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## An Analysis of the Nutritional Behaviors of Children and Adolescents who are Professional Athletes

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**Introduction:** Nutrition is very important for young athletes in their growth. Insufficient intake of energy and nutrients can delay puberty, impede muscular growth and reduce cognitive and physical performance. This study has been aimed to assess-ment of children and adolescents who participate in sports in different branches of nutritional behaviors.

**Material and Methods:** The study sample included 138 athletes (78.3%M, 21.7%W). All of the participants were members of the sports clubs in Kocaeli and national leagues, and had trained for at least two years. The represented five different sports (basketball 18.1%, football 21.7%, swimming 31.9%, wrestling 16.7% and tennis 11.6%) and their ages ranged between 10-17 years (13.8±1.97). General information of athletes (age, gender, years as an athlete and hours of weekly practice) were taken and examined their nutritional behaviors. The research project was approved by the Ethics Committee of the Kocaeli University.

**Results:** Of the participating adolescents, those who played basketball (44%), football (63.3%), swimming (40.9%) and tennis (81.2%) showed adequate concern regarding their nutrition, but the wrestlers showed less concern (26.1%). The average liquid intake of the participants before, during and after competition was 313.9±204.8mL, 411.1±456.0mL and 513.8±376.0mL, respectively. It was found that the liquid intake of tennis players was the highest in each of the three periods (475.0±177.1mL, 1143.8±444.2mL, 703.1±686.4mL; p<0.05). Of the participants, 31.9% preferred sports drinks. Of those who preferred them, 63.6% consumed them during competition, doing so in the amount of 361.4±144.9mL on average. Participants ate 3.0±2.8 hours before the competition, but the duration was longer among football players (4.3±3.5h) and wrestlers (5.8±3.4h) (p<0.05). Of the participants; 11.6% preferred dairy products before competition, 52.9% preferred cereals, 21.7% preferred meat, 12.3% preferred fat or sugar, and 10.1% preferred vegetables or fruit. The participants ate an average of 1.1±0.2 hours after competition, and this duration did not vary among the respective sports (p>0.05).

**Conclusion and Discussion:** Tennis players showed the greatest concern for their nutrition and liquid intake, while the wrestlers showed the least concern. Athletes prefer cereals over dairy products prior to competition. Their nutrition should be monitored carefully for their sport performance, in addition to ensuring for optimal growth and development.