Fruits and vegetables as important contributors to an adequate hydration status

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Introduction: A healthy hydration status can only be achieved with a proper balance of water and mineral. In this sense fruits and vegetables are good sources of both of them, furthermore they are rich in vitamins, fiber and antioxidants and low in calories.

Objective: The aim of this study was to evaluate how fruit and vegetable contribute to the Total Water Intake (TWI), and to the mineral intake (Na, Mg, K).

Method: 466 Spanish adults aged 18–50 years (260 women and 206 men). Dietary data was obtained from a 3-day food record (including one weekend day). Dial software was used to calculate fruit and vegetable intakes as well as their contribution to TWI (g/day) and the mineral intake.

Results: Water from fruit and vegetables represented a 77% of non-beverage water intake. Mean TWI was 2,030±734 g/day and non-beverage water intake 534 g/day. Fruit at vegetable contributed with 25% of the total Mg intake, 37% of total K intake, and only 3% of total Na intake.

Conclusion: Increasing fruit and vegetable consumption can contribute to a heathier and more balance hydration status.

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Key words: fruits, vegetables, hydration, water intake.

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How can a 0.7% loss of body mass influence cognitive functioning? A mechanistic investigation

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Introduction: The study of small changes in hydration status has been largely ignored.

Objective: To see if drinking water, when mildly hypohydrated (a loss of 0.7% of body mass), helps to maintain cognitive functioning and mood and to explore underlying mechanisms.

Method: 118 (61 male) young adults were exposed to a temperature of 30°C for four hours and either did or did not drink two 150ml glasses of water during that time. On three occasions, once at baseline and once after each drink, they completed cognitive tests and rated their thirst, energy and task difficulty. Changes in body temperature and perspiration were monitored throughout and considered, along with thirst and ratings of difficulty, as potential mediators. Individual differences in habitual water consumption and baseline urine osmolality were also considered.

Results: Participants had better memory, attention and energy levels if they had drunk water but this depended upon habitual water consumption and baseline osmolality. Thirst mediated the effect of drinking on memory and energy levels, whereas perspiration mediated the effects on attention. Neither a change in temperature, nor gender, affected the results. Although participants found the tasks easier if they had drunk, these ratings of task difficulty were not found to mediate the effects on cognition.

Conclusions: Drinking water when hypohydrated improves cognition although the mechanisms involved vary with cognitive domain.

Key words: hydration, cognition, mood, water, thirst.

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Lifestyles associated with the adhesion of the Mediterranean Diet in the elderly

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Introduction: Eating habits play a crucial role in the maintenance of health both at individual and population level. The Mediterranean diet (MD) and healthy eating pattern is associated with a reduction in overall mortality, cardiovascular disease and various cancers. Recent studies have shown that individuals who combine healthy lifestyles and have healthier eating habits have improved health.

Objective: to know which lifestyles are associated with adherence to the MD in older people.

Method: cross-sectional study with a total of 351 subjects over 60 years of age living in the Levant, where the relationship between adherence to the MD and lifestyle were evaluated. We excluded patients with a score of 3 or more errors in the Pfeiffer test. Statistical analyzes were performed using logistic regression adjusting for sex.