VALIDATION OF A FOOD FREQUENCY QUESTIONNAIRE DESIGNED FOR CHILDREN 10-12 YEARS: THE PANACEA-FFQ

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Background and aims: The aim of the present work was to evaluate the validity of a food frequency questionnaire (FFQ) that could be used for children aged 10-12 years living in urban areas in Greece.

Methods: The semi-quantitative FFQ included questions regarding the frequency of consumption of the main food groups and beverages typically consumed in Greece, as well as questions regarding eating habits of children. During 2007, 125 children 10-12 years old recruited from randomly selected schools from Athens (overall mean age: 10.9 ± 1.2 yrs, 38% boys) were studied. FFQs were completed by the children's parents and were compared with the 3-day dietary diary (3DD) records recorded also by them. Agreement of the FFQ with 3DD was evaluated using the Bland-Altman method, cross-classification analysis and Kendall's tau-b.

Results: High percentage of agreement (i.e., >91%) between FFQ and 3DD according to the Bland and Altman method was found. Low but still significant agreement for refreshments /juices (tau-b=0.29, p=0.004), dairy products (tau-b=0.26, p< 0.001), starchy products (tau-b=0.13, p=0.057), vegetables (tau-b=0.23, p=0.006), fruits (tau-b=0.19, p=0.017), sweets/snacks (tau-b=0.14, p=0.057) and toasts/pizzas (tau-b=0.19, p=0.017) was also observed. Stratified analysis by gender and obesity status confirmed the high agreement of the two methods. Cross classification analysis of the FFQ and 3DD demonstrate moderate to very good percentages of correct classification (range: 49% to 90.2%).

Conclusions: The suggested FFQ seems to be a reasonably valid measure of dietary intake and can be used in children aged 10-12 years living in urban areas in Greece.