Dietary Contributors to Food Group Intake in Preschool Children Attending Family Childcare Homes

Andrea Ramirez,1 Maya Vadiveloo,1 Mary Greaney,2 Patricia Risica,3 Kim Gans,4 Noereem Mena,5 and Alison Tovar1

1University of Rhode Island; 2Department of Health Studies, University of Rhode Island; 3Brown University; 4University of Connecticut; and 5University of Colorado

Objectives: To identify and describe the food sources that contribute to food group intake in preschool children attending family childcare homes (FCCH) in Rhode Island and to examine differences by provider ethnicity.

Methods: Baseline data (n = 120 FCCH and n = 370 children) from Healthy Start, an ongoing cluster-randomized trial, were used. Information about foods and beverages consumed by the children was collected using the Dietary Observation in Child Care. The Nutrition Data System for Research food group classification was used to define food groups, sources and servings. The contribution of food sources to major food groups was calculated using ratio of means. Differences in mean ratios between Latino and non-Latino providers were tested with ANOVA and ANCOVA (P < 0.05) and Bonferroni adjustments were made for multiple comparisons.

Results: The analysis included 120 FCCH providers, all female, 68% were Latino, mean age of 48.9 ± 9.0 years; and 370 preschool children, 57% were Latino, mean age of 3.4 ± 0.9 years. Across FCCH, juice contributed the highest proportion to the fruits consumed (0.85 ± 0.24), and most vegetables consumed were non-starchy (0.61 ± 0.34). Nearly, three-fourths of dairy was low-fat (0.71 ± 0.30) and most milk/yogurt was unsweetened (0.85 ± 0.20). Three fourths of the grain servings consumed were refined (0.75 ± 0.22). The majority of the fats were vegetable oils (0.89 ± 0.20), and syrup/honey/jelly contributed more than half (0.50 ± 0.41) to the total sweets consumed. Children in non-Latino vs Latino FCCH consumed a significantly higher proportion of nuts and seeds (0.21 ± 0.34 vs 0.05 ± 0.13) and animal fats (0.37 ± 0.36 vs 0.11 ± 0.20). Similarly, children attending non-Latino FCCH ate a significantly higher proportion of non-starchy vegetables (0.82 ± 0.24 vs 0.52 ± 0.34), but a significantly lower proportion of legumes (0.05 ± 0.19 vs 0.33 ± 0.31) compared to Latino FCCH.

Conclusions: FCCH providers should be encouraged to include more whole fruits and whole grains. Differences between the foods consumed in FCCH according to the ethnicity of the provider, highlights the importance of considering cultural differences when developing tailored interventions to improve children’s dietary intake at these settings.

Funding Sources: National Institutes of Health- National Heart, Lung, Blood Institute, National Institutes of Health.