



## Assessing validity of a short food frequency questionnaire on present dietary intake of elderly Icelanders.

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Tea  
Vegetables

Abstract:

Few studies exist on the validity of food frequency questionnaires (FFQs) administered to elderly people. The aim of this study was to assess the validity of a short FFQ on present dietary intake, developed specially for the AGES-Reykjavik Study, which includes 5,764 elderly individuals. Assessing the validity of FFQs is essential before they are used in studies on diet-related disease risk and health outcomes.

128 healthy elderly participants ( $74 \text{ y} \pm 5.7$ ; 58.6% female) answered the AGES-FFQ, and subsequently filled out a 3-day weighed food record. Validity of the AGES-FFQ was assessed by comparing its answers to the dietary data obtained from the weighed food records, using Spearman's rank correlation, Chi-Square/Kendall's tau, and a Jonckheere-Terpstra test for trend.

For men a correlation = 0.4 was found for potatoes, fresh fruits, oatmeal/muesli, cakes/cookies, candy, dairy products, milk, pure fruit juice, cod liver oil, coffee, tea and sugar in coffee/tea ( $r = 0.40-0.71$ ). A lower, but acceptable, correlation was also found for raw vegetables ( $r = 0.33$ ). The highest correlation for women was found for consumption of rye bread, oatmeal/muesli, raw vegetables, candy, dairy products, milk, pure fruit juice, cod liver oil, coffee and tea ( $r = 0.40-0.61$ ). An acceptable correlation was also found for fish topping/salad, fresh fruit, blood/liver sausage, whole-wheat bread, and sugar in coffee/tea ( $r = 0.28-0.37$ ). Questions on meat/fish meals, cooked vegetables and soft drinks did not show a significant correlation to the reference method. Pearson Chi-Square and Kendall's tau showed similar results, as did the Jonckheere-Terpstra trend test.

A majority of the questions in the AGES-FFQ had an acceptable correlation and may be used to rank individuals according to their level of intake of several important foods/food groups. The AGES-FFQ on present diet may therefore be used to study the relationship between consumption of several specific foods/food groups and various health-related endpoints gathered in the AGES-Reykjavik Study.

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## [\[Diet of six-year-old Icelandic children - National dietary survey 2011-2012\].](#)

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Humans  
Iceland  
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Nutrition Assessment  
Nutrition Policy  
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Nutritional Status  
Seafood  
Vegetables  
Vitamins

Abstract: Knowledge of dietary habits makes the basis for public nutrition policy. The aim of this study was to assess dietary intake of Icelandic six-year-olds.

Subjects were randomly selected six-year-old children (n=162). Dietary intake was assessed by three-day-weighted food records. Food and nutrient intake was compared with the Icelandic food based dietary guidelines (FBDG) and recommended intake of vitamins and minerals.

Fruit and vegetable intake was on average  $275 \pm 164$  g/d, and less than 20% of the subjects consumed  $\geq 400$  g/day. Fish and cod liver oil intake was in line with the FBDG among approximately 25% of subjects. Most subjects (87%) consumed at least two portions of dairy products daily. Food with relatively low nutrient density (cakes, cookies, sugar sweetened drinks, sweets and ice-cream) provided up to 25% of total energy intake. The contribution of saturated fatty acids to total energy intake was 14.1%. Less than 20% of the children consumed dietary fibers in line with recommendations, and for saturated fat and salt only 5% consumed less than the recommended upper limits. Average intake of most vitamins and minerals, apart from vitamin-D, was higher than the recommended intake.

Although the vitamin and mineral density of the diet seems adequate, with the exception of vitamin-D, the contribution of low energy density food to total energy intake is high. Intake of vegetables, fruits, fish and cod liver oil is not in line with public recommendations. Strategies aiming at improving diet of young children are needed.

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[Do descriptive norms related to parents and friends predict fruit and vegetable intake similarly among 11-year-old girls and boys?](#)

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Sex Factors  
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Vegetables

Abstract: We examined whether there are sex differences in children's fruit and vegetable (FV) intake and in descriptive norms (i.e. perceived FV intake) related to parents and friends. We also studied whether friends' impact is as important as that of parents on children's FV intake. Data from the PRO GREENS project in Finland were obtained from 424 children at the age 11 years at baseline. At baseline, 2009 children filled in a questionnaire about descriptive norms conceptualised as perceived FV intake of their parents and friends. They also filled in a validated FFQ that assessed their FV intake both at baseline and in the follow-up in 2010. The associations were examined with multi-level regression analyses with multi-group comparisons. Girls reported higher perceived FV intake of friends and higher own fruit intake at baseline, compared with boys, and higher vegetable intake both at baseline and in the follow-up. Perceived FV intake of parents and friends was positively associated with both girls' and boys' FV intake in both study years. The impact of perceived fruit intake of the mother was stronger among boys. The change in children's FV intake was affected only by perceived FV intake of father and friends. No large sex differences in descriptive norms were found, but the impact of friends on children's FV intake can generally be considered as important as that of parents. Future interventions could benefit from taking into account friends' impact as role models on children's FV intake.

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## mediators and the intake of fruits and vegetables.

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School Health Services - statistics & numerical data  
Snacks  
Students  
Vegetables

Abstract:

Little is known about the mediating effects of the determinants of fruit and vegetable (FV) intake in school-based interventions that promote FV intake, and few studies have examined the impact of the degree of implementation on the effects of an intervention. The present study examined whether the degree of implementation of an intervention had an effect on children's fruit or vegetable intake and determined possible mediators of this effect. The study is part of the European PRO GREENS intervention study which aimed to develop effective strategies to promote consumption of fruit and vegetables in schoolchildren across Europe. Data from 727 Finnish children aged 11 years were used. The baseline study was conducted in spring 2009 and the follow-up study 12 months later. The intervention was conducted during the school year 2009-2010. The effects were examined using multilevel mediation analyses. A high degree of implementation of the intervention had an effect on children's fruit intake. Knowledge of recommendations for FV intake and liking mediated the association between a high degree of implementation of the intervention and an increase in the frequency of fruit intake. Knowledge of recommendations for FV intake and bringing fruits to school as a snack mediated the association between a low degree of implementation of the intervention and an increase in the frequency of fruit intake. Overall, the model accounted for 34 % of the variance in the change in fruit intake frequency. Knowledge of recommendations acted as a mediator between the degree of implementation of the intervention and the change in vegetable intake frequency. In conclusion, the degree of implementation had an effect on fruit intake, and thus in future intervention studies the actual degree of implementation of interventions should be assessed when considering the effects of interventions.

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