

What Preschoolers Eat: A Pilot Study

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Abstract

Many preschool programs are required to comply with guidelines set out by the Child and Adult Care Food Program (CACFP). However, CACFP guidelines are minimal and programs are permitted to provide non-nutritional foods as long as the minimum requirements have been met. Preschool age is thought to be a critical time for development of healthy food habits, thus preschool programs potentially play an important role in long-term health through the foods to which they expose children. Children consume a majority of their kilocalories and other nutrients while in school. Therefore, the purpose of the current project is to pilot test a protocol for evaluating how well preschool programs meet a higher standard – the Dietary Guidelines for Americans. From the audit of one preschool cycle menu, with clarifications via a pantry inventory and cook interview, findings are compared to the Dietary Guidelines for Americans. The findings and a refined protocol will provide the basis for a larger study to assess dietary adequacy in the preschool setting.

Introduction

The Dietary Guidelines for Americans provide science-based dietary and physical activity advice for people ages two and older to promote health and minimize risk of chronic disease. As such, they serve as the basis for federal nutrition programs and nutrition education programs, such as the National School Lunch Program. However, childcare and preschool programs are exempt from these standards. The federal nutrition and nutrition education programs are revised every five years, with the most recent edition released in January 2005 (1).

Key recommendations in 2005 include:

- ◆ Choose a variety of fruits and vegetables each day. In particular, select from all five vegetable subgroups (dark green, orange, legumes, starchy vegetables, and other vegetables) several times a week.
- ◆ In the fruit group, consumption of whole fruits (fresh, frozen, canned, dried) rather than fruit juice for the majority of the total daily amount is suggested to ensure adequate fiber intake.
- ◆ Consume 3 or more ounce-equivalents of whole-grain products per day, with the rest of the recommended grains coming from enriched or whole-grain products. In general, at least half the grains should come from whole grains.
- ◆ Keep total fat intake between 30 to 35 percent of calories for children 2 to 3 years of age and between 25 to 35 percent of calories for children and adolescents 4 to 18 years of age, with most fats coming from sources of polyunsaturated and monounsaturated fatty acids, such as fish, nuts, and vegetable oils.

- ◆ For children ages 2-8 years, consume 2 cups per day of fat-free or low-fat milk or equivalent milk products.
- ◆ When selecting and preparing meat, poultry, dry beans, and milk or milk products, make choices that are lean, low-fat, or fat-free.
- ◆ Limit intake of fats and oils high in saturated and/or *trans* fatty acids, and choose products low in such fats and oils.
- ◆ Choose and prepare foods and beverages with little added sugars or caloric sweeteners, such as amounts suggested by the USDA Food Guide and the DASH Eating Plan.
- ◆ Consume less than 2,300 mg (approximately 1 tsp of salt) of sodium per day.
- ◆ Choose and prepare foods with little salt. At the same time, consume potassium-rich foods, such as fruits and vegetables.

These key recommendations are based on the most recent scientific health findings concerning nutrition for all ages of people in the United States. As previously mentioned, childcare and preschool programs are not required to follow these recommendations. The Child and Adult Care Food Program (2) is a program that provides food for children and adults under the supervision of a care center. The CACFP is does not follow as stringent of rules as the National School Lunch Program. The CACFP enables non-profit care centers to provide meals for children and adults who need food. The CACFP is managed by the United States Department of Agriculture, as is the Dietary Guidelines for Americans. In order for the CACFP to aid a Child or Adult Care Center, the center must fall below certain financial circumstances.

Most childcare centers and preschools are for profit, thus do not meet the requirements to get aid from CACFP (2). These same preschools also are not required to follow the Dietary Guidelines for Americans, nor provide a certain percentage of food groups based on the Guidelines. This reality is the impetus for this pilot research project to determine the variety of foods preschoolers are offered during the preschool day and how well these foods match the recommendations set out in the Dietary Guidelines for Americans.

Literature Review

The interest pertaining to what preschoolers actually eat and are offered for consumption during their time in the childcare program is not novel. One Australian study done in 2002 focused on the development of requirements for long-day childcare programs. The requirements would be based on offering a percentage of Recommended Dietary Intakes for nutrients (2). The children in the study were between two and five years of age. This study was conducted throughout all Australian states and territories. The results showed that childcare centers varied greatly in providing certain percentages of RDIs. The total mean daily intake exceeded the RDIs of a majority of vitamins and minerals. Iron was the only nutrient for which the RDI was not met by at least 50%. The study concluded that a recommendation of at least 50% of the RDI for nutrients should be provided to children under the care of long-day childcare programs. No evidence proved that children are at greater nutritional risk while under the care of a childcare facility (3).

Environmental influences play a large role in determining how a child eats. They eat what their parents eat, and commonly have the same aversions to foods as their parents. The setting for the preschool or childcare center may either influence or discourage healthful eating behaviors (4). One study focused on the environmental influences and their effects on children's growth. Preschool age children are at a critical time of their growth. The study, conducted in 2006, looked at the international growth standard for children 1 to 19 years in age. Good nutrition and healthcare were the largest factors in which encouraged positive growth in children internationally. America is at a huge advantage with its developed world wealth. Most people around the world would not think that America would have a problem with malnutrition and inadequate child

growth, but it can easily occur in America (4). This research study showed one out of a plethora of aspects that affect how a young child eats food.

Another study proposed that eating in larger groups, such as in a preschool setting, could produce a positive effect. This is a very recent study, which will be published in May 2007 (5). The purpose of the research was to find whether or not children consume more food and calories when eating in large groups than eating alone or with smaller groups. The study was set up with different numbers of children in groups eating snacks. The amount of food was recorded by weight in grams. In compiling the results, researchers found that larger group eating produced a shorter latency to start eating, speedier eating rates, and a reduction in social interaction while eating. This study showed that there is potential for group size to modify negative eating behaviors (5). In a preschool, the children, usually a group of 6-20 children eat together at the same time. This could cause children to be more experimental in the foods that they eat, but a larger emphasis needs to be placed on healthful foods that are recommended by the Dietary Guidelines for Americans.

Healthy eating starts at an early age in children with many compounding influences. In largely populated areas, fresh fruits and vegetables are harder to come by. The fruits and vegetables are grown in rural areas of the country and must be preserved and transported to the more populous areas where growing fresh foods is nearly impossible. A study conducted in Missouri focused on how families growing their own produce at home increased consumption of fresh produce. The study showed that the consumption of fresh produce was increased with availability of homegrown produce, but the problem for the rest of the U.S. is that homegrown produce is not available

everywhere, especially where it is needed the most. Educational programs that encourage awareness and consumption of fresh produce could easily cause the same effect (6). In the same way, preschoolers could be introduced to the consumption of more fresh produce by learning to grow plants and produce, which could be easily incorporated into the children's education curriculum (6).

In the 2005 Dietary Guidelines for Americans, fresh fruits and vegetables are strongly recommended several times a day. Some children are more eager to eat fresh produce, while others are very hesitant. This may be due to the more hesitant children's parents discouraging them through their own distaste for fresh produce. A 2007 study from the Department of Health Education and Promotion in the Netherlands focuses on the parents' roles in children eating or not eating vegetables. This study explored the effects of parental produce consumption, availability of produce in home, general and daily exposure to produce, current dietary habits as well as psychological factors in fruit and vegetable consumption in children aged 4 to 12. As with the previous study, exposure was a huge indicator in whether or not a child would consume fruits and vegetables. The study suggested educational promotion of nutrition with a concentration on fruits and vegetables, which would make the consumption of fresh produce psychologically habitual (7). Although this study was done in the Netherlands, its applications could be applied to preschoolers and preschools in America. This study dealt with the psychological side to the increased consumption of fruits and vegetables, strongly recommended food groups in the American diet.

Focusing more on the clinical side of health of preschoolers, a study published in the American Journal of Clinical Nutrition considered how nutrition affects brain

development for different properties of nutrients and brain measurement. The two main factors that impact brain growth are nutrient intake and biological growth factors within the body. During infancy, and young childhood, brain growth and development is critical. This means nutrient intake is critical as well. There are specific nutrients that have more beneficial effects on the brain for brain growth than other nutrients. Protein and certain fats play huge roles in brain development as well as micronutrients iron, copper, zinc, selenium, iodine, choline, vitamin A and folate (8). Although this study focused somewhat on neonatal nutrition, this definitely pertains to young children of the preschool age. Young children's brains grow immensely in the first few years of life; even if there was a deficiency during the child's neonatal development.

Reverting back to environmental factors, marketing is another way that deeply influences how young, preschool-age children eat. The Department of Pediatrics at the University of Colorado, Denver studied a marketing campaign that targeted preschool children. This campaign was to try to get preschoolers to try new foods: to combat preschooler neophobia. For the experiment, four head start centers participated in the program. Different social marketing techniques were utilized towards preschool children. The result of the experiment was that social marketing encourages the reduction of children's neophobia (9). This is an effective, but very time-consuming way for preschools to work to get children to try new, healthy foods. The preschool must be very willing to devote time to social marketing to influence its children to try new, healthy foods like fruits and vegetables.

Through literature review, conducted research has been seen, some of which has even tried to implement nutrition requirements for preschools. More locally in

Knoxville, TN, action and intervention can be taken to ensure that children in the centers are getting enough daily-recommended nutrition for healthy, substantial growth.

Materials & Methods

In order to develop methodology to assess dietary quality in the preschool setting, one preschool was selected for pilot testing. Because human subjects were involved in the research study, an IRB Form A was to be completed before approaching the prospected project (Appendix A). Informed consent was obtained from the participating preschool (Appendix B). A copy of the current cycle menu (Appendix C) was collected and reviewed and used as a basis to develop interview questions. The primary cook for the preschool was subsequently interviewed to determine details regarding forms of foods served, ingredients in multi-ingredient foods, and food preparation methods such as baking, frying, etc. A pantry inspection was incorporated to verify findings and clarify results from the interview. As preschool programs often serve family style and children have the opportunity to select what they will eat of the foods offered and how much they eat, we counted how frequently foods from each group were offered as an “opportunity” to consume. These opportunities were then compared to the recommended daily intake from each food group as delineated in the Dietary Guidelines for Americans. Additionally, food offerings were broken down according to more detailed aspects of the guidelines. For example, it is recommended that half of grain servings should be whole grains, so both the total number of grains consumed plus the percentage of those in the form of whole grains were calculated. Since children consume lunch and two snacks during all-day preschool, it is expected that approximately half of daily food consumption occur in the preschool setting.

Results

The pilot preschool has a 4-week cycle menu, which includes a morning snack, lunch, and afternoon snack each day. They operate with a fall/winter menu and a spring/summer menu. The fall/winter cycle was in effect during this study and thus, is the one analyzed for the purposes of this project. The cook is responsible for planning menus, purchasing and preparation of foods. Foods are purchased locally from Sysco, Kroger, and Wal-Mart. The kitchen adjoins the dining area in the basement where lunches are eaten “family-style,” in which the different foods in larger containers are passed around the table. The preschool teachers are responsible for supervising children during meals and snacks and are able to encourage healthy eating, although they are not to force any foods upon the children to eat against their will.

Figure 1 shows the average number of servings provided daily in the preschool as a percentage of the Dietary Guidelines for Americans recommendations based on the 1,600-kilocalorie meal plan outlined in the USDA Food Guide, which translates the Dietary Guidelines for Americans into food patterns.

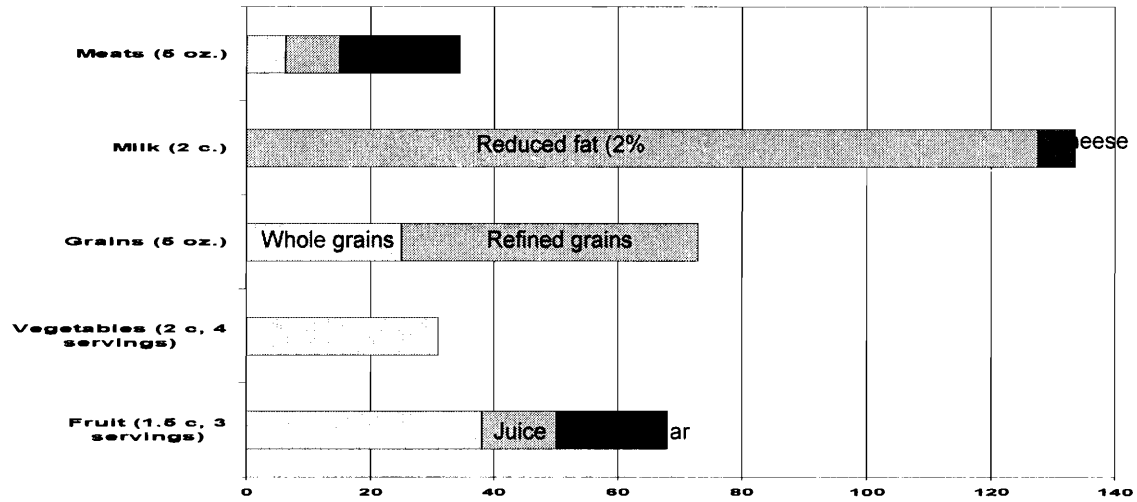


Figure 1

Legend: Gold indicates leaner choices with no added sugar, orange less desirable; red indicates added sugar or higher fat choices are offered.

Figure 2 shows the percentage of recommended servings from each vegetable subcategory provided in the pilot preschool.

Recommended in 1,600 kilocalorie meal plan:

- Dark green: 2 c/week
- Orange: 1.5 c/week
- Legumes: 2.5 c/week
- Starchy: 2.5 c/week
- Other: 5.5 c/week

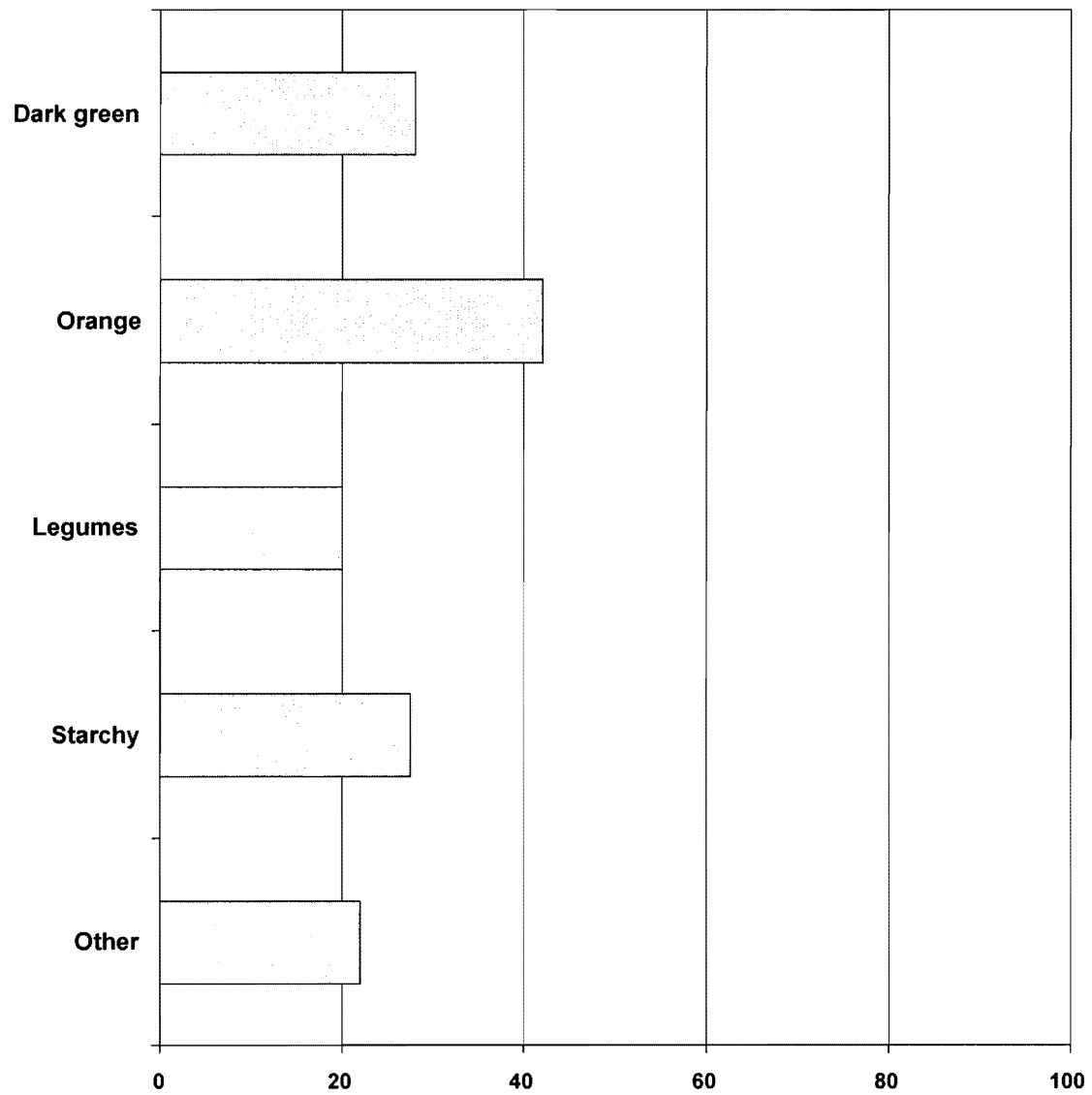


Figure 2

Pre-packaged foods are not served at the audited preschool; most foods are homemade. This action is taken to provide healthier meals for the children while at the preschool. Meats are heated by stovetop boiling or conventional oven heating; frying is not used in the kitchen. USDA advocates lean meats, yet meats used do not have the lean labeling, e.g., ground chuck beef, chicken breast. Fish and chicken nuggets are breaded, adding to the grains food group. The USDA suggests 50% of grain intake to be whole-grain for health promotion. Although whole-grain breads are used for sandwiches, many other grain items are refined due to time restraints and preparation convenience. Due to higher costs and lack of preparation time, fresh fruits and vegetables are used only on a limited basis. Children receive fresh fruit on Mondays, Wednesdays, and Fridays. Fresh vegetables are rare although all of the vegetables (except spinach and potato pearls) served are fresh-frozen. Vegetables span different categories listed by the USDA, e.g., broccoli, carrots, peas, iceberg lettuce, corn, and potatoes. Fruits, aside from fresh, are nearly all canned and a few are dried. Canned fruits are either in their own juice, light syrup, or water. All juices used are 100% fruit juice. The Dietary Guidelines for Americans suggest non-fat milk as the healthiest choice for children 2-8; the preschool serves 2% reduced fat milk. Unsalted butter is used as the fat of choice in preparing dishes.

Conclusions

This project provided valuable experience in developing and refining methodology for a menu audit protocol to assess dietary adequacy in the preschool setting. The primary limitation of the protocol is that actual food intakes are not assessed. Rather the opportunity to consume various foods is observed. Thus, some children may select more and some less than the amounts calculated. However, this methodology provides an overall picture of foods available to preschoolers. As one meal and two snacks are served during the day, it is expected that approximately half of daily food consumed while in preschool and, thus, half of recommendations should be met in preschool. The pilot site clearly met recommendations for fruit, milk, grains, and fruit although whole grains accounted for less than half of those provided. Milk provided was reduced fat rather than low fat or non-fat. Many of the meat choices are high in fat. Additionally, vegetable selections fell short of recommendations across all types. Limitations in providing healthier foods cited by the cook included time and money, although the interest in providing nutritionally for children is there.

Recommendations

There are a some recommendations that can be made for the preschool under study. One thing that could easily be changed 2% reduced fat milk with non-fat milk to reduce the amount of fat intake. Low-fat or reduced fat cheeses could also be used. A wider variety of different colored vegetables could be offered to the children as well. The amount of vegetables a young child eats should follow the recommendations in the 2005 Dietary Guidelines for Americans in the young children category. The recommendations can be seen under Figure 2 in the Results section. The use of refined sugars could easily be lessened with varying ingredients in recipes used to make some of the menu items.

The latest MyPyramid information and education materials could be used with the children (10). The website offers online games and other fun activities, such as coloring book pages. The preschool does very well in the way that the food is presented to the children. The children are not forced to eat any food that they do not want to or are unsure about. The children are encouraged to try new foods by their teachers.

Acknowledgements

We sincerely thank the pilot preschool for their willingness to participate in this project.

Appendix A

FORM A

Certification for Exemption from IRB Review for Research Involving Human Subjects

A. PRINCIPAL INVESTIGATOR(s) and/or CO-PI(s) (For student projects, list both the student and the advisor.): Cheryl Cantrell, student & Melissa Hansen-Petrik, advisor

B. DEPARTMENT:
Nutrition

C. COMPLETE MAILING ADDRESS AND PHONE NUMBER OF PI(s) and CO-PI(s):

Cheryl Cantrell	Melissa Hansen-Petrik, PhD, RD
860 20 th St. Apt #819	229 Jessie Harris Building
Knoxville, TN	1215 West Cumberland Ave.
37916	Knoxville, TN 37996-1920

D. TITLE OF PROJECT:
Do preschool programs follow the Dietary Guidelines for Americans? A pilot project.

E. EXTERNAL FUNDING AGENCY AND ID NUMBER (if applicable): NA

F. GRANT SUBMISSION DEADLINE (if applicable): NA

G. STARTING DATE (NO RESEARCH MAY BE INITIATED UNTIL CERTIFICATION IS GRANTED.): March 5, 2007

H. ESTIMATED COMPLETION DATE (Include all aspects of research and final write-up.): May 1, 2007

I. RESEARCH PROJECT

1. Objective(s) of Project (Use additional page, if needed.):

The purpose of this project is to pilot test methodology for assessing the extent to which preschool programs meet the Dietary Guidelines for Americans via provision of meals and snacks. The preliminary findings will be presented at the UT Exhibition for Undergraduate Research and Creative Achievement and the Tennessee Dietetic Association meeting in 2007. They will also be used as preliminary data in application for extramural funding for a larger study

2. Subjects (Use additional page, if needed.):

One preschool program (UT Early Learning Center) will be assessed with involvement of the executive director and the primary cook. The children in the preschool program will not be a part of the assessment. The study will begin in March 2007 and end in May 2007. This program meets required criteria by providing full-time preschool care and providing meals and snacks subject to regulation via the Child and Adult Care Food Program administered by the federal government.

3. Methods or Procedures (Use additional page, if needed.):

The cycle menu of a local preschool will be audited using a modified CATCH protocol to compare the foods children are being served to the recommendations set out in the Dietary Guidelines for Americans. The primary cook will be interviewed to clarify the composition/content of menu items and cooking methods utilized. Supplies will be audited and grocery receipts may be audited to validate details concerning food production. This project will

provide pilot data and the basis for a larger study and also will benefit the preschool program under study through provision of constructive feedback and recommendations for menu improvements. As there is only one program involved, the risk exists for the cook to be identified. Protection will be provided to the extent possible by not including the cook's name in any materials presented without her express permission. Only the listed researchers (C. Cantrell and M. Hansen-Petrik) will have access to the raw data collected.

- 4. CATEGORY(s) FOR EXEMPT RESEARCH PER 45 CFR 46** (See instructions for categories.):
Categories 3 (interview: primary cook) and 4 (document: cycle menu)

J. CERTIFICATION: The research described herein is in compliance with 45 CFR 46.101(b) and presents subjects with no more than minimal risk as defined by applicable regulations.

Principal Investigator:

Date	Name	Signature
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Student Advisor:

Date	Name	Signature
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Department Review Committee Chair:

Date	Name	Signature
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APPROVED:
Department Head:

Date	Name	Signature
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COPY OF THIS COMPLETED FORM MUST BE SENT TO COMPLIANCE OFFICE IMMEDIATELY UPON COMPLETION.

Appendix B

INFORMED CONSENT STATEMENT

“Do preschool programs follow the Dietary Guidelines for Americans? A pilot project”

INTRODUCTION

This study will involve the cooks at the University of Tennessee, Knoxville’s Early Learning Center. All involved in the preparation of the children’s meals during school-time are invited to participate in this project to further investigate the nutrition provided to the children while at the Early Learning Center. The purpose of the current project is to pilot test a protocol for evaluating how well preschool programs meet a higher standard – the Dietary Guidelines for Americans.

INFORMATION ABOUT PARTICIPANTS' INVOLVEMENT IN THE STUDY

During the investigation, the food used to prepare the foods that the children eat will be looked at. The cooks will be asked how the food is prepared and various other questions pertaining to the quality of the food. From the cook interviews and the audit of the foods in the pantry and quantities given to the children, a comparison with the Dietary Guidelines for Americans will be made.

An initial interview will be held in the time allowed by the Early Learning Center and if any information is necessary after the first interview, an additional interview will be set up.

RISKS

No risks are presented in this research project. The food will not be harmed or touched. It will be only viewed to provide the information necessary for the research project.

BENEFITS

Through this project, the findings and a refined protocol will provide the basis for a larger study to assess dietary adequacy in the preschool setting.

CONFIDENTIALITY

Any personal information from this project will be kept confidential. Data will be stored securely and will be made available only to persons conducting the study unless participants specifically give permission in writing to do otherwise. No reference will be made in oral or written reports, which could link participants to the study.

_____ Participant's initials

)

The information from this pilot study will be able to be used for further investigation. The Early Learning Center will benefit by learning what is healthy in their current meal plans and what can be done to make their meal plans healthier in the future.

CONTACT INFORMATION

If you have questions at any time about the study or the procedures, you may contact the researcher, Cheryl Cantrell, at (865) 640-8875. If you have questions about your rights as a participant, contact the Office of Research Compliance Officer at (865) 974-3466.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at anytime without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed your data will be returned to you or destroyed.

CONSENT

I have read the above information. I have received a copy of this form. I agree to participate in this study.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

Appendix C

The 4-week Cycle Menu

2006 Spring & Summer Menu - Week #1
 (Weeks of April 3rd, May 1st, May 29th, June 26th, July 24th, August 21st, September 18th)

EVENT	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM SNACK	Kix Cereal™ Milk	Blueberry Muffins Milk	Cinnamon Toast Milk	Corn Chex Milk	Biscuits Grape Jam Milk
LUNCH	Macaroni & Cheese Peas & Carrots Applesauce Whole Wheat Bread Milk/Water	*Beef Taco w/*shell Lettuce & Cheese Whole Kernel Corn Mandarin Oranges Milk/Water	*TunaNoodleCasserole Broccoli Peaches Whole Wheat Bread Milk/Water	*BBQ Chicken Cole Slaw Corn on Cob Pears Rolls Milk/Water	Cheese Pizza Green Beans Pineapple Tidbits Breadsticks Milk/Water
PM SNACK	Apple slices Rice Cakes Peanut Butter Water	Wheat Ritz cracker Cheddar Cheese Grape Juice	Bananas Vanilla Pudding Water	Saltine Crackers Peanut Butter Apple Juice	Mixed Fruit Triscuits™ Water

*Adaptations will be made for infants and toddlers, food allergies, and vegetarians.

2006 Spring & Summer Menu - Week #2
 (Weeks of April 10th, May 8th, June 5th, July 3rd, July 31st, August
 28th, September 25th)

EVENT	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM SNACK	Cheerios Milk	Cinnamon Raisin Muffins Milk	Cheesy English Muffins Milk	Rice Chex Cereal Milk	Toast Strawberry Jam Milk
LUNCH	Cheese Tortellini Spinach Apricots Rolls Milk/Water	*Sloppy Joe's w/Bun Whole Kernel Corn Celery Sticks Applesauce Milk/Water	*Sweet & Sour Chicken Steamed Rice Broccoli Pineapple Tidbits Milk/Water	*Fish Portions Cole Slaw Baked Beans Mandarin Oranges Milk/Water	*Peanut Butter Jellies Cucumber Slices Tator Tots Tangy Cherry Salad Milk/Water
PM SNACK	Saltine Crackers Cheddar Cheese Apples Water	Trail Mix Grape Juice	Strawberries Graham Crackers Yogurt Fruit Dip Water	Rice Cakes Peanut Butter Apple Juice	Orange Sherbet Animal Crackers Water

*Adaptations will be made for infants and toddlers, food allergies, and vegetarians

2006 Spring & Summer Menu - Week #3
 (Weeks of April 17th May 15th, June 12th, July 10, August 7,
 September 4th)

EVENT	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM SNACK	Kix Cereal Milk	Mixed Berry Muffins Milk	Vanilla Yogurt/ w Nutty Nuggets Milk	Corn Chex™ Milk	Bagels Cream Cheese Milk
LUNCH	Macaroni & Cheese Peas & Carrots Pears Whole Wheat Bread Milk/Water	*Chicken Patty & Bun Whole Kernel Corn Cole Slaw Pineapple Tidbits Milk/Water	*Meatloaf Creamed Potatoes Peas Peaches Rolls Milk/Water	Beans & *Franks Cauliflower& Broccoli Mandarin Oranges Cornbread Milk/Water	*Italian Bake Green Beans Apricots French Bread Milk/Water
PM SNACK	Rice Cake Peanut Butter Apples Water	Chocolate Grahams Cream Cheese Apple Juice	Bananas Fruit Dip Water	Triscuits Cheese Cubes Grape Juice	Fresh Fruit Graham Crackers Water

*Adaptations will be made for infants and toddlers, food allergies, and vegetarians

2006 Spring & Summer Menu - Week #4
 (Weeks of April 24th, May 22nd, June 19th, July 17th, August 14th,
 September 11th)

EVENT	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM SNACK	Cheerios Milk	Strawberry Muffin Milk	Cinnamon Bites Milk	Rice Chex Milk	Cinnamon- Raisin Bread Milk
LUNCH	Pinto Beans Greens Applesauce Cheddar Cornbread Milk/Water	*Fish Portions Wild Rice California Blend Vegetables Pineapple Tidbits Milk/Water	*Chicken Nuggets Peas Mashed potatoes Mandarin Oranges Rolls Milk/Water	Spaghetti Noodles *Meat Sauce Green Beans Pears French Bread Milk/Water	*Ham & Cheese Subs Tomato Wedges Cucumber Slices Ranch dip Peaches Milk/Water
PM SNACK	Triscuits Cheese Cubes Grapes Water	Graham Crackers Cream Cheese Apple Juice	Pears Rice Cake *Peanut Butter Water	Animal Crackers Vanilla Yogurt Cran-Grape Juice	Frozen Vanilla Yogurt Vanilla Wafers Water

*Adaptations will be made for infants and toddlers, food allergies, and vegetarians

2006/2007 Fall & Winter Menu, WEEK 1
October 2, October 30, November 27, January 8, February 5,
March 5

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM SNACK	Multi-Grain Cheerios Milk	Mini-Waffles Maple Applesauce Milk	Cinnamon Toast Milk	Life Cereal Milk	Blueberry Muffins Milk
LUNCH	Macaroni & Cheese Peas & Carrots Applesauce Rolls Milk	Beef* Tacos w/ Shell Shredded Cheese Refried Beans Corn Pears Milk	Cheese Toast Tomato Soup Oyster Crackers Mandarin Oranges Milk	Chicken* Divan Carrots Pineapple Tidbits Whole Wheat Bread Milk	Cheese Pizza California Style Vegetable s Peaches Breadstick s Milk
PM SNACK	Rice Cakes Peanut Butter* Apples Water	Wheat Ritz Vegetable Cream Cheese Grape Juice	Graham Crackers Pears Water	Saltine Crackers Peanut Butter* Apple Juice	Triscuits Cheese Cubes Grapes Water

*Adaptations will be made for infants & toddlers, and vegetarians

2006/2007 Fall & Winter Menu WEEK 2
October 9, November 6, December 4, January 15, February 12,
March 12

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM SNACK	Kix Cereal Milk	Buttered Toast Grape Jam Milk	Mixed Berry Muffins Milk	Corn Chex Milk	Brown Sugar & Cinnamon Oatmeal Milk
LUNCH	Pinto Beans Macaroni & Tomatoes Applesauce Cornbread Milk	Roast Turkey* Buttered Rice Green Beans Pineapple Tidbits Rolls Milk	White Chicken* Chili Cheese Toast Oyster Crackers Mandarin Oranges Milk	Fish* Nuggets Mashed Potatoes Broccoli w/cheese Whole Wheat Bread Peaches Milk	Italian* Bake Peas & Carrots Pears French Bread Milk
PM SNACK	Saltine Crackers American Cheese slices Apples Water	Rice Cakes Peanut Butter Cran-Apple Juice	Chocolate Grahams Cream Cheese Bananas Water	Triscuits Cheddar Cheese cubes Grape Juice	Graham Crackers Peanut Butter Raisins Water

*Adaptations will be made for infants & toddlers, and vegetarians

2006/2007 Fall & Winter Menu WEEK 3
October 16, November 13, December 11, January 22, February 19, March 19

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM SNACK	Multi-Grain Cheerios Milk	Cinnamon Bites Milk	Bagels Cream Cheese Milk	Life Cereal Milk	Strawberry Muffins Milk
LUNCH	Macaroni & Cheese Spinach Peaches Whole Wheat Bread Milk	Chicken*Patty Bun Carrots Broccoli Pineapple Tidbits Milk	Vegetable Alphabet Soup Cheese Toast Oyster Crackers Pears Milk	Meatloaf* Creamed Potatoes Peas & Carrots Mandarin Oranges Rolls Milk	Chicken* & Noodles Green Beans Apricots Whole Wheat Bread Milk
PM SNACK	Rice Cake Peanut Butter* Apple Water	Saltine Crackers Cheddar Cheese Cubes Grape Juice	Graham Crackers Banana Water	Ritz Crackers String Cheese Apple Juice	Triscuits Oranges Water

*Adaptations will be made for infants & toddlers, and vegetarians

2006/2007 Fall & Winter Menu WEEK 4
October 23, November 20, December 18, January 29, February
26, March 26

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM SNACK	Kix Cereal Milk	Toasted English Muffin & Grape Jam Milk	Banana Bread Milk	Corn Chex Milk	Cheese Toast Milk
LUNCH	Cheese Ravioli /sauce Spinach Pears Whole Wheat Bread Milk	Baked Ham* Sweet Potatoes Lima Beans Pineapple Tidbits Rolls Milk	Spaghetti w/meat* sauce Green Beans Applesauce French Bread Milk	Chicken* Nuggets Mashed Potatoes Broccoli Peaches Rolls Milk	Vegetable Beef Soup Celery Sticks Spiced Apples Cornbread Milk
PM SNACK	Graham Crackers Cream Cheese Apples Water	Rice Cakes Peanut Butter* Apple Juice	Saltine Crackers Cheese slices Grapes Water	Raisin Bread Cream Cheese Orange Juice	Triscuits Dried Fruit Mix Water

*Adaptations will be made for infants & toddlers, and vegetarians

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