Abstract

Aim: The aim of our study was to evaluate the inadequacy of voluntary energy and nutrient intake on the first day of hospital admission. Patients and methods: A cross-sectional study was carried out in two tertiary care hospitals, with a probabilistic sample of 50% of in-patients. Dietary intake was evaluated by a 24-hour dietary recall, and undernutrition was screened through the Nutritional Risk Screening 2002 tool. The overall frequency of inadequate energy and nutrient intake was estimated using Dietary Reference Intakes. Results: Energy and nutrient intakes from 258 patients showed very low values for both men and women. No significant differences were found for energy and nutrient intakes across age groups (< 65 years and 65 years). When the proportion of study subjects with inadequate nutrient intakes was analysed, a high degree of inadequacy was found. The degree of inadequacy was higher for fibre, niacin, folate, vitamin B12, magnesium and zinc. No significant differences were found for energy and nutrients studied and for intakes below 1/3 of dietary recommendations from nutritionally-at-risk (n = 89) and well-nourished (n = 169) patients. Conclusion: Voluntary nutrient and energy intakes in the first 24 hour of hospital admission are highly inadequate. No differences were found between undernourished and well-nourished patients or patients < 65 years and 65 years.

Keywords

Disease-related malnutrition, Inadequate nutrient intake, Estimated average requirements, Hospital food, Dietary reference intakes.