P120 Draw Your Dinner: Examining Perceptions of Meal Size Using Incrementally Reduced Plate Sizes in College Students

David Sharp, PhD, Dsharp7@kent.edu, Kent State University, 135 Nixon Hall, Kent, OH 44240;
Jennifer St Peter, BS, University of Minnesota Medical School

Background (Background, Rationale, Prior Research, and/or Theory): The ways in which food is presented can influence the amount of food selected and consumed as well as how accurately those meals are perceived and recalled. Hence, if the method of food recall is modified through the use of incrementally changing plate sizes for participants to draw their meals on, they may align their food sizes to fit the plate rather than accurately reporting portion sizes.

Objective: The purpose of this study was to examine the association between plate size and meal recall through drawn food representations over a 10-week period.

Study Design, Setting, Participants, Intervention: Using a longitudinal design, we had 293 undergraduate students enrolled in an introductory Nutrition lecture course draw their last night's meal for 10 weeks on either a 10.5" diameter plate, an 8.5" diameter plate, or a 10.5" diameter plate that was reduced in size by .2 inches every week. One hundred ninety-five students who completed >60% of their meal recalls, including the first and final weeks, were included for analysis.

Outcome Measures and Analysis: One-way and two-way ANOVA as well as independent samples t-tests were used to compare total area, % of plate coverage, individual food group food portion size across Large, Small, and Incrementally-changing plates.

Results: Participants provided with 10.5" diameter plates generally drew significantly more food on them than participants with 8.5" diameter plates ($P < .001$). Participants provided with incrementally shrinking plates drew meal sizes similar to the large plates at week 1 and drew meal sizes similar to small plates by week 10.

Conclusions and Implications: These findings suggest that people's conceptualization of previous meal consumption may be influenced by the size of the plate on which they draw upon, suggesting that the external environment can modify participant drawn recall of their meal sizes.

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P121 Effects of Time Restricted Feeding on Weight Loss and Sleep: A Randomized, Cross-Over Trial

A'anna Sewall, BS, RDN, CPT, ams724@cornell.edu, Cornell University, Savage Hall Forest Home Drive, Ithaca, NY 14853; David Levitsky, PhD, BS;
Laura Barre, BS, RDN, MD

Background (Background, Rationale, Prior Research, and/or Theory): Time Restricted Feeding (TRF) is the practice of consuming all of one's calories

within a restricted period of time in a day, and is gaining popularity as a method to promote weight loss and improve metabolic health and sleep. Evidence based research in humans is insufficient to make recommendations.

Objective: To examine the short-term effects of TRF on weight and sleep time and quality in adults.

Study Design, Setting, Participants, Intervention: A randomized, cross-over study of TRF was conducted. Adults ($n = 60$) were randomized to two weeks of TRF followed by two weeks of Control (CON) or vice versa. During both phases participants ate and drank ad libitum. Intake was restricted to a 12-hour period of time in the TRF phase and unrestricted in the CON phase.

Outcome Measures and Analysis: Daily weights were collected throughout using blue-tooth enabled scales and remote monitoring. Participants self-reported subjective sleep quality and physical activity (hours per week). Paired t-tests were used within-subjects to compare CON to TRF data.

Results: Participants were a mean age of 46.6 years ($SD = 10$ years); 86% Caucasian; 88% women; and a mean BMI of 27.3 kg/m² ($SD = 5.56$). For those in the TRF-CON group, weight change was -0.13 lbs ($SD = 3.04$, $P = .98$) and for those in the CON-TRF group -0.04 lbs ($SD = 3.01$, $P = .96$). Subjective sleep quality was higher during the TRF vs. CON phase, $t(58) = 3.25$, $P = .001$. Physical activity was not significantly different between the two phases (219 min, $SD = 1.87$, $P = .29$).

Conclusions and Implications: In adults, 2 weeks of TRF did not result in significant changes in weight, however sleep quality was better. TRF may be an advantageous lifestyle to improve perceived sleep quality in adults short term. Further research is necessary to determine the effects of TRF on body weight in free-living adults eating ad libitum longer term.

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P122 Exploring the Importance of Healthfulness Among Food Truck Operators

Melissa M. Reznar, PhD, MPH, reznar@oakland.edu, Oakland University, 433 Meadow Brook Road, 3102 Human Health Building, Rochester, MI 48309;
Jamie Eathorne, MPH, Monroe County Health Department; Katherine Brennecke, BS, Oakland University;
Brandon Metcalf, BS

Background (Background, Rationale, Prior Research, and/or Theory): Food trucks have become an increasingly popular part of the food scene, yet little research has investigated food truck operators or their offerings.

Objective: This study examines the characteristics of food truck operators in the Metropolitan Detroit area and their attitudes toward health and nutrition of food truck menu items.

Study Design, Setting, Participants, Intervention: Food truck operators were identified by searching state

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licensing agencies and various websites, yielding a list of 120 food trucks. Researchers conducted a cross-sectional, quantitative survey that included questions about attitudes toward healthfulness of menu items. The survey was available in both paper and web formats and delivered using a multi-modal, multi-contact approach that included paper mailings, email messages, telephone calls, and Facebook messaging.

Outcome Measures and Analysis: Survey data were descriptively analyzed using one-way frequencies, measures of central tendency for continuous variables, and chi-square analysis for categorical variables.

Results: Forty-seven food truck operators (39% response rate) responded to the survey, but six were excluded for lack of survey completion. Operators were 51% male, 71% white non-Hispanic, and 41% had obtained a Bachelor's degree. Average age was 39.6 years (standard deviation 9.8 years). Respondents rated taste as the most significant food success factor, with 100% rating it as very or somewhat important, whereas healthfulness was indicated as very or somewhat important by 66% of respondents. Less than a third (29%) were extremely or very familiar with the calorie content of their menu items. Only 20% reported that it is not necessary for food trucks to provide healthful offerings.

Conclusions and Implications: Although food truck operators do not perceive healthfulness to be a particularly important selling feature, many are neutral or open to the importance of selling healthy food to their customers. Food trucks may be one potential unexplored avenue to increasing diet quality of consumers dining away from home.

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P123 Head Start Teachers' Experiences with Healthy Eating and Physical Activity

Jocelyn Bayles, East Carolina University, Department of Nutrition Science, College of Allied Health Sciences; Archana Hegde, PhD, BK, East Carolina University, Department of Child Development and Family Relations, College of Health and Human Performance; Virginia C. Stage, PhD, LDN, RDN, carrawaystagev@ecu.edu, East Carolina University, Department of Nutrition Science, College of Allied Health Sciences, 5th Street, Greenville, NC 27834

Background (Background, Rationale, Prior Research, and/or Theory): Early childhood teachers can play a significant role in helping to develop health behaviors in children by sharing their own health knowledge and modeling positive health behaviors. Unfortunately, teachers often lack the background knowledge needed to understand, interpret, and/or apply health

information accurately in their personal and professional lives.

Objective: The purpose of this study was to examine Head Start teachers' experiences when attempting to improve their personal health behaviors (diet and physical activity) and promote positive health behaviors among children in their classrooms and their families.

Study Design, Setting, Participants, Intervention: Researchers conducted 15 in-depth, semi-structured telephone interviews with Head Start teachers from two Eastern North Carolina counties. Phenomenology was used to guide study design and analysis.

Outcome Measures and Analysis: All interviews were recorded using digital audio and transcribed verbatim. Researchers used open coding to identify emergent themes. Interrelated themes were condensed and presented in a model depicting the "what" and "how" related to teachers' experiences.

Results: Researchers identified four interrelated themes related to teachers' personal and professional experiences with improving and promoting health: interpersonal factors (e.g. awareness of personal health; strategies for improving health); teacher-child and teacher-parent relationships (e.g. parent engagement/support for positive health behaviors; teacher facilitation of child/parent engagement around health behaviors); organizational (e.g. administrative support; center-level policy; workplace/social temptations); and community (e.g. cultural influences; "rules" around food). Themes revealed multi-level factors that affected teachers' ability to improve their own health, and serve as health advocates to children/families.

Conclusions and Implications: Overall, findings indicate teachers want to improve health behaviors personally (individual/family health) and professionally (children/families served); however more barriers than facilitators exist at all levels impacting their ability to improve their own health and facilitate positive behaviors among the children/families they serve. Additional research is warranted to develop strategies for reducing barriers to health promotion.

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P124 Teachers Eating Smart, Moving More: Impacting Head Start Teachers' Personal Health Behaviors Through Hands-on, Food-Based Education

Virginia C. Stage, PhD, LDN, RDN, carrawaystagev@ecu.edu, East Carolina University, Department of Nutrition Science, College of Allied Health Sciences, 5th Street, Greenville, NC 27834; Caitlin Bullard, BS; Archana Hegde, PhD, BK, East Carolina University, Department of Child Development and Family Studies, College of Health and Human Performance; Lorelei Jones, MEd, North Carolina State University, Expanded Food and Nutrition Education Program, Department of Agricultural and Human Sciences

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