A Comparison of the Eating Patterns and Blood Pressures of Firefighters and Law Enforcement Officers

Joelle Romanchik-Cerpovicz, PhD, RD, LD, Bridget Melton, EdD, Mario Keko, MPH, Kayden Lowe-McAlvin, MS.

Department of Health Sciences and Kinesiology, Georgia Southern University, Statesboro, GA

Background/Objective: Healthy diets are important for emotionally and physically challenging careers, including first responders. This pilot study compared eating patterns and Blood Pressure (BP) of Firefighters (FFs) and Law Enforcement Officers (LEOs) from rural Southeastern Georgia.

Methods: FFs (N=36) and LFOs (N=36) enrolled in a local voluntary workplace wellness program were recruited. They provided data about demographics, blood pressure, and eating patterns, collected using Rapid Eating Assessment for Participants Survey.

Results: Dietary quality scores did not differ between LEOs (28±4) and FFs (27±4). The majority of subjects (64%) reported usually eating more than 8 ounces of meat, chicken, turkey, or fish daily and regular processed meat, fried food, and salty snacks (59%,76%, and 67%, respectively). Daily consumption of <2 servings of fruits (80%) or vegetables (70%) was reported. Systolic BP did not differ between LEOs (134±13mmHg) and FFs (133±12mmHg), but Diastolic BP was higher in LEOs (88±11mmHg) than FFs (78±10mmHg)(p=.002). FFs and LEOs presented at all stages of health behavior changes, with no significant differences between groups; the majority of participants (64%) had not yet reached the implementation stage but 85% were at least aware that changes could be made.

Conclusions: First responders may be receptive and could benefit from instruction focused on how to modify their meal preparation, since increased fruit and vegetable consumption and limited sodium and saturated fat intake may reduce the risk of hypertension. Expanding this study to include urban first responders and larger samples would allow generalization of results and recommendations.