

# **Nutrition Instruction in the Fifth Grade Classroom: Does Knowledge Affect Eating Habits?**

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## **Question and Process**

I wanted to know if the nutrition unit for health would affect my fifth graders' eating habits. The health unit in fifth grade teaches the students about different vitamins and minerals, sodium and fat content, and making healthy food choices. I surveyed the students before beginning the unit to find out what they wanted to learn. Students responded that they wanted to know how food was grown, how our bodies used food, and how fat worked. They wanted to know what foods were "good" and what foods were "bad." They also wanted to know more about the food guide pyramid.

I first taught students about vitamins A, B, C, D, and calcium. I taught them how the body uses each nutrient, problems caused by a lack of the nutrient, and foods rich in that nutrient. For example, students learned how vitamin A helps your eyes and that a lack of it may cause night blindness. Foods rich in vitamin A include carrots and other bright orange or bright green vegetables. They learned about other diseases associated with poor nutrition, including scurvy, beri beri, osteoporosis, and rickets.

Students learned why mealtime should be a relaxing experience. We talked about making healthy choices and taking your time when you eat. We talked about how hurrying through meals might cause us to overeat or to make unhealthy food choices. We also talked about how advertisers try to sway us into buying their products. Students indicated through class discussions that they were very prone to trying new products with flashy advertising, especially for snack foods and soft drinks. For example, students like certain soft drinks, like Mountain Dew, because of the TV commercials. Boys, especially like the vivid colors and the sports figures that appear on TV commercials.

We studied the food guide pyramid. Students learned about dietary guidelines. They learned about how much food makes up a serving. We kept food diaries, tracking how much of each food group we ate.

One activity that the class completed was a database on fruits and vegetables based on a CD-ROM from Dole Food Corporation. They learned about over forty fruits and vegetables (all produced by Dole, of course). The informative program used animation to teach about nutrition and gave fun facts about each food. We worked with the database for three class periods in the computer lab. Students

said that they had tried many of the vegetables and fruits already, which I found interesting. The database was shared with second graders who were learning about the different food groups.

One idea on which I tried to focus was that there are no "good" or "bad" foods. Children often see things in such a concrete way; they wanted to be able to group things as one way or another, healthy or unhealthy. I told them that every food is fine in moderation. We planned menus and gave them grades of A, B, C, D, or F. We rated them by the fat and sodium content of the foods, as well as how balanced the meal was according to the food guide pyramid. They were much tougher than I would have been, often giving any meal that had one high-fat food an "F." I taught them that if they have a "D" lunch, they should plan to have an "A" dinner. During this lesson, I learned that many students have trouble classifying foods as sweet or salty. For example, I would tell them that pretzels and ketchup were salty. I would ask them to name other salty foods and they would say, "Chocolate cake! Coke!" I have noticed this problem in previous years, too.

To conclude the nutrition unit, I asked students to create recipes for fruits or vegetables they might not be familiar with. The students made the food and brought it in to share with the rest of the class. The recipes included fruit smoothies, zucchini bread, and other snacks. I was glad that so many students were willing to try the recipes, even though they did not look very appealing to me. I always emphasized that students did not have to try anything they didn't want to eat. I think this freed them from worry, and most students did try the new foods.

## **Findings**

I gave the students a survey to study their reactions to the unit and to gauge their feelings about food. I was surprised about what a variety of food students like. Favorite foods included calamari, peaches, perogies, and tacos. There were also some more traditional "kid's food" choices, including pizza, spaghetti, and macaroni and cheese. Carrots were the students' favorite vegetables. Broccoli and spinach were also popular choices. Students disliked celery and Brussels sprouts the most. The majority of the kids ate dinner with their families in the dining room or kitchen table. However, about half of my class ate dinner with the television on. Most of my students like to cook. Most of the students go out to a restaurant 0-2 times a week, although some families eat out three or more times a week. Their favorite restaurants varied greatly, ranging from McDonald's to Chinese food to steakhouses. Although one of the focuses of the nutrition unit was to make healthy food choices, most of the favorite snack choices of my class were not very healthy. Favorite snacks included candy, Doritos, and cookies. Most students would not choose fruits or vegetables as snacks.

I asked two very important questions on the survey. The first was, "How have our studies of nutrition affected the way you eat?" Sixteen out of the twenty-six students who answered that question said no, it did not affect the way they ate or the choices they made. One student said, "I was already making good food choices." Another person said, "I eat what tastes good." One girl said, "I'll start eating better when I get older." I also asked if students felt that they were too fat or too thin. Most students said they were happy with their weight. Five girls said that they felt too fat. One girl said she was too thin. No boys responded that they were unhappy with their weight.

## **Conclusion**

From my observations of students' eating habits and from their responses to the survey, I concluded that the information they learn about nutrition does not affect the way they eat or the choices they make at this age. Although most students did well on assessments, they did not apply what they learned in class to their own lives. While many students say that they make many decisions in what and when they eat, my lessons did not affect them very much. I also noticed that children seem much more open-minded today than they did when I was a child. I remember being very picky about food. My friends had similar attitudes toward food. Today, children are willing to try new foods with a variety of textures and flavors. My students come from a wide range of ethnic backgrounds, and this fact might account for the different choices they make. Students are affected by what their families and friends eat. They are also affected by popular culture and advertising. I also noticed that my food choices have an effect on students' views of food. As part of keeping a food diary, I shared what I ate. I told the class that I was a vegetarian. The students were very interested and asked many questions. While no students have become vegetarians, their views of vegetarianism have changed. Past students of mine have become vegetarians after learning about my choice.

## **Implications**

In the future, I will continue to teach nutrition. I think that the health units in elementary school are a good example of scaffolding. What the students learn this year will be built upon in years to come. As they get older, when they become more aware of food and make more of their own choices, the facts they learn now will be more meaningful.

I think the Ready Set Go! health unit could be improved for fifth grade. I think that there should be more emphasis on the food guide pyramid. Students should learn about health-related diseases that are more prevalent in our society, like adult-onset diabetes, heart disease, and cancer. Learning about beri beri and rickets is not relevant to children in our area. These are topics that are currently included in the county prepared nutrition unit.

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