Importance of water consumption in a group of young women with overweight and obesity

E. Rodríguez Rodríguez, A. Aparicio, AM. López-Sobaler, RM. Ortega.

Introduction: Water consumption is associated with a significant effect on body weight loss because it seems to increase the basal metabolic rate, to suppress appetite before meals and to be associated with adequate dietary habits (high consumption of fruits and vegetables). Thus, water consumption would be important in overweight/obese people who want to lose weight.

Objectives: To analyze water consumption in a group of overweight/obese women and its relationship to body weight.

Method: 58 women (20 to 35 years) with body mass index (BMI) over 25 kg/m² were studied. Diet was registered using a “Food record questionnaire” for 3 days, including a Sunday. Weight and height were measured and body mass index calculated. Physical activity was recorded by a questionnaire activity.

Results: Average water consumption was 1.19 ± 0.540 L/day. 70.7% of the women did not reach the recommended 2 L/day. Women with lower water consumption (<p50=1.8 L/day) had higher BMI than those who consumed more than this amount (29.96 ± 3.20 vs. 27.82 ± 2.30 kg/m²). For every 1 mL of water consumed, BMI decreased 0.0021 kg/m² (R² = 0.1479, p = 0.0332) considering factor activity and energy intake as covariates.

Conclusions: The consumption of water is inadequate in women with overweight/obese and its relationship to body weight.

Key words: water, women, overweight, obesity.

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Hydration habits of a group of university students

E. Rodríguez Yera, I. García Izquierdo, C. Martín Salinas.

Introduction: A good hydration has acquired a big importance in recent years. Water is an essential component of nutrition, but there are other kinds of drinks which also contribute to hydration. However, it is important to establish the nutritional profile of different beverages commonly consumed and their contribution to the overall diet.

Objective: Determine hydration habits of university students.

Methods: Transversal and descriptive study in a sample of 102 nursing students of Autónoma University of Madrid. Water and other liquids intake habits were gathered through an on-line, anonymous and self-filling survey. A descriptive analysis on these data was developed.

Results: The 15.7% (16) of the sample were men and the 84.3% (86) women, with an average age of 23 years old and in a range of 20 years. 79.4% (81) were trained in Nutrition. All of them used to drink water on a daily basis, and a 59.8% (61) used to do it systematically several times per day, regardless they were thirsty or not. In relation to the daily consumption of other type of drinks, 13.7% (14) used to drink soft-drinks or energetic beverages, being 36.3% (37) with sugar and 35.3 % (36) light. Additionally, 76.5% (78) used to drink milk daily, 31.4% (32) coffee and 6.9% (7) infusions. Regarding the quantity consumed, 69.3% (70) used to drink between four and eight glasses of water, 89.2% (91) used to take also a soft-drink, 73.5% (75) a glass of milk, 87.3% (89) a coffee with milk and 89.2% (91) an infusion. On the other hand, only 3% (3) used to drink wine or beer on a daily basis and none of the respondents used to drink alcohol at this frequency. In this case, 38.5% (37) used to drink a can of beer and 50.5% (48) a glass of wine. Among 2% (2) of the students that used to drink alcohol 2 or 3 times per week, 40.2% (41) used drink only one unit. Finally, 38.2% (39) considered they were always well hydrated.

Conclusions: Most of the students that have participated in this study, comply with the recommendations on liquid intake for the Spanish population. The drinking of water predominates over other liquids that also contribute to keep the hydration, but which help increasing the energetic content of the diet.

Key words: Hydration, drinking habits, water, university students.

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Calorie reduction in soft drinks during the last 5 years on the Spanish market

M. Serrano, G. Varela-Moreiras.
Department of Pharmaceutical and Health Sciences. Faculty of Pharmacy. CEU San Pablo University. Madrid. Spain.

Introduction: The soft drink industry has a significant economic and social weight in the world. It’s a leader in providing a variety of products in order to improve consumer’s choice.

Objective: To understand how soft drinks sold in the Spanish market (2,000 references) in the last five years have varied in the number of calories.
Method: Data on nutritional composition of soft drinks from a sample of 80% of the total market was collected by ANFABRA, Chair of communication and education on healthy lifestyles.

Results: Between 2009 and 2015 calories per litre of all soft drinks placed in the Spanish market fell by 19%. The fourth part of soft drinks contributes less than 4 calories per 100 ml.

Conclusions: The soft drinks sector has shown a strong commitment to innovation and promotion of low and no calorie products, without compromising taste while making it possible to choose a drink based on taste, needs, activity or moment of the day.

Key words: soft drinks, calories, innovation.

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Short-term oral liquid ingestion decreases human milk osmolality

MJ. Soto Méndez1,2, A. Maldonado1, R. Bright1, A. Gil1, NW. Solomons1.
1Center for Studies of Sensory Impairment, Aging and Metabolism (CeSSIAM). Guatemala City. Republic of Guatemala. 2Department of Biochemistry and Molecular Biology II. Institute of Nutrition and Food Technology. University of Granada. Granada. Spain. 1Tufts University School of Medicine. Boston. MA. USA.

Introduction: previous studies have reported stability of human milk osmolality in situations of liquid restriction and a decrease in cow milk osmolality in conditions of controlled water ingestion.

Objective: To confirm any possible influence of short-term water ingestion and restriction in human milk osmolality.

Method: 26 mothers of breastfed infants aged 3-6 months were invited to come twice and stay for 90-min in an educational meeting with nutritionists from CeSSIAM. Treatment-1 (tx-1) consisted in consuming 1l of water over 90-min; treatment-2 (tx-2) consisted in being abstained from fluid intake for 90-min. Breastmilk and urine samples were obtained before and after each treatment and measured to determine volume; subsequently, two aliquots were stored at -20oc prior to analysis. Urinary (Uosm) and milk (Mosm) osmolality were measured in a Voguel Löser 815 osmometer. Statistical analyses were performed in SPSS version 20.

Results: Maternal mean age was 24 y, 42% of the babies were girls. Median baseline and final (90-min) Uosm for Tx-1 were 628 and 248 mOsm/kg (p<0.001), corresponding values for Mosm, 282 and 280 mOsm/kg (p=0.325). There was significant different in the change of Mosm (p=0.013) as well as in the change of Uosm (p<0.001) between treatments.

Conclusions: We found asymmetrical change in breast milk osmolality after water consumption and water restriction; while fluid restriction does not influence Mosm and Uosm, liquid ingestion impacts human milk and urine by decreasing osmolality.

Key words: urinary-osmolality, milk-osmolality, fluid-ingestion, fluid-restriction, Guatemala.

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Taste workshops for children: importance of being hydrated

T. Valero Gaspar1, P. Rodríguez Alonso1, E. Ruiz Moreno1, S. Del Pozo de la Calle1, JM. Ávila Torres1, G. Varela Moreiras1,2.
1Spanish Nutrition Foundation (FEN). Spain. 2CEU San Pablo University. Spain.

Introduction: Spanish Nutrition Foundation (FEN) and the Royal Spanish Academy of Gastronomy (RAG) were the pioneers to present the idea of including gastronomy and healthy eating habits into the European education system. This initiative was approved on 12th march 2014 by the European Parliament and since then, both institutions, in collaboration with the Ministry of Education, Culture and Sports, have been working on innovative audiovisual and multimedia materials for children. Nutrition education contributes to children’s improved understanding and practice of healthy lifestyles behaviors. One essential topic consist of having a well hydration status, and children are a vulnerable population much more prone to dehydration than adults.

Objective: To develop a serial of videos for children between 3 and 9 years old with cooking and nutrition lessons and recipe demonstrations to be used as educational resources in the official curricula.

Method: Videos focused on food groups, nutrients, gastronomy, active lifestyles and importance of being hydrated. A nutritionist, a cooker and two muppets participated in them.

Results: The videos include five sections: introduction, theory class, recipes –in case of hydration we recorded recipes with different water content foods-, video summary and final test. We have presented a summary of them in Spain Pavillion in Expo Milano 2015 and will use as an education tool for teachers.

Conclusion: Videos can be used as nutrition education tools to reinforce language, listening and motor skills...