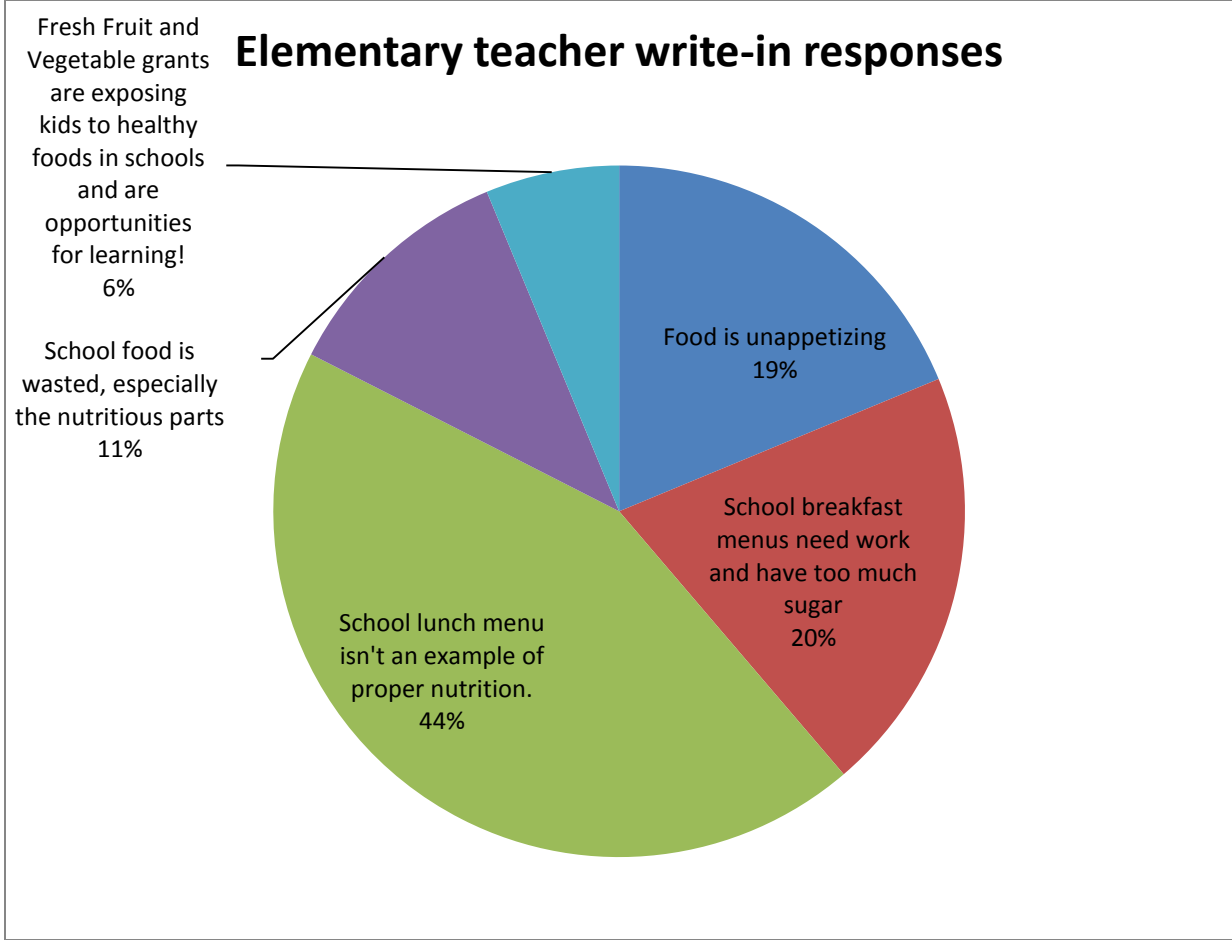


Figure 10: Elementary teacher write-in responses

Appendix A:

The letter below was sent to school superintendents of USD 383 and 475 as part of a larger letter focusing on several related initiatives that Fort Riley Public Health wanted to partner with the schools on. They were meant to provide the superintendents with initial information on initiatives before we (Fort Riley Public Health) met with them and other interested parties in person.

According to the Center for Disease Control and Prevention (CDC), nearly one in five school-age children in the United States are overweight, and this prevalence is expected to increase. Our society has become one in which our environment promotes obesity. Unfortunately for children, our current negative health decisions can lead to lifelong health challenges for them. Therefore, establishing healthy habits in *childhood* is imperative for healthy development.

<p>Childhood Obesity can lead to:</p> <ul style="list-style-type: none"> • Type II diabetes • Social and psychological problems (stigmatization and low self-esteem) • Sleep apnea • Bone and joint problems • Obese adults with chronic health problems 	<p>Students that meet dietary recommendations have:</p> <ul style="list-style-type: none"> • Better academic performance in testing • Less absence from school • Less psychosocial problems in school and at home • Better productivity in the school setting
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Some of the classrooms within your districts are teaching “Team Nutrition” material, an initiative of the USDA Food and Nutrition Service that supports child nutrition programs. Unfortunately the nutrition education students are encountering in the classroom is not being modeled in the cafeterias.

USDA “Team Nutrition” values	Elementary Schools
Eat a variety of foods	No variation month to month with seasonal produce
Eat more fruits, vegetables, and grains	Produce is unappealing
Meals (including vegetables) eaten	Most meal uneaten and thrown away
Meals should meet dietary guidelines, taste good and appeal to children	Meals unseasoned, poorly prepared, and unappealing
Cafeteria food should stimulate and support nutrition education in the classroom	Classroom nutrition education and eating habits aren’t modeled in the cafeteria

The reversal of this obesity epidemic will require a long-term and coordinated approach to reach and teach children where they live, learn, and play. We at Fort Riley would like to help in this endeavor. After viewing the school lunches served at Fort Riley schools and in your community, we would like to partner with you in discussing practical improvements that can be made to school lunches. Some ideas may include:

- Grant writing to fund more fresh fruits and vegetables in the diet
- Teaming up with our dieticians to plan healthy and child appealing menus
- Using child/teacher feedback to serve meals that meet nutrition requirements yet taste good
- Including seasonal variations in menu planning to expose children to different types of food and buy produce at cheaper prices.

Many of these ideas are working in our Child Development Centers (infant-5 years of age) here on Fort Riley and we would like to continue to expose our school age children to quality, nutritious meals. We believe that the classroom nutrition education that is taking part in your schools can further be augmented by serving delicious and nutritious meals in your cafeterias and we would like to find ways to partner with you to realize this goal.

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Appendix B

The survey sent to the K-6 elementary school teachers of USD 383 and USD 475 is include below as seen on the Axio system.

AXIO SURVEY

Elementary School Nutrition Initiative Survey

Survey Description

Dear Elementary School Teachers,

According to the Centers for Disease Control and Prevention nearly one in five school-age children in the United States are overweight, and this prevalence is expected to increase ("Childhood Obesity - DASH/HealthyYouth." *Centers for Disease Control and Prevention*. <http://www.cdc.gov/HealthyYouth/obesity/#1>). New research points to the fact that the prevalence of obesity is increasing among young children and suggests that efforts to prevent obesity, by encouraging physical activity and improving diets, begin in early childhood. Gathering your perceptions, as elementary school teachers who engage in teaching about nutrition, is very important for researchers to better understand the nutrition messages children receive.

I am conducting this research in collaboration with Fort Riley Public Health as a Masters of Public Health student intern. This information will help direct future collaboration and wellness committee direction within your school. This survey has been approved by the Kansas State University compliance office. The survey will be available for 3 weeks.

Thank you in advance.

Opening Instructions

Please take a few minutes to answer the questions below. The survey should take no more than 10 minutes. Your participation in this survey is voluntary. Your submitted responses imply your consent for participation. Your name and other identifying characteristics will not be reported, and all responses you provide will be confidentially protected by the researchers. Your responses will assist nutrition researchers in improving nutrition education messages and materials that are designed for school-age children. Thank you.

Page 1

Question 1

What grades do you teach this year?

- Kindergarten
- 1st
- 2nd
- 3rd
- 4th
- 5th
- 6th
- I'm not a teacher

Question 2

- 1 - Not at all important
- 2 - Somewhat important
- 3 - Very important

2.1 How important is it to teach nutrition in schools?	1	2	3
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 3

1 - Not at all adequate | 2 - Somewhat adequate | 3 - Very adequate

	1	2	3
3.1 How adequate do you feel your training is for teaching nutrition?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 4

1 - Not at all adequate | 2 - Somewhat adequate | 3 - Very adequate

	1	2	3
4.1 How adequate do you feel your resources are for teaching nutrition?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page 2

Question 5 **** required ****

Do you teach nutrition in your classroom?

- No
- Yes

Page 3

Fill out this page only if you answered:

- **No** on question 5. *Do you teach nutrition in your c...* on *page 2* .

Question 6

What is the primary reason that you do not teach nutrition in your classroom?

- Not enough time
- It is not part of the curriculum
- I don't have the materials
- Other:

Question 7

What do you see as the most important nutrition-related concern in this state?

Fill out this page only if you answered:

- Yes on question 5. Do you teach nutrition in your c... on page 2 .

Question 8

On average, how much time do you spend teaching nutrition in the classroom per month?

- Less than 1 hour
- 1-2 hours
- 2-3 hours
- 3-4 hours
- More than 4 hours

Question 9

Which of the following materials do you use?

- USDA "Team Nutrition" or "Eat Smart. Play Hard." materials
- National Dairy Council Child Nutrition Education Kit
- Kansas State Extension Nutrition Education materials
- Other:

Question 10

1 - Not at all reflected | 2 - Somewhat reflected
3 - Greatly reflected | 4 - I do not know

	1	2	3	4
10.1 How well does the school cafeteria food reflect the nutrition concepts you teach in the classroom?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 11

On average, what percentage of meals prepared by the school cafeteria food service is eaten by the children?

- < 33%
- 34-67%
- > 67%
- I do not know

Question 12

Please provide any comments you may have related to nutrition education in your classroom or the food options provided at your school.

Closing Message

Thank You!

Thank you for taking the time to provide your feedback. If you believe this survey experience has provided undue stress, please feel free to contact Kaarin Lund at 320-232-0097 or Rick Scheidt at 785-532-1483 for assistance in ameliorating the situation. If you would like to receive a copy of the findings at the conclusion of this study, please contact Kaarin Lund at 320-232-0097 or kclund@ksu.edu.

- End of Survey -

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Appendix C

Q12: Please provide any comments you may have related to nutrition education in your classroom or the food options provided at your school.

This year we received a grant which give the students twice a week a vegetable and fruit. This has been really helpful and has exposed the students to different food. Each time, teacher are given a facts sheet which we share with the students. I will talk about nutrition every so often, but don't really teach about it. I know in our kindergarten reading curriuculm they have a unit on healthy eating, so this helps. The sad truth is there isn't enough time to fit in nutrition/science. But I am glad that we recieve the grant and we are slowly exposing our kids to healthy food.

Fort Riley has an excellent nutrition program where they teach the food groups and talk about healthy eating habits. Then the students are served a healthy snack. The kids love the programa and enjoy trying foods they have never eaten before.

Frozen 'fruit' slushies should not count as a fruit serving, 'potato' chips shouldn't be served as a vegetable serving, and brocolli should not be served with ranch dressing. There have been numerous times where it is hard to connect each food on their tray to a healthy food choice or a section of the food guide pyramid. The lunches are loaded with carbs which causes the kids to crash a couple hours after lunch. We have outdated food pyramid resources in our classroom and nothing that talks about the importance of milk. I would like to see some of the healthy eating/milk resources in the classroom that are found in lunchrooms.

I am pleased with the Book in a Bag program that I have used through the K-State Research & Extension Office. As for the school lunches, most seem adequate, though certain breakfast foods don't seem like the best choices for kids (pop tarts).

I believe our children need to be better educated in health and nutrition. I also believe the school lunch program in our school district has a lot of room for improvement, starting with more palatable food and finding ways for it to still be warm upon serving. Cold peas and carrots are not the least bit appetizing! I have eaten school lunches for thirty years in our district and they used to be much better! They have really gone downhill. One example: no butter served for spreading on rolls anymore - please, if what's served could taste better, healthier food might be consumed. I, personally, find myself unwilling to eat school lunches more often than not because I don't like too many of them, which leads me to the vending machine for a bag of chips instead. Other examples: cinnamon rolls with hardly a trace of cinnamon on them, big globs of meat in the chili that used to be very good, etc. I could go on, but don't have the time.

I did the nutrition class from a source on Fort Riley and was not impressed with the class or the materials.

I do not understand why we offer them Choc and other high sugared milk. They do not need the sugar. Also, the breakfast that is offered is not high fiber but low fiber high sugar.

I feel that although our school food service provides foods that are 'fortified' and deemed nutritious we are still teach students to eat over processed foods that do not come fortified on the grocery shelves. I also question the use of flavored milk in our schools. I think white milk or water is a much healthier choice and that we could be healthy habit instead of a not so healthy one. I also feel that research on the connection with healthy food choices and learning is being ignored. I would also like to see more health and nutrition curriculum available for use in schools.

I feel that the foods provided in our schools are a poor example to students of what proper nutrition should be. They try to 'trick' students into thinking that they are receiving foods from all of the food groups, but typically they are not the best choices. Half of the time, the trays are filled with all 'yellow' foods (corn, potatoes, cheese sauce, processed breads, etc.) Although these could each be classified into a particular food group, we should be teaching students to eat whole wheat bread instead of white bread. I think there are way too many carbs in the school lunches. There are not enough fresh vegetables. Students are not given choices of what they would like to eat.

I feel the school lunches are high in whites and low in whole grains as well as being overly cooked.

I know there is a lot of waster within my school district. I have relative that works in a school cafeteria in the district and this relative tells me about the waste of food-they are sent too much or the students don't eat certain menu items and throw a way a good majority of the food given to them. My students do not eat a great deal of what they are given. I feel the students that do eat the food are the students from low income homes that do not always get enough to eat at home as well. At times the food is not

visually appetizing and I am not always sure how the district determines how one meal or one menu item is more nutritious than another. The district would be better off to make salads an option to students as well as other vegetables they like. We should survey students about their likes and try to work around that to make meals more nutritious and appealing as well as looking at cutting down on waste. Left over food in the kitchen is thrown away.

I think school menus are to full of calories.

I wish the food was not processed. The chicken patties, hamburger patties, and other products are primarily soy products. They are gross. I feel we need more meals that reflect how a meal would be made at home. Even the taco meat isn't real.

My students currently have the Fresh Fruit and Vegetable Program that is offered to our school. Each week, they have the opportunity to try a fresh fruit and vegetable. They ABSOLUTELY love the program and often times they tell me that they ask their parents to buy those items to eat at home. I also encourage healthy snacks on a daily basis and I have seen an increase in the students who bring fruits or vegetables to the classroom for their morning snack. I show the students my love for fresh fruits and vegetables and I see that within them when we try them.

Nutrition education isn't part of the curriculum. Students do need exposure to it however. Food options are very starchy and loaded with carbs. More fresh food and less food out of a can would be healthier and better tasting.

Our fourth grade students have to take the Kansas Science Assessment. It is the only elementary grade required to do so. Nutrition is something we have to cover. As my first year teaching this year, I feel I didn't have appropriate resources to teach nutrition. I had to rely heavily on the Internet to find resources. If I had the resources, I could have easily taught nutrition more often throughout the year. Also, at the beginning of the school year, I told parents that if students brought a snack, it had to be healthy. Quickly students began to bring junk food that their parents packed for them. Although I try to reinforce bringing healthy food, it is a huge challenge. Back in about October, two times a week students are provided a healthy snack on behalf of an organization. Students love eating these healthy snacks when they are provided for them.

Students can bring a cold lunch from home or buy a hot lunch from school. There is one lunch choice provided. The meals attempt to be balanced but are very starchy.

Students are offered a balanced hot meal. Older kids are also offered a salad bar option.

The students loved this opportunity to taste fruits and veggies and were very excited to get them for a snack twice a week. They tried some things they had not been exposed to.

We are doing well to get reading, writing and math into the day.

We are receiving additional fruit and vegetables from the healthy foods program in our school, twice a week, on Tuesdays and Thursdays for our snack periods. Most of my students give the fruits and vegetables at least a try, however, I have noticed that the majority of my students will not eat most of the vegetables provided. Many say that they don't eat veggies at home so why should they eat them at school. Many don't even give new fruits, like star fruit, a try.

We have no real resources for teaching nutrition. I always have to pull the information together myself. It is part of our 4th grade science standards and is tested at the 4th grade level

When I look at the breakfast and lunch trays, it seems to me that we are serving sugar for breakfast and carbs for lunch. Everything is processed and almost nothing is fresh. It seems like many of the lunches served are one bland color. This is unfortunate for me as a parent. My child likes to order a school lunch like his friends rather than bring one from home. Materials in my classroom still consist of the old food guide pyramid.

The food that is provided at school is not 'recognizable' as 'real' food. I worry children won't develop good nutritional habits because of all the processed food they are presented with. I am SHOCKED to know that KETCHUP counts as a vegetable and FRUIT JUICES count as fruit!!! It is difficult to provide children with options but it seems we are doing a disservice to our

children by feeding so many processed, colorless foods that do not easily fit into the food pyramid we teach. If they do fit on the pyramid - they are used OVER and OVER again until the children aren't as interested in eating them. The classrooms are NEVER provided with nutritional information (other than the monthly newsletter). It would be great for the kids to see the cooks/servers in more than just one setting - a quick fly-by with a tray. It would be nice for the children to be able to discuss their food choices with someone.

Although school lunches may be prepared in a nutrition way, I feel that having pizza, nachos, tacos/burritos as frequently as we do can be confusing for the students.

As a PE teacher I try to incorporate the simple fact that you have to eat right (portion control, etc.) and exercise.

Fortunately, I teach in a Team Nutrition Elementary School. Students have choices as far as their lunch is concerned...they can preorder salads once a week; they can substitute the main dish for a turkey sandwich or a peanut butter sandwich. Students can only eat 'healthy' snacks during snack time--some of my students favorites are: milk, string cheese, yogurt, fruit, granola bars, raisins, veggies, trail mix, etc. Even the focus of our school parties are healthy. My students really enjoyed having veggies and lowfat dip, fresh fruit, and cheese and crackers at the Halloween, Christmas and Valentine's Day parties. Parents understand that students just do not need three cupcakes, four cookies and individual sacks of candy at these parties; instead, the students enjoy one cupcake or cookie. At the Halloween party, students decorated and ate rice cakes. Along with healthy snacks, at the Christmas party, students decorated one sugar cookie. Both third grade classes enjoyed cheese pizza, veggies and dip, fruit and a cookie at the Valentine's Day party. Students and their families, along with many staff members are currently participating in our Fitness Challenge. Classroom rewards are healthy alternatives to candy; i.e., extra recess time, a neighborhood walk, popcorn or pretzels, pencils or erasers, books, stickers, educational videos, extra art, etc.

Fourth graders are assessed on nutrition on the state science assessment. This is the main reason I teach nutrition. Without the state assessment I would spend less time on it because there is so much that is pushed on schools to teach that used to be taught at home. It is sad to say, but I teach it because it is assessed.

I am disappointed with the quality of food provided by the school and the overwhelming amount of dairy that is served.

I do not teach much nutrition in my classroom because it is not a part of my curriculum. Also teaching in a state testing grade level leaves little or no time to teach about areas outside of state standards. Now that we are finished with state testing I have more time and could incorporate more lessons about nutrition. If I had some material to use it would be helpful but I can supplement with information from the internet.

I feel that I have very little time to keep my students active in 30 mins., so I share, by mouth, while they are warming up. Since I have 4 music and PE programs a year to prepare and present, I feel that that cuts in on my time discussing nutrition even more. I hold a Kansas Kids' Fitness Day for district 3rd graders every year, and I get materials from the state department and through Team Nutrition that I put into the packets of the 3rd graders participating. I began this event with 2 schools, and by my 3rd year, I have increased it to 7 schools. These materials are used in the classroom before the event begins. I also have our food service prepare the kids a healthy sack lunch of ham and cheese sandwiches for the teachers to discuss nutrition in the classroom---again. I feel it's all a, 'Catch 22.' Our PE times are so limited that I feel that active students are so very important. On the other hand, if nutrition was taught to students, as well as their families, we might be able to get on board with some changes taking place in our overweight and obese population. Thanks for the time that you're putting forth to see what we need to do to begin making a difference!

I have had an excellent program brought in by our extension office in the past that was highly effective and I would like to have that opportunity again. The presenter read a book and then brought the ingredients to make a snack that students could make at home. It introduced them to foods that they might not normally get at home and were encouraged to try everything. Most of the time they were excited about the new tastes and textures.

I think teaching nutrition is important, but I think it contradicts the many processed foods served at lunch.

I understand that school lunches must meet certain requirements, however some of the foods they serve are not appealing to students at all and are thrown out. I think students should have some choice in what they eat as well. Nutritional choices of course but I don't think as much food would be wasted if students had more appealing food and choices.

I would truly like to see a fresh fruit/salad bar be added to our school.

I'm just not sure the food options for the children are good choices. Where they may have nutritional value in some form, in other areas the foods are not good for them.

If we advocate eating a balanced diet, there are many times that the food served at lunch is very heavy on carbohydrates/grain group. Also, counting catsup as a serving of vegetables is not giving kids the right amount of servings of those. I can't believe that the amount of fat and sodium in the school lunches doesn't exceed the guidelines for those.

lots of processed foods for lunch nutrition education is taught because I teach science and it is part of the standards. We also have K-State research and extension bring in nutrition lessons for our first and third graders.

Most of my students are on the free/reduced lunch program and do not have the option of bringing a lunch from home. However, they end up throwing away a large portion of the meals that are served. When I have asked why they are not eating the response is about 50/50 that the food is not good or they do not have enough time to eat. Over the years, I personally have ordered fewer and fewer school lunches because they have little or no flavor, they are over or undercooked, and there is very little variety. (e.g. It is not unusual to see chicken nuggets as the main course one day and chicken patties two days later.) Not to mention, I am charged significantly more for an adult meal, but receive the same portions as the students, with the exception of the occasional roll. The meals that were typically favorites among students have disappeared with the exception of pizza and hot dogs. In addition, the amount/quality of fresh fruits and vegetables, which is what so many children are lacking in their diets, are rarely served and have no variety. (Kids need more than just broccoli and carrots to choose from.) With the decrease in the quality of the meals and the increase in the cost of the meals, I would not, as a parent, waste the money on school lunches for my children if I had the option.

My students DO NOT like a majority of the school food. While I appreciate our district's efforts to provide nutritious meals, the students aren't happy with the way the meals taste. I'm not sure how to find the balance. Teaching at a grade level that takes state assessments, it's VERY hard to fit in 'extra' lessons on subjects such as nutrition. While it's sad to admit, it's also the current reality we face as educators. Last year USD 475 had a grant that provided healthy snacks in our schools. Students and Staff LOVED this program, as it exposed students to several foods they had never tasted (and actually enjoyed). I wish we could have this opportunity again!

One of the basic nutrition rules is to eat foods with the least amount of processing as possible. Our school menus are overloaded with pre-cooked, preserved, processed foods. Meals are no longer freshly prepared at school, due to cost. Hot meals are not the only way to provide nutrition. Schools should NOT be the primary food source for children. Providing healthy fruits and vegetables, milk and cheese snacks, could be an alternative to full lunches and breakfasts. Portions currently are the same for kindergarten and 5th grade students. That results in a lot of waste. Feeding children should be the responsibility of the parent. Schools should provide education, including nutrition education.

Our district is working towards promoting healthy schools/kids. One of the biggest changes this year was removing junk food from the vending machines and avoiding the use of candy or food as TREATS/prizes. Cafeteria meals are healthier (I've seen the district nutrition numbers for calories, fat, sugar, sodium, etc), but students do not always see or understand this. Serving fortified honey buns (even if they're fortified with many great nutrients) still supports the idea of high sugar content. Serving overcooked vegetables does not promote good nutrition. The kids don't eat them. We have discussed serving more whole fruits and raw vegetables as well as using local merchants as our suppliers. Also, we're encouraging parents to send healthy snacks for school parties vs. all the junk food. It is interesting to note that children prefer the fruits over the cupcakes. Overall, it's the adults that need to be re-educated and make changes. However, I see the biggest problem and need comes in educating families and franchises. It's faster and easier to drive through McDonalds or pick up a Lil Caesars pizza for dinner before rushing our children to all their various activities. How can we SLOW down and take time to make a healthy dinner a

priority? How can consumers make the fast food industry change their practices (though, some change has been coming over the last few years with healthier side options)?

Our school is providing students with at least three choices per day on what they prefer to eat for lunch. We are hoping to encourage the children to eat lunch by doing so. We also offer the choice of a salad once a week. We would like to increase the salad option for next year if the district nutrition program is willing.

referring to question 7. processed proteins and potatoes with canned fruits and veges do now represent a healthy diet. I know at times things have to be processed in some way to make them easier to serve, but I feel that it should be identified to students and parents that this is a processed food and it's health content is not that of a fresh or frozen source of protein, vitamins or minerals.

School lunches are wasted by our children. It is very apparent by looking in the trash that kids do not find their meals appealing. Often times when given a choice, teachers would rather eat a 'fast food' item or nothing at all if the only option is school lunch. Most of the lunch provided is not fresh or 'homemade'. Most items are frozen/packaged. In addition, our menu is 'boring'. Repeatedly our kids eat pizza and tacos... as a matter of fact one meal is recognized as the 'yellow tray' because everything on it is YELLOW!!! Burrito, Cheese Sauce, Banana, corn... wow how exciting. I think parents have no idea the amount of waste!! It is sad but in some cases I don't blame the kids. Somewhere along the lines we lost touch with what made a school lunch something to look forward to. Very sad....

Since we have provided choices (salads, turkey, or peanut butter sandwiches) the children are eating the school lunches more often.

The children tell me they like vegetables that their parents cook. I ask why they do not like the school vegetables, because they are very squishy. The vegetables are way over cooked and the children will not eat them.

The children at my school come from families who are not educated about nutrition and where time and money are not plentiful. My classroom and school have rules about the types of snacks children may eat at school. School lunches are not anything I would eat due to their lack of appetizing look, smell and nutritional value.

The food served to our students is not representative of the good nutrition choices we try to teach our students. There is too much processed food and sugar. Starting their day with sweet buns does not maintain them through the morning.

The school lunches are not well liked by the students and do not appear that good for them. Even if they are, the students are not getting the nutrients if they are not eating them.

We need healthier food choices in our school cafeterias. The food we serve is not the best choice for anyone to eat. I would LOVE to see a change come to our school lunch/breakfast program.

We spend a significant amount of time studying nutrition in our Recipe for Growth unit. Nutrition is not covered much outside of that unit. Our school is trying to adopt healthier snack/party plans, but there seems no plan for healthier lunches.

As a classroom teacher I often seat with my students in the lunch room and also eat school lunch frequently. The school does a fairly good job in my opinion of providing various food options. There are certain menu items that are obviously more nutritious than others but I think as a whole the school does well at providing nutritious options for our students. I utilize the resources of K-State Extension to help my students learn more about nutrition. The folks at K-State Extension are very helpful and my students enjoy working with them each year. We participate in the gardening program and for many of my students it is the first time they have had the opportunity to grow something.

I do a 3 week unit and then provide instruction through-out the year.

Biggest concern for food options is the school breakfast menu...such things as funnel cakes, donuts, french toast with syrup....The breakfast menu needs more whole grains and protien options. Lunch menus are much better....variety of choices for entree and a choice bar with fruits and vegetables....again always a good variety.

chocolate, vanilla, and strawberry flavored milks, and kids aren't guided to make healthy choices. Almost every breakfast is high in suger and carbs.

Food options are great. I came from a school that had no options.

Fruits and vegetables are always optional...it would be good if they were served as part of the entree more often so that students might not avoid them. Also, more encouragement for students to try new things...maybe by not serving pizza, corn dogs, etc. so often.

I am appalled at the high amounts of sugar and refined carbohydrates in both the school lunch and breakfast options. Many times the students will have a sweet roll or even a funnel cake for breakfast. All the teachers know when funnel cake day is because our kids are out of control and then crash. There is very little protein in the morning when it is necessary to get the students through the day. Then in the afternoon they carbload again with mashed potatoes, noodles, and a roll that poses as having wheat in it. I do like that there is at least one vegetable option offered to the kids and usually a fruit as well. I would just like to see mostly a more nutritious and lasting breakfast menu.

I do believe it's important to provide students with information about making healthy choices and having a nutrition diet. However, I don't believe the childhood obesity can be solved in the schools. This is a problem that can only be solved at home. I can give them all the information in the world that there is about nutrition, but I can't follow them home and prepare their meals. I believe our school lunches are too starchy. Our school breakfast are too sugary. A bowl of cereal with milk and juice would be healthier.

I do not formally teach nutrition but I constantly have informal discussions with my students about the importance of a healthy diet and exercise.

I do not teach it each month. I do a unit study over nutrition. The unit is taught 1 hour a day for 2 weeks. A total of 14 hours taught. For that question, if I were to divide that time over the school months, I choose 1-2 hours a month.

I do not teach nutrition, but it should be covered in every grade level. Children need to keep hearing and understanding the importance of good nutrition to their life long health.

I feel like a lot of our lunches having higher fat contents than what would be best for students (and faculty). Not sure how much this is monitored if at all.

I feel that teachers do not teach nutrition education to students in their classrooms. In concern to food options. There are plenty of option provided to the children for breakfast and lunch, but the portions are not large enough. Many times I hear students complain they are still hungry after lunch

I probably will not teach nutrition unless there is curriculum provided.

I think that every effort is made to provide food that the children will eat, but I'm often horrified at some of the choices. (Funnel cakes for breakfast?!) I taught at a private school for 13 years prior to being employed by the public school system. All of the food there was made from scratch onsite and it was so wholesome and delicious! I realize that in a district of our size that isn't possible, but I think nutrition often takes a backseat to expedience when most of the entrees easy-to-reheat, breaded options.

I think the more materials given to classroom teachers, the better. I try to incorporate nutrition at any time. I think the cafeteria lunches are fairly balanced. One thing I would like to see is less fried/breaded food (especially sandwiches). I think

doing small things like changing fried/breaded meats to grilled would greatly help the children that already consume way too much fat in a day.

Most of the school lunches are very high carbohydrate meals. While they meet the guidelines provided by the state, it is difficult for our diabetic students to eat school lunch on a daily basis because of the high carbohydrate choices.

Our food options are ridiculous. Students are almost never given a healthy option. You can have nachos or a corn dog, pizza or breaded chicken. We used to offer salads but it was too much work for our small kitchen staff. I hope to see improvement, but unless we are willing to put some money into the program, I doubt we will.

Our school breakfast and lunch options are pathetic. The food is frequently fried, breaded, salty, and sugary. Donuts, Funnel Cake, Toaster Pastries, Cheetos, Sun Chips, and Super Nachos should not be choices for children. Chocolate milk should not be a daily option.

Pop Tarts, funnel cakes, honey buns, a lot of prepackaged foods for breakfast; similar to that which people pick up at convenience stores for their kids, for which they are looked down upon - doesn't sound like a very nutritious breakfast to me. A lot of the meals are loaded with carbs, very little truly green veggies on a regular basis, little grilled foods, mostly breaded foods, foods high in fat on a regular basis. I had to stop eating the regular meals because they made me so tired when I finished eating them. I bring my own now. The kitchen did try to provide chef salads as option to older kids, but it wasn't consistent enough and kids didn't know when to expect it to be offered, so the number taking advantage of it decreased to the point that the kitchen stopped offering it as an option.

School lunches are unhealthy more often than they are healthy. I do see efforts in my school, from the lunch ladies who cut fruit into manageable chunks to encourage consumption. There is also a salad bar that sometimes has fresh vegetables like carrots and broccoli. However, the core of what is being served is not a top choice to feed our children. White pastas and breads should be replaced with a whole grain variety. Meats should be leaner. Breakfasts should have a higher protein content.

Seems like a lot of the food mimics fast food that the kids see. I know that I would prefer to see more fresh items (fruits and veggies) and less pre packaged items (pancakes, pb and j's). We also seem to have a lot of breaded chicken products...seems almost daily

Since I don't know if I will have the opportunity to type in this thought in another box, one of my biggest and most distressing concern is the amount of food wasted by students. They throw completely full cartons of milk away, they take food and don't eat any of it, just throw it away. I think students should have some accountability for eating food given to them for free.

Some of the food is greasy. A lot of kids are picky eaters and there is a lot of waste because of this that parents aren't aware of.

The breakfast that is served is full of sugar. Not a good start to their day. Ex. Funnel cakes are served sometimes for breakfast.

The lunch provided at the school always seems very high in fat. Not quality at all.

Too much sugar in breakfast and not enough fruit and protein

We stress healthy eating, but our district offers things like funnel cake on the breakfast menu. This makes no sense to me.

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