

ADEQUACY OF ORAL INTAKE IN A PRIVATE INTENSIVE CARE UNIT IN GAUTENG PROVINCE

A Kloppers, R Nel & L Van Den Berg

Introduction: The prevalence of disease related malnutrition in acute care facilities is a common phenomenon that negatively affects patient outcomes and treatment costs.

Objective: To assess the adequacy of energy and protein intakes of exclusively orally fed patients admitted to the intensive care unit (ICU).

Methods: An observational cross-sectional study was conducted. Actual total energy and protein intakes of 26 eligible participants (15 receiving a ward diet, 11 receiving a ward diet and oral nutritional supplements (ONS) were assessed over a study period of 14 consecutive days in a multi-ICU and compared to calculated requirements.

Results: Those not receiving ONS met 98% of energy and 68% of protein requirements. The more nutritionally vulnerable group that had been prescribed ONS, met 57.2% of energy and 53.7% of protein requirements without ONS, and 76.4% of energy and 74.3% of protein requirements if the ONS was included in the calculation ($p < 0.05$). When divided per body mass index (BMI), the subgroup BMI $< 30 \text{ kg/m}^2$ ($n=19$) had inadequate median intake for energy and protein, with and without ONS. For the subgroup BMI $\geq 30 \text{ kg/m}^2$ ($n=7$), however, energy intake exceeded requirements (125.6%) ($n=6$), while protein intake was inadequate (64.1%).

Conclusion: The oral intakes of ICU patients on ward diets were inadequate in particularly protein, even in those prescribed ONS based on their requirements. Specific consideration to optimise protein delivery, without exceeding energy requirements in the critically ill obese patient, is necessary.