Does seasonality affect fluid intake?

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Introduction: The proportion of elderly population is increasing globally; however, there are few studies on fluid intake in older adults and specifically on beverage intake throughout the seasons.

Objective: To evaluate the effects of changes on fluid intake according to the four seasons in Spanish elderly people.

Method: Twenty-eight Spanish subjects aged over 55 years (60.7% females) performed a longitudinal study during one year. Subjects completed in each season a 24-hour dietary recall. Fluid intake was calculated using the DIALfood composition computer program (AlceIngeniería, S.L.). Also, physical fitness status was evaluated performing two strength tests and subjects were divided into 2 fitness groups (fit and unfit). Data was analyzed using one-way repeated measures.

Results: Beverage intake was higher in summer than in winter (p=0.001), spring (p=0.008) and autumn (p=0.005). Water was the fluid most consumed in all seasons. Seasonal variation was highest for soft, diet drinks and beer. An interaction effect of sex, age, and fitness status was not observed (p>0.05).

Conclusions: Seasonality has an influence on fluid intake and should be considered when analyzing drinking behavior and water and beverage intake in research studies.

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