

Doctoral dissertation

Author: Sölve Elmståhl

Title: HOSPITAL NUTRITION IN GERIATRIC LONG-STAY MEDICINE. Dietary intake, body composition and the effects of experimental studies.

Key words: body composition, diet, malnutrition, elderly

Date of issue: 1987-12-18

Language: English

ISRN LUMEDW / MESO--1001--SE

Abstract

Low intake of energy and nutrients in elderly patients have been reported from several countries. The clinical significance of the nutritional status has been shown by higher frequencies of morbidity and mortality in undernourished patients. The etiology of hospital malnutrition is multifactorial, and the causes can be the disease per se, physical or mental handicaps, improper hospital routines for offering food, inadequate meal environment, and a poor oral health.

In the present studies, the mean intake of energy in geriatric long-stay patients were 5.7 MJ/ 1361 kcal in females and 6.8 MJ/1631 kcal in males. Nineteen per cent of the patients consumed less than the estimated basal metabolic rate of 90 kJ/kg body weight. Thirty per cent of the patients had a negative energy balance that is in the risk zone for undernutrition. Vitamin D and thiamine were the nutrients most commonly deficient. The mean body weights in both sexes were lower compared with healthy elderly, and this was explained by a lower body fat in females and lower body fat and lean body mass in males. The mean values of body weight water were 59 % in males and 50 % in females.

Redecoration of the dining-room in geriatric ward with changed routines of offering the food resulted in marked improvements of the intake of energy and nutrients. No significant changes in body weight occurred despite a 25 % increase of energy intake which might reflect an increased energy expenditure. Similar increases of the dietary intakes were also seen after giving dietary supplements. Intensive oral treatment failed to show any improvement of the intake of energy and nutrients but the dietary habits changed in 13 % of the patients. The dental state was poor and 89 % of the patients received dental treatment. These studies have shown that some of the causes of hospital malnutrition are possible to partially eliminate by improvements of the meal environment and giving dietary supplement.