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The Effect of Academic Year and Major on Nutritional Knowledge in Division II Female Athletes

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Athletes should make dietary decisions with the intent of fueling their bodies with the appropriate nutrients to maximize performance. Assessing nutritional competency allows sport scientists to gauge the perceived importance of nutrition and identify deficiencies. Current research suggests that collegiate student athletes have nutrition knowledge similar to their non-athlete peers. This is problematic due to the increase metabolic demands placed on athletes during competition and practice. Formal nutritional programming may be the solution to deficits in knowledge, this type of programing could come from a singular class or as part of a student athlete's curriculum. **PURPOSE:** To assess year in school, area of study and history of previous nutrition class on sports nutrition knowledge. **METHODS:** All subjects were currently rostered DII athletes in Northeastern PA, 278 student athletes were identified as potential participants with 119 subjects completing the survey. The survey instrument used was the Sports Nutritional Knowledge Questionnaire. Data was collected using google sheets, scored by the PI (passing score >75%) and analyzed using SPSS V29. **RESULTS:** Results indicate that year in school underclassmen (n=73) and upperclassmen (n=46) show a non-significant (p=0.071) positive trend in nutrition scores of 51.3% ± 10.9 and 60.1% ± 13.2 for underclassmen and upperclassmen respectively suggesting more time in school may lead to greater exposure to nutrition information. Formal nutrition education amongst our subjects did result in significantly (p=0.006) higher scores on the survey. Those students with a formal nutrition class had a mean score of 63% ±14, while those athletes who have not taken a nutrition course had a mean score of 51% ± 10.1. Lastly, those students in a major related to the health sciences (n=45) had a mean score of 62.71% ± 12.7 with a range of scores from 38%-88%. In contrast, those outside of the Health Sciences (n=74) achieved a mean score of 50.29% ± 10.23 with a range of score from 27%-77%. Further analysis revealed a p-value of .038 which indicated a statistically significant difference between these groups. Although we did uncover significance to higher scores, it is still important to note that only 8.4%, (n=10) of the population passed the survey suggesting there are significant delinquencies in nutritional knowledge. **CONCLUSION:** Data suggests that female student athletes with formal nutrition education and/or are majoring in the Health Sciences have significantly better comprehension of nutritional needs for sport. **SIGNIFICANCE/NOVELTY:** This study agrees with current research suggesting that collegiate female athletes do not have adequate knowledge in regard to nutrition, however those who have had formal nutrition education show greater competency. As a result, this study supports the idea that athletes should have formal education on the topic of nutrition.