**Hydration status and water sources in 9-10 year soccer players**

L. Rodríguez1, AR. Azevedo1, A. Seabra2, P. Padrão1, P. Moreira1.


**Introduction:** Physical activity leads to an increased water loss via sweating, which may increase the risk of dehydration.

**Objective:** To evaluate the hydration status and its relation to food intake in a group of children that play football.

**Method:** 36 male 9-10 years children were invited to participate in this study, and 30 completed a 24 h urine collection. The Free Water Reserve (FWR) was used to assess the hydration status; additionally, a food record corresponding to the day of urine collection and a lifestyle, and socio-demographic questionnaire was filled with parents help. Anthropometric data were obtained. Food and beverage groups were created and models of unconditional logistic regression were fitted in order to estimate the magnitude of the association between the contribution of food’s water content and the hydration status.

**Results:** 43.3% of children were classified as at risk of hypohydration. Compared to children who reported low fruit and vegetable intake (at or below the median), those with higher intake (above median) were at decreased risk of hypohydration (OR = 0.19, 95% CI 0.04 - 0.94, p = 0.041).

**Conclusions:** Almost half of this sample of 9-10 years soccer players was at risk of hypohydration. Fruit and vegetables intake was significantly associated with a better hydration status.

Key words: children, hydration status, sport.

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**Hydration level and mood status in adolescents. The Up & Down Study**

JA. Rodríguez Laprast, S. Gómez Martínez, A. Hernández González, A. Marcos Sánchez.


**Introduction:** Optimum hydration is essential for a proper functioning of the organism. Adolescence is a period in which there is adoption of eating habits and also psychological changes, where mood status is a very important health factor.

**Objective:** To assess possible interactions between hydration and mood status in a group of adolescents from Madrid.

**Method:** This is a cross sectional substudy from the Up & Down Study. Multifrequency bioimpedance was used to assess the hydration status (Extracellular Water Volume, ECW). The PANASN questionnaire was used to create a factor which was stablished in four levels: very low, low, high and very high, in order to assess mood status.

**Sample:** 101 healthy adolescents (both sexes) between 13 and 16 years old.

**Results:** 42.90% of the adolescents who were below the optimal ECW range reported a low mood status. 51.70 % of adolescents within the optimal ECW range reported a high mood status. 29.60% of subjects above the optimal ECW range showed very low mood, meanwhile 18.50 % of them showed a very high mood status.

**Conclusions:** In view of these results, adolescents should be advised about the most beneficial range of the hydration status they have to show in order to achieve the best mood rate. Further research studies are needed in order to find out possible associations.

Key words: hydration, mood status, adolescence.

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