

## Controversies in Critical Care Nutrition

### References

- Allingstrup MJ, Esmailzadeh N, Wilkens Knudsen A, et al. Provision of protein and energy in relation to measured requirements in intensive care patients. *Clin Nutr.* 2012;31(4):462-8.
- Alverdy J, Zaborina O, Wu L. The impact of stress and nutrition on bacterial-host interactions at the intestinal epithelial surface. *Curr Opin Clin Nutr Metab Care.* 2005;8(2):205-9.
- Arabi YM, Aldawood AS, Haddad SH, et al. Permissive Underfeeding or Standard Enteral Feeding in Critically Ill Adults. *N Engl J Med.* 2015;372(25):2398-408.
- Berger MM, Reintam-Blaser A, Calder PC, Casaer M, Hiesmayr MJ, Mayer K, Montejo JC, Pichard C, Preiser JC, van Zanten ARH, Bischoff SC, Singer P. Monitoring nutrition in the ICU. *Clin Nutr.* 2018 Jul 20. pii: S0261-5614(18)31211-1. [Epub ahead of print].
- Berger MM. Can oxidative damage be treated nutritionally? *Clin Nutr.* 2005;24(2):172-83.
- Dickerson RN. Assessing Nitrogen Balance in Older Patients. *JPEN J Parenter Enteral Nutr.* 2015;39(7):759-60.
- Doig GS, Simpson F, Heighes PT, et al. Restricted versus continued standard caloric intake during the management of refeeding syndrome in critically ill adults: a randomised, parallel-group, multicentre, single-blind controlled trial. *Lancet Respir Med.* 2015;3(12):943-52.
- Feng Y, Ralls MW, Xiao W, Miyasaka E, Herman RS, Teitelbaum DH. Loss of enteral nutrition in a mouse model results in intestinal epithelial barrier dysfunction. *Ann N Y Acad Sci.* 2012;1258:71-7.
- Fraipont V, Preiser JC. Energy estimation and measurement in critically ill patients. *JPEN J Parenter Enteral Nutr.* 2013;37(6):705-13.
- Hanna JS. Sarcopenia and critical illness: a deadly combination in the elderly. *JPEN J Parenter Enteral Nutr.* 2015;39(3):273-81.
- Harvey SE1, Parrott F, Harrison DA, et al. Trial of the route of early nutritional support in critically ill adults. *N Engl J Med.* 2014;371(18):1673-84.
- Hayakawa M, Asahara T, Henzan N, et al. Dramatic changes of the gut flora immediately after severe and sudden insults. *Dig Dis Sci.* 2011;56(8):2361-5.

## Controversies in Critical Care Nutrition

### References Continued

Hu B, Sun R, Wu A, et al. Severity of acute gastrointestinal injury grade is a predictor of all-cause mortality in critically ill patients: a multicenter, prospective, observational study. *Crit Care.* 2017;21(1):188.

Ioannidis JPA. Why Most Published Research Findings Are False. *PLOS Medicine.* 2005;2(8):e 124.

Jiang ZD, Ajami NJ, Petrosino JF, et al. Randomised clinical trial: faecal microbiota transplantation for recurrent Clostridium difficile infection - fresh, or frozen, or lyophilised microbiota from a small pool of healthy donors delivered by colonoscopy. *Aliment Pharmacol Ther.* 2017;45(7):899-908.

Kelly CR, Kahn S, Kashyap P, et al. Update on Fecal Microbiota Transplantation 2015: Indications, Methodologies, Mechanisms, and Outlook. *Gastroenterology.* 2015;149(1):223-37.

Koekkoek WACK, van Setten CHC, Olthof LE, Timing of PROTein INTake and clinical outcomes of adult critically ill patients on prolonged mechanical VENTilation: The PROTINVENT retrospective study. *Clin Nutr.* 2018 Feb 17. pii: S0261-5614(18)30075-X. [Epub ahead of print].

Krezalek MA, DeFazio J, Zaborina O, Zaborin A, Alverdy JC. The Shift of an Intestinal "Microbiome" to a "Pathobiome" Governs the Course and Outcome of Sepsis Following Surgical Injury. *Shock.* 2016;45(5):475-82.

Kondrup J, Johansen N, Plum LM, Bak L, et al. Incidence of nutritional risk and causes of inadequate nutritional care in hospitals. *Clin Nutr.* 2002;21(6):461-8.

Li Q, Wang C, Tang C, et al. Successful treatment of severe sepsis and diarrhea after vagotomy utilizing fecal microbiota transplantation: a case report. *Crit Care.* 2015;19:37.

Li Q, Wang C, Tang C, et al. Therapeutic modulation and reestablishment of the intestinal microbiota with fecal microbiota transplantation resolves sepsis and diarrhea in a patient. *Am J Gastroenterol.* 2014;109(11):1832-4.

McClave SA, Patel J, Bhutiani N. Should fecal microbial transplantation be used in the ICU? *Curr Opin Crit Care.* 2018;24(2):105-111.

McClave SA, Taylor BE, Martindale RG et al. Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically Ill Patient: Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.). *JPEN J Parenter Enter Nutr.* 2016;40(2):159-211.

McClave SA, Martindale RG, Rice TW, Heyland DK. Feeding the critically ill patient. *Crit Care Med.* 2014 ;42 (12):2600-10.

Morowitz MJ , Carlisle EM, Alverdy JC. Contributions of intestinal bacteria to nutrition and metabolism in the critically ill. *Surg Clin North Am.* 2011;91(4):771-85.

## Controversies in Critical Care Nutrition

### References Continued

- Morowitz MJ, Babrowski T, Carlisle EM, Olivas A, Romanowski KS, Seal JB, Liu DC, Alverdy JC. The human microbiome and surgical disease. *Ann surg.* 2011;253(6):1094-101.
- Nicolo M, Heyland DK, Chittams J, et al. Clinical Outcomes Related to Protein Delivery in a Critically Ill Population: A Multicenter, Multinational Observation Study. *JPEN J Parenter Enteral Nutr.* 2016;40(1):45-51.
- Noto MJ, Wheeler AP. Mechanical ventilation, clinical trials, and glaciers. *Am J Respir Crit Care Med.* 2013;188(2):128-30.
- Ralls MW, Demehri FR, Feng Y, Woods Ignatoski KM, Teitelbaum DH. Enteral nutrient deprivation in patients leads to a loss of intestinal epithelial barrier function. *Surgery.* 2015;157(4):732-42.
- Reignier J, Boisramé-Helms J, Brisard L, et al. Enteral versus parenteral early nutrition in ventilated adults with shock: a randomised, controlled, multicentre, open-label, parallel-group study (NUTRIREA-2). *Lancet.* 2018;391(10116):133-143.
- Rice TW, et al. Initial trophic vs full enteral feeding in patients with acute lung injury: the EDEN randomized trial. *JAMA.* 2012;307(8):795-803.
- Shad BJ, Thompson JL, Breen L. Does the muscle protein synthetic response to exercise and amino acid-based nutrition diminish with advancing age? A systematic review. *Am J Physiol Endocrinol Metab.* 2016;311(5):E803-E817.
- Tosh PK, McDonald LC. Infection control in the multidrug-resistant era: tending the human microbiome. *Clin Infect Dis.* 2012;54(5):707-13.
- Van Zanten HR. Nutritional support and refeeding syndrome in critical illness. *Lancet Respir Med* 2015;3(12):904-905.
- Wei Y, Yang J, Wang J, et al. Successful treatment with fecal microbiota transplantation in patients with multiple organ dysfunction syndrome and diarrhea following severe sepsis. *Crit Care.* 2016;20(1):332.
- Wischmeyer PE. Tailoring nutrition therapy to illness and recovery. *Crit Care.* 2017;21 (Suppl 3):316.
- Wurm P, Spindelboeck W, Krause R, et al. Antibiotic-Associated Apoptotic Enterocolitis in the Absence of a Defined Pathogen: The Role of Intestinal Microbiota Depletion. *Crit Care Med.* 2017;45(6):e600-e606.

## Controversies in Critical Care Nutrition

### References Continued

Zaborin, A, Krezalek M, Hyoju S, et al. Critical role of microbiota within cecal crypts on the regenerative capacity of the intestinal epithelium following surgical stress. *Am J Physiol Gastrointest Liver Physiol.* 2017;312: G112–G122.

Zusman O, Theilla M, Cohen J, et al. Resting energy expenditure, calorie and protein consumption in critically ill patients: a retrospective cohort study. *Crit Care.* 2016;20(1):367.

**Website:**

<https://www.criticalcarenutrition.com/>

**Abstract:**

Yeh A & Morowitz M. ASPEN 2018 Abstract # 2832646.