Abstract

Background/objective: The elderly, and especially those attending nursing homes, are at great risk from certain nutritional deficiencies. The aim of this study was to examine the percentage of energy wasted, energy and protein intake and percentage consumed of meal offered by a group of healthy institutionalized elderly in four nursing homes in Spain. Design and methods: This was a multicentre observational study of a sample of the institutionalized population over the age of 65. Our final sample comprised a total of 62 individuals. Dietary data were collected using double weight method for each meal during 21 days. We calculated the following consumption variables: percentage of food consumed (% food consumed) for each subject in each meal. We also calculated the energy intake (kcal/day), the wasted energy (kcal/day), the protein intake (g protein/ day) and the energy density (kcal/g meal) for each of the meals eaten. To analyse the overall differences we used analysis of variance test (ANOVA). The significance level used was 0.05 (p < 0.05). Results: The largest meals were lunch (781 g/day [728.4, 833.6]) and dinner (653 g/day [612.1, 693.9]). The percentage of total consumption was 81.9% [79.3, 84.6]. The average energy consumption was 1,575.4 kcal/day [1,508.3, 1,642.6]. The percentage of caloric distribution varied depending on the center. The highest percentage of wasted food was found in the main meals. Forty four percent did not consume enough energy to meet the recommended intakes. Protein intake was 63.6 g protein / day [61.2, 66.1]. 12.5% of women and 4.55% of men did not consume the recommended intakes for the elderly. Breakfast and the bedtime snack had the highest energy density with 1.10 [0.9, 1.25] and 1.04 [0.9, 1.08] kcal/g food served respectively [Energy density]. Discusion/conclusions: The best strategy for increasing the energy intake of the institutionalized elderly without raising the amount of food that is rejected may be to provide higher energy density foods in the same serving sizes.

Keywords