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Influence of oral intake of water in improving memory and visual acuity
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most important source and there were no differences in dairy products between normal weight and OW-O.

Key words: hydration, dairy, dietary water, adolescents.

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Promoting the right nutrition and hydration in schools by community nursing

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Method: We conducted a qualitative descriptive study by two nurses from a health center of Cartagena on 40 Primary pupils of two schools in Cartagena during 30-31 March 2015 to train teachers and students on healthy nutrition-hydration so as to assess previous and acquired knowledge by the students.

Data were obtained through an open question survey about nutrition, hydration, balanced diet and healthy eating prior to a talk and various educational games (food pyramid, drawings, plasticine games...) to strengthen knowledge. In the second day of school we conducted the same survey, assessing their recently learned skills. Teachers were in charge of strengthening the information provided during the school quarter, revealing in previous surveys that were conducted in the classrooms a basic knowledge with a few trends.

Results: They didn’t know which foods are healthy or not and the minimum daily liquid amount required. Some children considered bakery as a must in breakfast and dinner. 95% of students improved their knowledge about nutrition.

Conclusions: Educational activities should be included within existing health programs in all schools. Health education guided by healthcare professionals is better captured by the students at an early age, because is in this age is when they will shape their eating habits and lifestyles.

Key words: nutrition, hydration, school, nursing, primary care.

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Water consumption, body composition and cardiometabolic parameters in children

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Introduction: Beverage consumption and its possible association with the current obesity epidemic and metabolic syndrome is under investigation in recent years, but water intake is probably the most underestimated or poorly measured of all beverages. Water is essential for life and plain water instead of other caloric beverages is one approach to decrease energy intake and therefore could play an important role to fight against obesity and cardiovascular disease.

Method: A cross sectional study was conducted in 366 schoolchildren aged 9 to 11 years from Cuenca’s province in Spain. Body composition and cardiometabolic parameters were measured and averaged 24h recalls to obtain water and beverage consumption. Cardiorespiratory fitness (CRF) was assessed by the 20m shuttle run test.

Results: In linear multiple regression (adjusted by sex, aged and CRF) we found an inverse association between water (ml) /Kg weight with BMI, Fat mass, Fat free mass, Waist circumference, insulin levels, MetS index, HOMA-IR (p<0.000), and with arterial pressure parameters, SBP (p<0.010), DBP (p<0.028) and Mean Arterial Pressure (p<0.012) and also, direct associations with HDL cholesterol (p<0.001).

Conclusions: Higher consumption of water/kg weight was negatively associated with BMI, Fat mass, Fat free mass, Waist circumference, insulin levels, MetS index, HOMA-IR, DBP, SBP, MAP and positively with HDL cholesterol in children. Water consumption is associated with numerous health benefits and an adequate intake of water could contribute to obesity and cardiovascular disease prevention in children and consequently in adulthood.

Key words: water, body composition, cardiometabolic risk.

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Influence of oral intake of water in improving memory and visual acuity


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Introduction: Water is an essential nutrient since it intervenes in the major metabolic functions of the human body, being necessary to the proper functioning of our brain. A decrease in water intake is associated with states of confusion, irritability, lethargy and cognitive function loss. Brain’s dehydration hurts (lower level of neurotransmitters) nerve transmission and decreases blood circulation in brain what may affect to mental performance. People with a proper hydration have better scores on intelligence tests.
**Objective:** The main objective of this study is to know the relationship between water intake/hydration of a group of University students and their cognitive function.

**Method:** This information was collected from personal data (age, sex, and tobacco use), anthropometric measurements (weight, height, BMI -body mass index-), fluid intake, physical activity, and a measurement of intelligence test to fifty students (WAIS test with a total of thirty-six variables for each of the subjects).

**Results:** It was observed a statistically significant relationship between water consumption of youths and their visual acuity/memory, as well as better scores in the intellectual quotient.

**Conclusions:** A higher level of hydration can cause a beneficial effect on the information systems of memory and visual acuity, contributing to the improvement of the intellectual quotient.

**Key words:** hydration, cognition, memory, intellectual quotient.

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**Hydration habits in Spanish elite athletes**

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**Introduction:** The concept of dehydration is defined as a risk to the health of athletes and their performance. Many athletes reach very high levels of dehydration due to water loss through sweat and low fluid intake.

**Objective:** This study aims to assess the state of hydration of athletes who come to the consultation by completing a questionnaire about their habits regarding fluid intake. The questionnaire consists of 28 questions on hydration. In addition, information on sports history and personal data of each athlete were required.

**Method:** A sample of 58 athletes participated in the study, 37.9% were men and 62.1% women, with a mean age of 29.1 years (SD = 5.5). They participated voluntarily and data collection was conducted from April to July 2015.

**Results:** The results showed that more experienced athletes presented higher intake of litres of liquid than the less experienced athletes, and this difference approached the statistical significance. This suggests an effect of experience on the hydration of the athletes. More research in this field is necessary.

**Key words:** supplementation, creatine, dehydration.

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**Study on risk creatine and dehydration in athletes training in a gym**


**Introduction:** Creatine is a supplement widely used by force athletes or whose goal is to gain muscle mass storing water in the intracellular space. Creatine has the ability to remove plasma water from the bloodstream into skeletal muscle in a process called muscle myofibrillar hydration or hydration. Although this benefits the skeletal muscles, less water is available to other tissues since most cell physiological and chemical reactions in the body need water.

**Objective:** To present the use of creatine as an ergogenic supplement, and possible adverse effects related to hydration.

**Method:** Cross-sectional study in adult males between 18 and 35 years. You are advised to use 0.3 grams of creatine per kilogram for several weeks. The administration form is the most commonly used initial charge and maintenance; when supplementation before and after training; and consumption takes place largely with the addition of carbohydrates.

**Results:** 34.5% of people who use creatine have or have had side effects, mainly weight gain, but do not manifest signs of dehydration at the indicated dose.

**Conclusions:** Although at lower doses of 3 grams there is no scientific evidence that risk of dehydration occurs, the recommendation is to maintain a high fluid intake (200-250 ml of water per 2.5 grams of creatine) since this water needs to be stored and if the availability is low, it decreases absorption and retention within the cell. There is no evidence that taking creatine in normal doses increases heat stress or adversely affects the performance of the athlete in warm environments.

**Key words:** supplementation, creatine, dehydration.

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**Efficiency of the hydration and nutrition institutionalized elderly with pressure ulcers**

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**Introduction:** It is estimated that the incidence of pressure ulcers in the general population is 3.3% between 70 and 75 years. It is estimated that 60% of pressure ulcers develop in the hospital and more than 70% occur in people over 70 years. The elderly are the most...