Self-Reported Dietary Habits and Barriers Among ROTC Cadets

SARAH E. JOHNSON¹, ADRIANA GIL², BRODERICK L. DICKERSON¹, JAMES L. LILLY³, RYAN J. SOWINSKI¹, STEVEN E. MARTIN^{1,4}, & DREW E. GONZALEZ¹

¹Tactical Athlete Research Unit, Department of Kinesiology and Sports Management, Texas A&M University, College Station, TX

²College of Medicine, University of Houston, Houston, TX

³Engineering Medicine (EnMed) Intercollegiate School of Engineering Medicine, College of Medicine, Texas A&M University (TAMU-COM), Houston, TX ⁴Sydney & JL Huffines Institute for Sports Medicine & Human Performance, Department of Kinesiology & Sports Management, Texas A&M University, College Station, TX

Category: Doctoral

Advisor / Mentor: Gonzalez, Drew (dg18@tamu.edu)

ABSTRACT

Reserve Officer Training Corps (ROTC) cadets' highly demanding lifestyle may negatively impact health and performance. Reports also suggest they are at risk for poor nutrition, i.e., low energy availability or not meeting Military Dietary Reference Intakes. Still, there are limited data on the barriers to proper nutrition and eating habits among ROTC cadets. PURPOSE: This study aimed to investigate the dietary habits of ROTC cadets and the factors or barriers influencing them. METHODS: Cross-sectional data were obtained from 173 ROTC cadets about nutritional habits, factors, and barriers via validated paperbased questionnaires including; the Perceived Barriers to Healthy Eating, Food Choice Questionnaire, and Rapid Eating Assessment for Participants - Short Version. The questionnaire data were analyzed using SPSS version 29 software. Shapiro-Wilk Test was used to assess normality for continuous variables. Categorical data are reported as frequencies (n) and total percentages. A chi-square analysis was used to determine independence (p<0.05) for male and female cadets. **RESULTS**: A total of 173 male (n=144) and female (n=29) cadets (age = 18.7 ± 1.2 ; height = 176.3 ± 8.5 cm; weight = 74.7 ± 12.8 kg) completed the questionnaires. Reported barriers included busy lifestyles (n=156, 90.7%), irregular working hours (n=83, 47.9%), cost (n=76, 43.9%), limited cooking facilities (n=98, 56.6%), and willpower (n=54, 31.2%). Overall, 85 (49.1%) cadets placed importance on consuming nutritious food; 92 (53.1%) placed high importance on having easily accessible food options; 139 (80.3%) emphasized the importance of high protein content, yet 28 (16.1%) followed a high protein diet, while 133 (76.8%) did not follow any diet, and 73 (42.1%) reported a willingness to change to healthier eating habits. Additionally, chi-squared analysis showed significant sex associations (p<0.05) as it pertains to; diet followed, consumption of animal products, the importance of high protein content, ease and time of food preparation, and cost. CONCLUSION: The cohort of ROTC cadets appear to be knowledgeable about which foods to consume but, reported barriers challenging their ability to practice healthy eating such as busy lifestyles, irregular shift work, cost of food, lack of access to proper cooking facilities, and willpower. Moreover, less than 50% are willing to change their current behaviors. These data provide insight into the barriers encountered by cadets, which can be addressed in future investigations to aid in ROTC healthy eating strategies.