

# Lack of evidence for a nutritional support team in a trauma intensive care unit?

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International clinical practice guidelines have been developed for nutritional therapy in critically ill patients. These recommendations are based on several levels of supporting evidence from various studies and on expert opinions.

Oh et al. [1] retrospectively studied use of a multidisciplinary nutritional support team (NST) in trauma patients in the intensive care unit (ICU). Nutritional support in the form of total calories or protein consumed relative to those recommended were higher in the NST group than in the controls. In addition, clinical outcomes of ICU stay, duration of hospitalization, and mortality were not different between the two groups. The groups were divided based on physician-requested NST consultation in the study period. Another small pre- and post-implementation retrospective study evaluated the effectiveness of NST in the same ICU [2]. Under guidance of an NST, patients showed more frequent achievement of nutritional goals (total calorie or proteins delivered as percentage of the recommended). Though not significant, the post-NST group showed downward trends of ICU stay, hospital duration, and mortality. Percentage of calories consumed/required was associated significantly with mortality rate (odds ratio, 0.997; 95% confidential interval [CI], 0.959 to 0.996;  $P=0.016$ ). The study populations of these two studies were very different, and outcome results could not be compared due to the disparate designs of the pre- and post-implementation study and the observation study. Cochran Reviews show a lack of evidence indicating that nutritional support decreases mortality [3]. However, at long-term follow-up, serious adverse events were reduced in patients receiving nutritional support (relative risk, 0.91; 95% CI, 0.85 to 0.97;  $P=0.004$ ).

Effects of nutrition support on muscle health, physical function, and sarcopenia have not been well evaluated, and long-term follow-up cohort studies are needed. I suggest that the Societies of Critical Care Medicine and Nutrition collaborate to perform such novel studies. High-quality studies on the effects of nutritional support should be performed and verified to determine the suitability of reimbursement of such programs by the health care insurance system.

## CONFLICT OF INTEREST

Jae Hwa Cho has been the editor-in-chief of Acute and Critical Care since 2016 and an editorial board member since 2008. No other potential conflict of interest relevant to this article was reported.

## Editorial

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