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Nutritional Knowledge of Division II Female Athletes in Team vs Individual Sports

Chelsea R. Allie, Matthew R. Miltenberger, Shala E. Davis, FACSM, Brandon W. Snyder, Kendall M. Nester. East Stroudsburg University, East Stroudsburg, PA.

Sports Nutrition knowledge among female athletes has been an increased area of research due to the rising number of female student-athletes participating in the National Collegiate Athletic Association (NCAA). Optimal nutritional knowledge is essential for athletes to maximize their health and meet the energy demands of the sport. Female athletes should make dietary decisions with the intent of fueling their bodies with the appropriate macronutrients and micronutrients. When comparing team and individual sports there are different nutritional needs and characteristics of each sport. Based on this information it is important to assess and evaluate nutritional knowledge so we can better prepare our athletes for competition. **PURPOSE:** To evaluate nutritional knowledge of Division II female athletes in team and individual sports. **METHODS:** All subjects were currently rostered DII athletes at a small school in Northeastern PA, 278 student athletes were identified as potential participants with 119 subjects completing the survey. The 119 subjects represented 13 female sports and consisted of 94 team sport athletes and 25 individual sport athletes. The survey instrument used was the Sports Nutritional Knowledge Questionnaire consisting of 23 questions (18 macro and micro nutrients, 5 demographic). The survey was administered electronically with a 2 week follow up. Data was collected using google sheets, scored by the PI (passing score >75%) and analyzed using SPSS V29. **RESULTS:** The results of this study suggest that overall nutritional knowledge is poor in our sample of DII female athletes, the overall score for the population was $54.7\% \pm 12.7$, with scores ranging from 27% - 88% which indicated an inadequate level of overall nutritional knowledge. Only 8.4%, (n=10) of the population passed the survey suggesting there are significant delinquencies in nutritional knowledge. Further evaluation of team and individual sports suggest that there is no difference ($p=0.064$) in scores $54.8\% \pm 11.6$ and $54.2\% \pm 16.4$ for team and individual sports respectively. **CONCLUSION:** The current study suggests that DII female athletes have low nutritional knowledge. Further analysis reveals that despite differences in nutrition needs, team and individual sport athletes show no differences in nutritional knowledge with both groups being deficient. **SIGNIFICANCE/NOVELTY:** The results of this study amplify the lack of understanding of nutrition in collegiate female athletes which is consistent with the current literature. This study supports the need for additional formal education programs for student athletes to address these barriers related to nutrition.