Title:

Preschooler's Perceptions of Food as a Possible Factor Related to Childhood Obesity

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Session Title:

Rising Stars of Nursing Invited Posters - Group 1

Slot (superslotted):

RSG STR 1: Thursday, September 25, 2014: 9:45 AM-10:30 AM

Slot (superslotted):

RSG STR 1: Thursday, September 25, 2014: 2:30 PM-3:15 PM

Keywords:

obesity, perception and preschooler

References:

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Learning Activity:

LEARNI NG OBJECTI VES	EXPAN DED CONTE NT OUTLIN E	TIME ALLOT TED	FACULTY/SPE AKER	TEACHING/LEA RNING METHOD	EVALUATION/FE EDBACK
Example	Example	Example	Example	Example	Example

Critique selected definition of the term, "curriculu m"	Definitions of "curriculum" Course of study Arrange ments of instructional materials The subject matter that is taught Cultural "training" Planned engagement of learners	20 minutes	Name, Credentials	Lecture PowerPoint presentation Participant feedback	Group discussion: What does cultural training mean to you?
The learner will be able to name the two sections of the Preschool Food Perception s Measurem ent Tool (PFPMT)	The two sections are Taste preferenc es and Healthful ness	20 minutes	Jennifer Bail BSN, RN	Poster Presentaion	Group Discussion
The learner will be able to	The age group of the	20 minutes	Jennifer Bail BSN, RN	Poster Presentation	Group Discussion

identify	sample is		
the age	4-5		
group of			
the			
sample.			

Abstract Text:

Problem: Who thinks about hypertension or diabetes in children? According to the World Health Organization (WHO), obese children are likely to stay obese into adulthood and more likely to develop diabetes and cardiovascular diseases at a younger age. As[EDA1] healthcare professionals/educators, we need to address these concerns because of the growing obesity epidemic in younger and younger children. There are many facets related to this problem; however, to promote healthy eating habits in children, an understanding of their perceptions of food is key. Yet, limited research exists related to children's perceptions of healthy eating. Without understanding how children think about food, parents and/or educators cannot communicate the benefits of nutritional choices effectively.

The purpose of this comparative, descriptive design study is to identify preschooler's perceptions of foods. The research questions for this study are 1) Which foods do preschooler's like/dislike? 2) Which foods do preschooler's perceive as healthy/unhealthy? 3) How are preschooler's likes/dislikes related to their perceptions of foods as healthy or unhealthy? Results from this study may aid healthcare professionals/educators in designing developmentally appropriate interventions to prevent and reduce childhood obesity.

Sample: A convenient sample (n=28) of preschoolers, age 4-5, from two preschools in Madison County, Alabama.

Instrument: The Preschool Food Perceptions Measurement Tool (PFPMT)™ was developed by the researcher to serve as a quantitative measurement tool for this study that would be developmentally appropriate for preschoolers. Food images consisted of seven healthy items (broccoli, apple, milk, banana, corn, black-eyed peas and water) and five unhealthy items (pizza, hot dog, soda, french fries, and cookie). Nine of the food items (broccoli, apple, milk, banana, corn, black-eyed peas, pizza, hot dog, and french fries) were obtained from the Huntsville city schools lunch menu which was followed by one of the research sites and should have been familiar to the children in the study. The remaining two, soda and cookie, were chosen by the researcher to be included in the study based on them both being common preschooler snacks. Possible answer bias, due to dietary preferences and/or food allergies/intolerances, were considered for pizza and hot dog. Therefore, dietary preferences and food allergies/intolerances were included on the demographic form. Food images were carefully chosen to allow preschoolers to self-identify the items without being prompted by the researcher.

The PFPMT ™ has two sections, a Taste Preferences section and a Healthfulness section. In the Taste Preferences section, two response options of "yummy" and "yucky" were displayed. In the Healthfulness section, two response options of "good for me" and "bad for me" were displayed. "Good for me" was defined as "you should eat lots of this food to help you be strong and grow tall". "Bad for me" was defined as "you should not eat too much of this food if you want to be strong and grow tall". Age appropriate images were used to depict the four response options. The images were also described by the researcher to the participants. The order by which food images were displayed was different in the two sections by design.

Before conducting the study, an initial validation of the PFPMT™ was done with a preschooler that was not enlisted in this study. The initial validation was aimed at ensuring that the preschooler was able to self-identify the food items, circle the correct images for their responses to "yummy"/"yucky" and "good for me"/"bad for me", and stay focused for the duration of the procedure.

Methodology: Children enrolled in the study were individually given a Preschool Food Perceptions Measurement Tool (PFPMT)™ booklet and asked to identify each food item and respond "yummy" or "yucky" in the taste preferences section & "good" for me or "bad for me" in the healthfulness section. To prevent distractions and answer bias, preschoolers were worked with individually in a private room. To ensure preschoolers stayed focused and did not get fatigued, the procedure was designed to be completed in 10 minutes or less.

Results: Food preferences and indices of healthfulness were analyzed and data was compared related to demographic data and type of preschool utilizing International Business Machines Corporation (IBM) Statistical Package for the Social Sciences (SPSS). Frequency scores of demographic data of the preschoolers (n=28) revealed: gender (boys=14, girls=14), age (4 years=16, 5 years=12), ethnicity (Caucasian=16, African American=4, Latino=1, East Asian=3, South Asian=4), breastfed (yes=21, no=7), breastfeeding duration (0-3 months =3, 4-6 months=2, 7-12 months=11, 13-18 months=4, 10-24 months=0, >24 months=1), dietary preferences (Halal=2, Kosher=0, Vegetarian=1, Other=4, None of the above=21), food allergies or intolerances(yes=6, no=22). Additionally, there were 14 preschoolers at each of the two research sites.

Frequency scores of taste preferences and healthfulness showed that the majority of the preschoolers responded "yummy" to all food items, except soda. These scores also showed that the majority of the preschoolers responded "good for me" to all food items, except soda and cookie. These results indicate an association between taste preference and healthfulness.

A Chi-square test for independence means (with Yates Continuity Correction) indicated a significant association between taste preferences of broccoli and healthfulness of broccoli, χ^2 (1, n=28)=8.31, p=.004 (Table 1), a significant association between taste preferences of milk and healthfulness of milk, χ^2 (1, n=28)=4.52, p=.033 (Table 2), and not significant association between taste preferences of pizza and healthfulness of pizza, χ^2 (1, n=28)=2.87, p=.09.

Significance: Upon completion of the study, parents were given their child's completed PFPMT ™ as well as healthy food tips for their preschoolers to aid in understanding their child's food preferences as well as increase their knowledge of nutritional sources of food for preschoolers. Future use of the PFPMT ™ by healthcare professionals/educators may aid in identifying children at risk for unhealthy eating behaviors and possible obesity. The risk of obesity needs to be addressed before children establish a pattern of eating that will be difficult to break. A child who is exposed to healthy eating habits will translate that knowledge into adulthood and will perpetuate a cycle of healthfulness for future generations.