

Patients waste high amounts of food provided by the hospital kitchen

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Rationale

Prevalence of disease-related malnutrition in hospital inpatients is high; many patients do not meet individual nutritional requirements while hospitalised. To better understand the reasons for inadequate nutritional intake, this study analysed the composition of hospital meals, the amounts consumed and the amounts wasted by the patients.

Methods

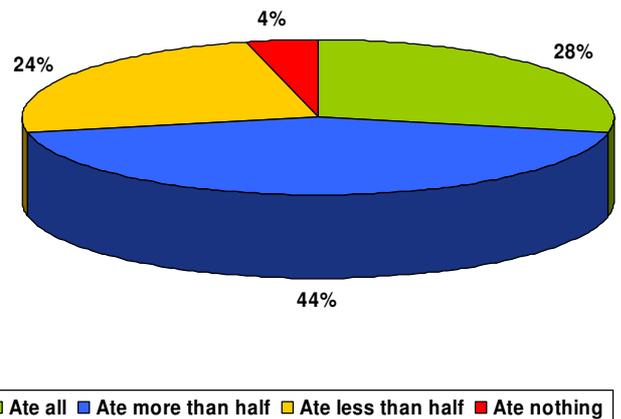
During six days, components of all meals delivered from the kitchen to the coronary care wards have been weighed, and nutrient composition was calculated. On return from the wards, waste was weighed. Nutrients consumed were calculated.

To determine percentage of intake and waste, we defined the following cut-off points: ate everything (86-100%), ate more than half (51-85%), ate less than half (16-50%) and ate nothing (0-15%).

Results

The three main meals accounted for a mean of 1809 ± 143 kcal and 77 ± 10 g of protein per day. The provided meals met the Dutch guidelines for a healthy diet, except for fruits.

Twenty-eight percent of patients ate everything from the meals, 44% ate more than half, 24% ate less than half and 4% ate nothing of the provided meals.



In total, 38% of the food provided by the kitchen was wasted. As a consequence, the main meals supplied on average 1105 ± 594 kcal and 47 ± 27 g of protein to patients.

Pastas with sauce, potatoes, rice and sauces were food products of which more than 50% was wasted. Patients almost completely consumed cold meats, apple pie, ice cream and soup.

Conclusion

The standard meals provided by the hospital kitchen provide adequate amounts of energy and protein. However, the majority of patients does not consume complete meals.

It may be concluded that food waste attributes largely to inadequate intake in hospitalised patients.

Periodical evaluation and adjustment of menus, components and nutrient density of meals may help to increase nutritional intake and to prevent weight loss during admission.