In Emerging Adulthood, Perceived Stress is Linked to Poor Diet Quality

Alexandria Colón, Christina D. Langan, Sonali Malhotra, Shravani Vanapalli, Jodi N. Dowthwaite.
Binghamton University, Binghamton, NY

PURPOSE: Food insecurity, perceived stress, exercise, and diet quality may affect body mass index (BMI, kg/m²) in emerging adulthood, setting up long-term chronic disease risk. We asked first-year undergraduates to self-report home-life exposures from their final year of high school for evaluation of associations with current BMI. METHODS: First-year students provided informed consent and were surveyed by electronic questionnaire (Aug-Oct 2019). Exclusion criteria were: diagnosed eating disorder and pregnancy. Variables of interest were assessed using the perceived stress scale (PSS: high score, high stress) and questions on race/ethnicity, socioeconomic status, food insecurity, diet quality, and exercise participation. Current height and weight were self-reported for BMI calculation. Spearman’s correlations and Mann-Whitney U tests were used (SPSS v25, α < 0.05). RESULTS: Sample size was n=94, with 25% reporting minority status. Only 10% reported benefit participation or food insecurity; no PSS differences were detected based on Free or Reduced-Price Lunch participation. PSS score was correlated with poor diet quality (rho= +0.241, p= 0.019). No significant associations were observed among food insecurity, exercise dose, PSS, and BMI. Of concern, 23% reported no consistent physical activity aside from high school physical education classes (prior year). CONCLUSION: Higher perceived stress was associated with poorer diet quality. This link suggests that unhealthy eating may be a coping mechanism, or individuals who eat unhealthy foods may perceive stress as higher. Future research should examine stress exposure, PSS score, food insecurity, diet quality, and BMI in a more socioeconomically diverse sample.

Supported in part by grants to Binghamton University from the following: Howard Hughes Medical Institute (HHMI) through the Precollege and Undergraduate Science Education Program, New York State Regional Economic Development Council, and SUNY Investment & Performance program.