P199 Recess or Lunch First? Impact on Recess Physical Activity Levels and Pro-Social Behaviors and Classroom Readiness to Learn

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Objective: With calls for recess before lunch, more research is needed to understand how the order of recess and lunch impacts recess physical activity levels and social behavior, and classroom readiness to learn. This study explores these relationships.

Design, Setting, Participants, and Intervention: A cross-sectional study with 2nd and 3rd graders (n = 2664) from 14 New York City public elementary schools.

Outcome Measures and Analysis: During recess, the System of Observing Play and Leisure Activity in Youth (SOPLAY) assessed physical activity level (sedentary, walking or vigorous) and the System of Observing Play Engagement Episodes at Recess (SOPEER) assessed social behaviors ("physical sportsmanship", "verbal sportsmanship", "physical conflict," and "verbal conflict"). Minutes of playtime at recess were recorded, to determine if order impacted length of time to play. Two days of recess were observed at all schools. Teachers completed the Survey of Readiness, Engagement And Disruption in Youth (SOREADY) with 4 scales: behavioral engagement, social engagement, behavioral disaffection, social disaffection.

Results: Whether recess was before or after lunch, there was no difference in minutes of playtime, or social behaviors during recess. However, both boys and girls were more vigorously active at recess when lunch was first (9%; $p=0.04$ and 12%; $p=0.009$ respectively). Teachers reported better behavioral engagement in the classroom, with lunch before recess ($p=.012$).

Conclusions and Implications: With lunch before recess being associated with more physical activity and readiness to learn in the classroom, these results contradict some prior research. Further research is warranted to soundly inform school policy makers on whether recess should come before or after lunch for young school children.

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P200 Development of a Meal Creation Tool to Assess Knowledge and Preference Among Preschool Children

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Objective: The purpose of this study was to develop and pilot-test a Pictorial Meal Creation Tool (PMCT) to assess preschool children's knowledge of and preference towards healthy foods/beverages commonly served during snack and mealtime.

Design, Setting, and Participants: Researchers developed and cognitively evaluated 32 high-quality photographs of foods/beverages. The final PMCT featured 20 photographs of foods presented to children in five groups (four photographs/group): snack, main entrée, fruit/vegetable side dish, dairy/grain side dish, and beverage. The PMCT was administered to 32 children in three early childcare centers on two separate sessions: knowledge was assessed by asking children to select a "healthy" snack, meal (entrée, two side dishes), and beverage for a proxy teddy bear; and preference was assessed by asking children to select a "preferred" snack, meal, and beverage for themselves.

Outcome Measures and Analysis: Data were analyzed using Spearman's Rho and Wilcoxin signed-rank tests. Foods were ranked from least healthy (1) to most healthy (4). No significant differences between the selected "healthy" and "preferred" snacks ($H=2.50\pm1.38$; $P=2.00\pm1.08$), meals ($H=2.31\pm.65$; $P=2.14\pm.48$), or beverages ($H=2.20\pm1.19$; $P=1.87\pm.97$) were observed; however, children's "healthy" selections ranked higher on average. Photographs are a promising way to assess knowledge/preference among preschool children.

Conclusions and Implications: Knowledge and preference towards healthful foods can help researchers better understand developing health behaviors; however, few validated tools are available to evaluate these constructs among young children. The application of PMCT to assess children's food preferences is promising; however, further research is needed to determine the efficacy of these methods to assess knowledge. Further validation research in a larger sample is also warranted.

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P201 HEART Clubs: Encouraging Healthy Eating and Activity in Rural Towns

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Objective: To evaluate the implementation of a novel civic engagement curriculum (HEART Club) designed to catalyze positive environmental change in rural communities.

Target Audience: Cooperative Extension educators recruited 7-12 community members (n=26) from three rural Northeastern towns to form HEART Clubs.

Theory, Prior Research, Rationale: Environmental conditions underlie many of the health disparities observed in rural areas, where the impact of poverty, lower education, and unemployment is compounded by factors such as geographic isolation and limited access to nutritious foods and physical activity resources. Civic engagement initiatives are a potential strategy for improving food and physical activity environments; however, research on the effectiveness of this approach in rural contexts is limited.

Description: The HEART Club curriculum was designed to engage rural residents in a stepwise process to create

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