

Revisions needed for current IV feeding safeguards against bloodstream infections

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Current guidelines to help prevent bloodstream infections during intravenous feeding may need revisions to strengthen protections for patients, a new study finds.

Researchers at the United Kingdom's University of Southampton found that current guidelines do not account for other independent factors that can affect the growth of potentially deadly microorganisms. Their study was published today in the OnlineFirst version of the *Journal of Parenteral and Enteral Nutrition (JPEN)*, the research journal of the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.).

Existing guidelines restrict how long a single bag of parenteral nutrition (PN) containing lipids can be used due to the ability of lipids to encourage the growth of microorganisms. This study looked at the growth of *Escherichia coli (E coli)* and *Enterococcus durans (E durans)* in PN to see if other factors can affect microbial growth.

The study found that additional factors, including <u>glucose concentration</u>, proportion of glucose to lipid, and osmolarity (concentration of a solution that can pass through the wall of a living cell through osmosis), can affect microbial growth apart from the presence of lipids.

The study's researchers recommend that these additional factors should be considered when making clinical and policy decisions to limit the potential growth of microorganisms in PN.



Provided by American Society for Parenteral and Enteral Nutrition

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