

Analysis of Nutritional Interventions for Pediatric Patients on Long-Term Enteral Nutrition

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Enteral nutrition is a key intervention for pediatric patients with complex medical conditions including neurological impairments, congenital heart disease, and genetic disorders. While enteral nutrition may be necessary for pediatric patients with chronic conditions inhibiting their oral intake of nutrients, long-term tube feeding can have negative side effects on the lives of patients and their support systems. The purpose of the present study was to investigate the effectiveness of various nutrition interventions among pediatric patients receiving long-term tube feeding. To be considered, patients had to be less than 18 years old, have been on enteral feeding for greater than 6 consecutive weeks at some point in their life, and have had greater than 3 visits with a doctor or dietitian. Data, including anthropometrics, number of visits with a dietitian, information regarding patients' tube feeding regimen, tolerance, and quality of life indicators, were recorded from dietitian notes in patients' charts. Enteral nutrition regimens providing breastmilk, Pediasure, and Nourish were associated with the most favorable growth outcomes. Likewise, remaining on one feeding regimen for a longer period of time related to better growth outcomes. Number of dietitian visits was not related to growth outcomes but was related to tolerance with the highest mean number of dietitian visits among patients struggling with diarrhea and the least among patients experiencing vomiting. Few nutritional interventions were associated with increased oral intake, showing the need for additional research to identify effective nutritional interventions for increasing percentage of oral intake among pediatric patients receiving long-term enteral nutrition.