

Parent BMI Increase 2 to 5 Years Post-study Related to Change in Age but Independent of Other Sociodemographics, Health Behavior, and Study Engagement (P16-001-19)

Brenda Abu,¹ Barbara Lohse,¹ and Leslie Cunningham-Sabo²

¹Rochester Institute of Technology and ²Colorado State University

Objectives: Characterize parent (P) weight change 2–5 y post participation in Fuel for Fun (FFF) a controlled trial of a school and family intervention focused on culinary and physical activity experiences for 4th grade youth.

Methods: P who had participated with their 4th grader in FFF were recruited via email to enroll in a follow-up (FFF-FU) assessment. FFF-FU survey set included measures from the original study and new items pertinent to P of adolescents. Physical activity was measured with the IPAQ; low income was denoted as using an income-based program or worry about money for food. Height, weight, age in FFF and FFF-FU were self-reported. Perimenopausal age included 47 y within BL and FFF-FU. Youth in FFF cohorts 1 and 4 were controls and cohorts 2 and 3 included the multi-component intervention. P were enrolled in 1 of 4 treatments varying in type and intensity. FFF and FFF-FU data were collected online using the Qualtrics platform. FFF P completed surveys at baseline (BL), post-intervention, and 4 months post-study. FFF-FU

data were collected spring 2018, about 2 to 5 years post-BL. Data were analyzed with repeated measures controlling for BL or FFF-FU sociodemographics, engagement, health behaviors.

Results: Of the 418 FFF P, 127 completed FFF-FU surveys (mean age 42.5 6.0 y) with 115 providing weight and height. FFF-FU sample was female (88%), white (84%), active (44% high activity), educated (69% college degree or higher), but had lower BMI and fewer with low income than FFF P. Of FFF-FU providing heights/weights at the 4 assessments, mean (SE) BMIs were 24.2 (0.5), 24.4 (0.5), 24.6 (0.6) and 25.7 (0.6) respectively. Change in BMI was significant after controlling for age, stress, ethnicity, sex, physical activity level, P treatment and engagement, but not when BL to FFF-FU change in age or perimenopausal age were controlled. The significantly greater increase in BMI for P of intervention youth than controls persisted when controlling for sociodemographic and health behavior findings, but not when BL to FFF-FU age change, perimenopausal age or activity level were controlled.

Conclusions: Significant weight gain by P of youth in a nutrition intervention 2 to 5 years post-study was unrelated to stress, ethnicity, activity level, income, but was related to the FFF-FU age change from BL and perimenopausal age.

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