People Plants and the Planet: Determinants of Food Choice and Factors Influencing How Adolescents Care for the Planet

Sara Elnakib, PhD, MPH, RDN, elnakisa@njaes.rutgers.edu, Rutgers Cooperative Extension; Shannon Barlow, MPH, Rutgers Cooperative Extension; Shauna Downs, PhD, MS, Rutgers School of Public Health; Ethan Schoolman, PhD, Rutgers University; Peggy Policastro, PhD, RDN, Rutgers University

Background: Adolescents exceed dietary recommendations for added sugar, saturated fat, sodium, and refined grains while consuming sufficient quantities of meat, poultry, and eggs. However, they are under-consuming plant-based food groups such as fruits and vegetables, whole grains, legumes, nuts, and seeds which are health-promoting and have a relatively low environmental footprint. Shifting adolescents’ food choices towards increasing their fruits, vegetables, whole grains has the potential to improve health and reduce chronic disease risk while also improving planetary health. However, research about how to encourage these changes in food choices is limited.

Objective: The objective of this study was to examine the drivers of food choice and salient sustainability considerations among 5th-grade students across New Jersey.

Description: Semi-structured interviews, with free listing activities, were conducted virtually with a convenience sample of 41 students from three school districts in New Jersey, representing different community structures: an urban, rural, and suburban school district.

Evaluation: Smith’s Salience (S) Index was used to analyze the free listing data in order to identify the most salient factors fifth-grade students considered when deciding what foods to consume. Interview transcripts were open-coded and organized based on key themes to complement the free listing analysis.

Conclusions and Implications: Taste and health were the most salient factors influencing food choice among students at all three schools while picking up litter was the most salient sustainability consideration. Students in two of the schools indicated ocean animal protection as being a key sustainability consideration, particularly as it relates to plastics in the water and the viability of sea turtles. There was a general lack of knowledge among students related to how food choices can impact the environment, with the exception of some limited knowledge related to food waste. These findings provide insight into the drivers of food choice and sustainability considerations among fifth-grade students. These findings can assist in the design of interventions and school curricula that can help to shift food choices towards more plant-based foods in the context of climate change mitigation.

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Starting Early Program Cohort: Prenatal and Early Life Predictors of Diet, Weight, Adiposity and Cardiovascular Health in School-Aged Children

Mary Jo Messito, BA, MD, mary.messito@nyulangone.org, NYU Grossman School of Medicine; Rachel Gross, MD, NYU Grossman School of Medicine

Objective: Identify prenatal and early life predictors of diet, weight, adiposity, and cardio-vascular health among low-income Hispanic school-aged children and determine long-term impacts of prevention delivered from the third trimester of pregnancy through child age three years old on these outcomes among school-aged children.

Description: Economic and racial/ethnic disparities in early obesity predict adult obesity and co-morbidities, such as diabetes and cardiovascular disease, and contribute to decreased socioeconomic achievement across the life-course. Pregnancy and infancy represent critical periods in which obesity-promoting feeding styles and practices develop. The Starting Early Program (StEP) was designed to target these practices for low-income with high rates of nutrition and weight related morbidity, and to deliver comprehensive obesity prevention from pregnancy through early childhood, coordinated with primary health care. An RCT of StEP enrolled 533 pregnant women, and followed over 400 until child age three years. Participation in the StEP intervention was associated with significantly improved maternal-child nutrition knowledge, feeding practices, and child weight outcomes at age two years. The current project seeks to identify prenatal and early life predictors of diet, weight, adiposity, and cardiovascular health and whether participation in StEP is related to these outcomes in children at age eight.

Evaluation: Data sources include: parent surveys of maternal and child dietary patterns, poverty-related risks, and participation in nutrition assistance programs; direct assessments of child diet using the Veggie Meter portable skin carotenoid detection device and anthropometrics, adiposity, and cardiovascular health; and medical records to assess additional health care indicators. Currently 334 mother child pairs have consented to participate in the follow up study. Two hundred and ninety-nine completed survey measures, 235 completed direct assessments and data collection is ongoing.

Conclusions and Implications: Understanding prenatal and early life predictors of diet, weight, adiposity, and cardiovascular health later in childhood and whether early preventive interventions such as StEP can impact these outcomes is a critical for development of effective health promotion and obesity prevention across the life course.

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