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## Meal provision in a UK National Spinal Injury Centre – a qualitative audit of service users and stakeholders

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Malnutrition is common in patients with spinal cord injuries (SCI)<sup>(1-2)</sup>. Adequate provision of appropriate meals is an integral part of treatment, yet there is relatively little research evaluating how well the current catering system provides for the needs of patients with SCI. The aims of this study were to (1) assess patient's food intake and; (2) measure satisfaction on current food provision in both service user (patients) and stakeholders (medical staff, nursing staff, managers and catering staff). All patients with SCI without artificial nutritional support were included. The pattern of food served and consumption was observed over a 24-hour period. A standardised questionnaire recorded both patients and stakeholders' evaluation of the quality, ordering, delivery and overall acceptability of food (12 items). The food intake of 67 patient's food intake were recorded for part I study (64% response rate) and 166 questionnaire (patients: n = 60, 55% response rate; stakeholders: n = 106, 50% response rate) were returned for part II study. Twenty-nine patients (48%) ate 3 full meals a day, 17 (26%) received oral nutritional supplements, 22 (34%) received vitamin / mineral supplements and 23 (35%) required assistance to eat. A small numbers of patients and stakeholders expressed satisfaction with the current food provision [patients %; stakeholders %, taste good: 25% v 17%, P = 0.334; appropriate texture: 22% v 21%, P = 0.773; appropriate temperature: 55% v 72%, P = 0.002; well presented:  $43\% \ v \ 28\%$ , P = 0.103; good choice:  $49\% \ v \ 59\%$ , P = 0.596, received meal ordered:  $65\% \ v \ 37\%$ , P < 0.001; meal served on time: 71% v 58%, P = 0.131; no interruption during mealtime: 62% v 46%, P = 0.119]. Overall, 27% of patients and 29% stakeholders were satisfied with the meals. Principal components analyses of item scores identified three main factors [food quality, food presentation; and food delivery (logistics)]. Mean scale scores based on the contributing items for each factor are summarised by patient and staff in the figure below. The present study identified some area of improvement in the current SCI hospital catering system such as quality and presentation of food. Patients with SCI is a vulnerable group, hospital-catering system should be tailored to meet the demands of the different patient groups to optimise patient's nutritional intake and to minimize wastage. Effort should be made to ensure greater choice and presentation for all delivered meals. Periodic quality control is essential in order to meet recommendations and patient's expectations.



- 1. Wong SS et al. (2010) Clin Nutr Supp 5 (vol 2), 63; 2.
- 2. Wong SS et al. (2011) Top Spinal Cord Inj Rehabil 16, 25-26.