INPLASY

Early enteral nutrition versus delayed enteral nutrition and with or without adequate enteral nutrition in critically ill adults

INPLASY202570054

doi: 10.37766/inplasy2025.7.0054

Received: 13 July 2025

Published: 13 July 2025

Liu, MV; Gao, SJ; Zhu, LY; Yang, XY; Liu, Y.

Corresponding author:
Ming-wei Liu

lmw2004210@163.com

Author Affiliation:
Department of Emergency, Dali Bai Autonomous Prefecture People's Hospital, Dali, 671000, China.

ADMINISTRATIVE INFORMATION

Support - Yunnan Provincial Science and Technology Department and Kunming Medical University (Grant No. 202201AY070001-091).

Review Stage at time of this submission - Data extraction.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202570054

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 13 July 2025 and was last updated on 13 July 2025.

INTRODUCTION

Review question / Objective The aim of this study is to compare the effects of different initiation times and nutritional pathways of enteral nutrition regimens on critically ill patients, with the hope of providing scientific basis for optimizing enteral nutrition treatment plans for critically ill patients in clinical practice, thereby improving treatment efficacy, prognosis, and quality of life for patients.

Condition being studied At present, enteral nutrition (EN) has become an important means of nutritional support for critically ill patients, but its application still has some problems: the timing of EN initiation still lacks a unified standard; Delaying the initiation of EN (≥ 72 hours) can lead to feeding intolerance, affecting the nutritional status and clinical outcomes of patients. The expert consensus of the Chinese Abdominal Intensive Care Collaboration Group of the Asian Society for Critical Care emphasizes that the initiation of enteral nutrition should be combined with gastrointestinal function assessment. If EN is initiated too early (<24 hours) before the patient's gastrointestinal function has recovered, it may cause intolerance symptoms such as bloating and diarrhea. The choice of nutritional pathways is also controversial, as different nutritional pathways may have differences in the absorption efficiency of nutrients and the incidence of complications.

METHODS

Participant or population Patient: Severe patients receiving enteral nutrition.

Intervention Severely ill patients receive enteral nutrition within 48 hours of admission.

Comparator Severe patients who have not received enteral nutrition.

Study designs to be included The study included randomized controlled trials, prospective and retrospective cohort design.

Eligibility criteria Conform to PIOCS standards.

Information sources PubMed, Embase, and Cochrane Library databases for studies published.

Main outcome(s) Timing of initiation and energy supply targets.

Quality assessment / Risk of bias analysis We selected the Risk Of Bias In Non-randomized Studies - of Interventions to assess the risk of bias of the included non-randomized intervention studies.

Strategy of data synthesis The data analysis was performed by STATA software package (version 14).

Subgroup analysis Based on the study design, types of critical illness and initial time of EN, Subgroup analyses were performed.

Sensitivity analysis We used sensitivity analysist o evaluate the robustness of the pooled analysis results.

Country(ies) involved China/Dali Bai Autonomous Prefecture People's Hospital.

Keywords Enteral nutrition, critically illness, Critical Care, prognosis.

Contributions of each author

Author 1 - Ming-wei Liu.
Email: lmw2004210@163.com
Author 2 - Shu-ji Gao.
Email: gshuji@163.com
Author 3 - Yan-lin Zhu.
Email: 483704441@qq.com
Author 4 - Xiao-yu Yang.
Email: 13808766816@163.com
Author 5 - Yan Liu.
Email: 2517695269@qq.com