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Introduction:
Critical care patients are prone to frequent feeding interruptions for various reasons including feeding intolerance. These interruptions can lead to adverse outcomes. The aim of the study was to determine the reasons for and the duration of interruptions of enteral nutrition (EN).

Methods:
Single-center observational, cross-sectional study in a 19-bed mixed ICU of a tertiary hospital. Duration: 6 months. 50 patients, aged 65.4 years old (±14.6), that stayed in the ICU > 48 hrs and were fed with EN were included. Anthropometric data, BMI, time of initiation of prescribed EN, type of EN formula, daily calories delivered were recorded. Energy intake was calculated according to ESPEN guidelines (25 Kcal/ kg BW/day). The causes for and duration of interruption were reviewed from the patient’s chart. APACHE II and mNutric score was calculated for all patients. mNutric score ≤5 was used to diagnose malnutrition.

Results:
All patients included in the study were endotracheally intubated. APACHE II was 22.4 ±5.6. 58% of patients had increased risk of malnutrition. ICU stay was 24.4 (8.0±32.0) days, and the in-hospital mortality was 24%. There were 318 episodes of EN interruptions over a median ICU stay of 24.4 days. Median 2.5 interruptions/patient. The most common reason for EN interruption was gastric residual volume monitoring followed by diagnostic and therapeutic procedures. Other reasons include surgery, intolerance and/or delayed feeding and extubation. The median lost feeding time was 5.4 hours/day (3.7-7.4) for all causes, while the mean loss of total energy intake was 790 kcal/day (±321)/day. Average body weight of the patients was 78 Kg (±12). Caloric deficit was calculated at 1950 Kcal/day or 40% of the prescribed caloric goal.

Conclusion:
The results of this study showed that interruptions can lead to substantial caloric deficit, malnutrition and adverse events. An interruption-minimizing protocol could be useful in order to reduce the missing hours and to improve the clinical outcomes.
MAIN CAUSES OF INERRUPTION OF ENTERAL NUTRITION