

Analysis of a State Police Academy Menu Cycle for Dietary Quality and Performance Nutrition Adequacy

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Objectives: Current literature suggests law enforcement officers have high rates of obesity. With diet as a leading risk factor, early career nutrition interventions could be beneficial in establishing long-term healthy eating habits. Thus, the purpose of this study was to determine the diet quality (DQ) and performance nutrition adequacy of a state police academy's dining facility menu.

Methods: This cross-sectional content analysis included six weeks (three daily meals, Monday–Friday) of a state police academy's dining facility menu. Nutrient content was determined by meeting with the dining facility manager, portioning menus, gathering food specifications from purchase orders, and then performing nutrient analysis. DQ was assessed using the Healthy Eating Index-2015 (HEI). Independent t-test and Cohen's d determined differences between menu nutrient content and performance nutrient needs.

Results: The mean (\pm SD) total HEI score for the six-week menu was 54 ± 9.55 out of 100. Subcomponent scores of total protein (4.97 out of 5) and whole fruits (4.77 out of 5) indicate adequacy. Total fruit (3.19 out of 5), whole grains (6.10 out of 10), total vegetable (3.77 out of 5), and dark greens and legumes (3.51 out of 5) scores could be improved. Seafood and plant proteins (0.33 out of 5), fatty acid ratio (1.31 out of 5), and dairy (1.59 out of 10) scores were low. The menu met recommended intake for 13 of 19 subcomponents investigated. Subcomponents that did not meet adequacy were calories (% mean difference, needs – menu = 36.7%), carbohydrates (% mean difference = 52.3%), vitamins D (% mean difference = 82.5%) and E (% mean difference = 66.7%), magnesium (% mean difference = 44.1%), and potassium (% mean difference = 41.8%).

Conclusions: The academy menu is adequate in most performance-related nutrients, but also leaves room for improvement in DQ and shortfall nutrients. By focusing on increasing low HEI subcategory scores, overall DQ of the menu will increase and could potentially simultaneously make up for inadequate nutrients. To optimize current and future performance and health, police academies should consider evaluating their menus and ensuring adequacy and high DQ.

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