The Dietary Habits and Nutrition Education Levels of Parents of Pre-School Children at a Community Head Start Program

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I am a senior, from Nicholasville, Kentucky, graduating in May 2006 with a bachelor’s degree in Human Nutrition. I recently attended the 2006 “Posters at the Capitol” event, where I presented this research and received awards from both the House and the Senate Representatives. Outside of school I enjoy playing the piano and volunteering with my sister’s preschool classroom. My future plans as of today are to continue my nutrition education with a master’s degree, and then proceed to either a medical position, or a doctoral degree in nutrition.

Abstract

The health of America’s youth is jeopardized as obesity, often beginning in childhood, becomes a major epidemic. Parents have exceptional influence on their children, especially nutritionally, which impacts how their children grow and develop. Parents with minimal nutrition education and who do not practice healthy eating habits may unintentionally influence their children in practices that could lead to nutrition-related disease and/or obesity. This research evaluated the dietary habits and nutrition knowledge of parents of preschoolers at a community Head Start program in Lexington, KY, which served a high percentage of Hispanic children. The parents were given a survey evaluating their educational background, ethnicity, and knowledge of healthy eating guidelines. Results indicated that Hispanic parents reported they did not adequately meet the US Dietary Guidelines when following a traditional Hispanic diet. The African-American and Caucasian parent group also showed deficient two-thirds of American children today are either overweight or obese. This is a nearly three-fold increase in childhood obesity over the past 25 years. Children who are overweight have an increased risk for diabetes, heart disease, and other chronic medical problems that used to be seen only in adults. It is recognized that several factors contribute to this obesity, including family life, media influences, and school. Ms. Keys designed an innovative study to evaluate the dietary habits and health knowledge of parents at a Lexington Community Head Start Program and to correlate their habits with those of their preschooler. An interesting component to this research was comparing normal dietary habits between Hispanic and non-Hispanic families. It is essential that we better educate parents regarding healthy eating and wellness habits in an effort to curb the rise in childhood obesity.
knowledge in general nutrition questions and overall unhealthy eating habits. Therefore, effective nutrition education programs need to target parents who can, in turn, influence and guide their children in developing healthy lifestyles.

**Introduction**

Nutrition is an integral part of sustaining life. The foods that individuals choose to eat have a direct impact on overall health and risk for chronic disease. As an adult, one chooses one’s food. However, children are dependent on their caretakers to provide them with adequate nutrition for normal growth. Caregivers greatly influence a child’s eating habits. Even the most well-intentioned caregiver may face obstacles such as work, time constraints, and cost, which interfere with providing appropriate nutritious choices. (Omar et al., 2001) These factors affect the perceptions that children form and adopt throughout their lives regarding nutrition.

All cultures abide by specific food and nutrition beliefs based on fact, tradition, and experience. In any culture there are concerns regarding the level of knowledge and experience in the nutrition arena, which may limit the ability for sound nutrition information to be disseminated. A study evaluating the dietary practices and food intakes of Spanish children and adolescents demonstrated that on average the nutrition intake of both children and adults, ages 2-24 years, was inadequate, therefore placing the study subjects at risk of developing nutrition-related health problems. (Majem et al., 2003) Beech and her collaborators studied African-American girls and their weight patterns. Results indicated that parental and cultural views influenced both the girls’ waistlines and their physical activity levels. (Beech et al., 2004) Over the past three decades, the number of overweight children, 2-5 years of age, has almost tripled. (Nicklas and Johnson, 2004) This trend is supported by a study indicating nutrition education and parental influence during childhood has lasting effects on weight management. (Birch and Davison, 2001)

The purpose of the present study was to determine the dietary habits and nutrition education levels and practices of parents of pre-schoolers at a Community Head Start Program. Results of this research may provide direction for planning wellness education programs for pre-school aged children and their families.

**Methodology and Results**

The participants in this study consisted of parents and children at a community Head Start program. A questionnaire assessing general personal information, nutrition education, and typical dietary intake was distributed to parents to complete and return. The general information consisted of questions regarding age and ethnicity of the parents and child and the parents’ highest education level. The nutrition education assessment measured the parents’ current basic nutrition knowledge. The personal nutrition assessment regarded the parents’ eating habits and measured parental knowledge of their child’s eating habits. An oral assessment of the pre-school aged children, 3-5 year of age, was taken through a series of questions assessing nutrition knowledge, habits, and influences. The children answered the questions to the best of their ability without any influences. Because this was a preliminary study, with a rather low number of subjects, it was decided not to compute measures of statistical significance, but only to observe any obvious trends.

Two parental groups were identified: 1) Hispanics, and 2) African-American/Caucasian. The results for these groups were compared based on the percentage of correct answers to the questions in the Nutrition Education section and are reported in Table 1. The four questions assessed were at an

<table>
<thead>
<tr>
<th>Questions Assessed</th>
<th>Hispanic (n = 6)</th>
<th>AA/Caucasian (n = 7)</th>
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<tbody>
<tr>
<td>How many food groups are on the food pyramid?</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Please list the food groups and daily servings that you know.</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Which food group should you eat the most of?</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Which food group should you eat the least of?</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
elementary level of difficulty. To better assess the Hispanic parents, the questionnaire was translated into Spanish. The results of the parent nutrition education assessment indicate a lack of knowledge of nutrition education issues in both groups, with the Hispanic group answering the lower percentage of correct answers throughout.

Results from the personal eating habits of the Hispanic population and the African-American/Caucasian population questions are reported in Tables 2 and 3. Data from the Hispanic group indicated that this group, on average, ate at home more often than they ate at restaurants. Consumption of candy or sweets was moderate in this set of subjects. The African-American/Caucasian group data indicated results similar to those of the Hispanic groups; i.e., meals eaten at home more than at a restaurant. The number of times they consumed candy per week was somewhat higher in comparison to the Hispanic group.

Table 3 shows the quantitative results of the child assessment. Part of the child assessment was designed to measure the nutrition knowledge of the children and part was designed to gather a generalized food pattern. The child assessment information indicated that children were familiar with some nutrition concepts; however, as the questions became more detailed, the ability to correctly answer the questions decreased. The children were able to respond to the more common questions: “What is your favorite food?” and “What did you eat for dinner last night?” and “Who tells you the most about good and bad food choices?”

The more detailed questions resulted in less response. These questions were “Do you know what the food pyramid is?” and “How many food groups are on the pyramid?” and “Do you know the names that are on the food pyramid?” There were no correct answers when the children were asked, “Has anyone told you what nutrition means?” The children responded with simple “yes” and “no” answers as well as a few general responses such as “McDonald’s,” and “milk and cheese.” On the other hand, 75% of the children knew that sweets and candy were not good choices. The majority of the children reported their mom or dad have the most influence on their eating habits, and 95% said they liked to eat what their parent(s) eats.

The Hispanic children were more deficient in basic nutrition knowledge than the non-Hispanic children. Of the eleven children who correctly answered the question regarding what a food pyramid is, none were Hispanic. Also, with questions regarding the number of groups on the pyramid and the category a
carrot belongs in, the Hispanic children were unable to respond correctly. On the other hand, about 70% of both the Hispanic children and the non-Hispanic children were aware that candy and sweets were not good choices. Overall, the Hispanic children were less knowledgeable in the detailed nutrition concepts than the non-Hispanic children; however, the two groups shared similar generalized food patterns.

Conclusion
Outcomes of this research project indicated a lack of nutrition knowledge within the study population. Interestingly, the data supported the premise that the parent population of 3-5 year old children is not aware of the nutrition needs of their children and, therefore, may exert potentially harmful influences. Although the children are very young, learning about nutrition has the potential to greatly impact their lifestyle and health for life. Even very young children have the ability to understand simple nutrition concepts. The results of this study indicate that children are capable of learning what is being taught them and are very impressionable. The influence exerted by immediate family, especially the mother or father, supports the need for sound nutrition information at all levels of the family structure.

As a preliminary study, this work should be considered a starting point for further research in the field of nutrition education and health behaviors in children. This pilot study involved only 20 preschoolers and 13 parents. A relatively small number of the parents were surveyed and, thus, they may not be representative of the entire parent population. However, the results do show strong trends worth pursuing in future research. By promoting health education we can potentially decrease chronic disease risk for conditions such as obesity, heart disease, diabetes, and cancer. Nutrition is a subject that should be more highly emphasized and that children need to learn as they grow older in order to live healthy and productive lives.

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Works Cited