

## Plate Waste And Malnutrition In Hospitals

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### Abstract

Hospital malnutrition is a worldwide dilemma and challenge. Under nutrition of hospital inpatients has been a problem recognized for nearly 40 years and many studies find from 25 to 40% of acute hospital patients are malnourished. It has been reported that there is a wide difference in prevalence rates of malnutrition. Some are primarily due to the fact that the studies included different populations and used different methods.

Plate wastage refers to the volume or percentage of the served food that is discarded. Plate wastage in foodservice sectors such as restaurants and cafes was found to be less than 15% while hospital food waste used to be two to three times higher. High level of food wastage is highly associated with malnourished-related complications and impacted financially as well as environmentally. Plate waste is typically measured by weighing food or by visual estimation of the amount of food remaining on the plate, with results presented as the percentage by weight of the served food, or by calculating the protein, energy or monetary value of the waste. Results from 32 studies in hospitals show a median plate waste of 30% by weight (range: 6-65%), much higher than in other foodservice settings. Levels are lower in hospitals using a bulk food delivery system compared to plated meal delivery. The level of plate wastage in the hospital was highly influenced by various parameters such as the setting and environment, diet type, the menu, method of the food distribution system (including difficulty accessing food and complex ordering systems), and its flexibility. High plate wastage leads to negative consequences financially and most of the patients are not likely to meet their nutrition requirements. Strategies to minimize waste include reduced portion sizes with food fortification, bulk meal delivery system, feeding assistance, provision of dining rooms, and protected mealtimes. Effective strategies that address factors associated with plate wastage should be taken among hospitalized patients.

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