

Commentary on ‘Guidelines for the provision of nutrition support therapy in the adult critically ill patient: The American Society for Parenteral and Enteral Nutrition’

Lorenzo Pradelli, MD^{1*}, Michael Adolph, MD PhD², Philip C. Calder, BSc (Hons), PhD, DPhil³, Nicolaas E. Deutz, MD, PhD⁴, Teodoro Grau Carmona, MD, PhD⁵, Adina T. Michael-Titus, Lic Sci., M en Sci., Doct en Sci⁶, Maurizio Muscaritoli, MD, PhD⁷, Pierre Singer, MD PhD⁸

¹AdRes-Health Economics and Outcome Research, Turin, Italy.

²Department of Anesthesiology and Intensive Care Medicine, Nutrition Support Team, University Hospital Tuebingen, Germany.

³School of Human Development and Health, Faculty of Medicine, University of Southampton, Southampton SO16 6YD, United Kingdom, and National Institute for Health Research Southampton Biomedical Research Centre, University Hospital Southampton NHS Foundation Trust and University of Southampton, Southampton, SO16 6YD, United Kingdom.

⁴Human Clinical Research Facility, Director, Center for Translational Research in Aging & Longevity, Department of Health and Kinesiology, Texas A&M University, College Station, TX, USA.

⁵Hospital Universitario Doce de Octubre, Madrid, Spain.

⁶Centre for Neuroscience and Trauma, The Blizard Institute, Barts and The London School of Medicine and Dentistry, Queen Mary University of London, London, United Kingdom.

⁷Department of Clinical Medicine, Sapienza University of Rome, Rome, Italy.

⁸Division of Anesthesia and Intensive Care of the Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel, and Head of Department of General Intensive Care and Institute for Nutrition Research, Rabin Medical Center, Hasharon Hospital, Chairman of ESPEN, Tel Aviv, Israel.

*Corresponding author: Lorenzo Pradelli, MD, AdRes-Health Economics and Outcome Research, Via Vittorio Alfieri 17, Turin 10121, Italy. Email: l.pradelli@adreshe.com

Disclosures

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Michael Adolph declares no conflicts of interest.

Philip C. Calder has received research funding from B. Braun, and undertaken consultant/advisory work for Fresenius Kabi.

Nicolaas E. Deutz declares no conflicts of interests, but discloses that he is a coinventor of several patents, owned by others, has served on scientific advisory boards for Novartis and Baxter and has been a consultant for Abbott Nutrition, Ajinomoto, OCERA and VitaNext.

Teodoro Grau Carmona declares no conflicts of interest with regard to the subject of this letter.

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To the Editor:

As authors of recent meta-analyses evaluating lipids for parenteral nutrition^{1,2} and/or the ESPEN Expert Group: lipids in the intensive care unit³ we welcome the updating of the ASPEN guidelines for clinical nutrition in adult critically ill patients,⁴ but would like to remark on certain aspects that cause us concern.

Our main areas of concern are a lack of transparency in reporting the methodology, and the inconsistencies and errors in the publication. Very few studies seem to be included in comparison with other recent meta-analyses on similar topics,^{1,2,5} but the reasons for this are unclear. The technical reporting of the guideline development process should be fully detailed and follow best practices.⁶ Because of the unclear screening process, it is impossible to duplicate or understand the authors' methodology; for example, Metry et al. (2014)⁷ was included despite being neither indexed in PubMed or Embase, nor having a statement about manual searching of the literature. We are also concerned by the search string itself, which does not reflect all of the research questions asked, nor the recommendations made. For example, it includes enteral tube feeding, proteins, probiotics and antioxidants, but no key words relating to lipids. We would have particularly welcomed a flow chart giving reasons for excluding certain randomised controlled trials captured by the search strategy,⁶ and were puzzled why some studies were included for selected outcomes but not for others also reported and included in the recommendations. For question 5B, for example, why were Weiss (2002), Wichmann (2007), and Grau Carmona (2015) excluded from the meta-analysis of ICU length of stay, yet included for other parameters such as infections and/or mortality? Furthermore, different methods were used to report different recommendations: for question 5A, the authors gave recommendations based on tabulated results and a text summary (but no meta-analysis), whereas meta-analyses were used as the basis for all other recommendations. If a meta-analysis was not performed for one question, then the reason for this should be detailed.⁸

While errors inevitably occur, to prevent them it is customary for two or more researchers to work independently to extract data, with a final data-checking step.^{6,9,10} Despite extensive changes being

made between the online and print versions, including replacement of 11 out of 25 figures and changes to 5 of 8 tables, major errors remain. For example, hospital mortality data in Figure 24 for Grau Carmona et al. (2015) are wrong, as ICU deaths are missing, resulting in the omission of 42 of 54 deaths during hospitalisation.¹¹

Finally, we would like to comment on more subjective aspects, such as the ‘slicing’ of outcomes and lack of comparison with published literature. While the decision to split outcomes into small and selected groups (e.g. pneumonia and catheter-related infections considered separately rather than in aggregate) is not necessarily right or wrong, it reduces the likelihood of statistically significant results by considering fewer events. As decisions on whether or not to combine data are often complex and somewhat subjective, it is of utmost importance that the authors describe their rationale so that readers can understand their approach. Furthermore, there was lack of discussion about the update’s conclusions in comparison with other systematic reviews/meta-analyses and previous guidelines, and where conclusions differed, reasons for this (e.g. different eligibility criteria, search methods, or data synthesis approaches), as is customary when producing guidelines, were not provided.¹²

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