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## The study of an association between outcome and an energy intake achievement during the first 2 or 3 days after admission to the general ward – A single institute study

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**Aim:** To examine our hypothesis that energy intake achievements to goal during the first 2, 3 and 7 days after admission to general ward by 20%, 30%, and 66% of the goal set at 25 kcal/ kg of actual body weight, respectively, are associated with good outcome.

**Methods:** This study was the retrospective chart review and approved by the Ethic Committee of the institute. All consecutive patients admitted to the general medical and surgical wards, between Oct. 2016 and Sep. 2017, and fed by enteral nutritional method. Collected data of all subjects were the follows: (1) demographics- sex, age, primary diagnosis, height, weight, body mass index (BMI), Charlson Comorbidity Index (CCI), (2) nutritional parameters- daily energy and protein intake (kcal, grams/kg of actual body weight), achievement of energy and protein intake to goal ratio (%) calculated daily until the first 7 days after admission to the wards, here goal of energy /protein were set at 25 kcal / 0.8 gram / kg, (3) laboratory data- Hemoglobin (Hb), Total Lymphocyte Count (TLC), serum total bilirubin (Bil), serum creatinine (Cre), C-Reactive Protein (CRP), all drawn in the study period was collected to analyze, (4) outcome parameters- the length of stay in hospital (LOS) as the primary outcome, rate of weight change between admission (Wt ad) and discharge (Wt dis) (defined as “(Wt dis – Wt ad) / Wt ad”, %), living status, highest CRP.

**Strengths of this Study:** To our knowledge, this is the first to study an impact of an earlier energy / protein intake after admission to general wards. The results might change a clinical practice to achievement of energy intake to 20%, 30% of goal during the first 2, 3 days after admission to shorten LOS and/or prevent the adverse events, such as nosocomial infection with higher CRP.

### Biography

Kazumi Matsumoto has expertise in Nutrition. She is doing Nutrition Management and Nutritional Guidance at Acute Care Hospital based on Japanese Nutritionist's license. On the other hand, she is conducting research on clinical nutrition in educational institution (graduate school). She is studying the effects of nutrition therapy on the clinical course and outcomes in patients with elderly.

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