
INAUGURAL CONFERENCE

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Fluid consumption in a sample of healthy French children, adolescents and adults

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Objective: Assess the intake of fluid in healthy French children, adolescents, adults and seniors, considering amounts, types of beverages, time and place of consumption.

Design: The present article presents the self-reported intake of beverages, recorded in a quota sample recruited to be representative of the French general population. Intake was assessed on the basis of a seven-day report of all intakes (fluid and solid), with recording of occasions, circumstances, location, people present, etc. Food and portion reporting was made easier by the use of a validated reference book showing various portions of common food and beverage choices (Suvimax, 2000). The energy and nutrients (including water) content was obtained from a French food composition table (Favier et al, 1995). Special attention was devoted to beverages. Six categories of beverages were considered: water (all kinds), hot beverages (tea, coffee, etc), sodas (regular or "light"), dairy drinks, juices and fruit-flavoured drinks, and alcoholic beverages. Energy and nutrient intakes were also studied, as well as the circumstances of each intake occasion.

Setting: Interview in free living persons, carried out in 2002-2003, 2006-2007, 2009-2010.

Subjects: 221 baby children (age 3-5), 439 children (aged 6-11), 599 adolescents (aged 12-19), 716 adults (aged 20-54), 485 seniors (aged 55 and over) in last survey.

Results: The average total intake of fluid was 1-1.3 litre a day depending on age groups. Small proportions of each group reached the intake levels recommended for the French population. Water accounted for about one half of daily fluid intake. Other types of beverages varied with age (e.g. dairy drinks in children and adolescents; alcoholic drinks in adults and seniors). Intake of sodas (including regular and "light") was highest in adolescents (184 ml a day). Beverages were mainly consumed at home, at the time of meals. In all age groups, people who reached the recommended level drank over 1 litre of water daily plus a more varied selection of other beverages, than people who did not.

The greater part of the ingested beverage in all age groups is water and it is consumed alone, with meals and at home. Beyond this general observation, consumed beverages are very different depending on the age of individuals. Children and adolescents consume mainly milk drinks, fruit juices and BRSA (soft drinks), while alcoholic beverages and hot drinks are mainly consumed by adults and seniors. More than half of the different classes do not follow the recommendations on beverage consumption (53% of kindergarten, 71% of primary, 86% of adolescents, 66% of adults and 78% of seniors). Current data indicate that energy from beverages represents about 10% of daily energy intake. In evolution, we can see generational effects; new generations drink more soft drinks and juice but less alcoholic drinks at the same age than other generations.

Conclusions: This is the second description of fluid intake in French children, adolescents, adults and seniors, considering amounts, types of beverages, time and place of intake and consistency with recommendations according to Bellisle and al (2010). It reveals that few people in all age groups reach the recommended intake levels, those who do drink more water and consume more types of beverages.

References

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Key words: fluid intake, self-reported surveys, children, adolescents, adults, seniors.