

January Nutrition Research Review

Nutrition Support Teams: Institution, Evolution, and Innovation

Publication: Nutrition in Clinical Practice

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Abstract: This review examines the historical institution, evolution, and innovations of nutrition support teams (NSTs) over the past six decades. NSTs were instituted to address the need for the safe implementation and management of parenteral nutrition, which was developed in the late 1960s. The number of NSTs has varied since, however hospitals and healthcare have adapted, as additional education and experience grew, primarily through ASPEN's efforts. Future innovations will assist in providing the right nutrition support for the right patient in the right way at the right time, recognizing that nutrition care is a human right.

<https://pubmed.ncbi.nlm.nih.gov/36440741/>

Nutrition Education in Medical Schools (NEMS) Project: Promoting Clinical Nutrition in Medical Schools – Perspectives from Different Actors

Publication: Clinical Nutrition

Authors: C. Cuerda, M. Muscaritoli, M. Chourdakis, Z. Krznaric, A. Archodoulakis, S. Gürbüz, K. Berk, M. Aapro, C. Farrand, K. Patja, S. Schneider, R. Barazzoni

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Abstract: The European Society for Clinical Nutrition and Metabolism (ESPEN) launched the Nutrition Education in Medical Schools (NEMS) Project in 2017. This paper describes the perspectives of different clinicians in the promotion of nutrition education in medical schools from an online meeting held in November 2021 on this topic. There was strong agreement among the representatives from different settings that increasing nutritional knowledge and skills of young doctors is now possible and will launch a virtuous cycle that will proactively involve all the other healthcare professionals working in the nutritional field.

[https://www.clinicalnutritionjournal.com/article/S0261-5614\(22\)00388-0/fulltext](https://www.clinicalnutritionjournal.com/article/S0261-5614(22)00388-0/fulltext)

Dietary and Complementary Feeding Practices of US Infants, 6 to 12 Months: A Narrative Review of the Federal Nutrition Monitoring Data

Publication: Journal of The Academy of Nutrition and Dietetics

Authors: Regan L. Bailey, Jaime S. Stang, Teresa A. Davis, Timothy S. Naimi, Barbara O. Schneeman, Kathryn G. Dewey, Sharon M. Donovan, Rachel Novotny, Ronald E. Kleinman, Elsie M. Taveras, Lydia Bazzano, Linda G. Snetselaar, Janet de Jesus, Kellie O. Casavale, Eve E. Stoody, Joseph D. Goldman, Alanna J. Moshfegh, Donna G. Rhodes, Kirsten A. Herrick, Kristin Koegel, Cria G. Perrine, Tusa Rebecca Pannucci

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Abstract: This article summarizes nutrition and feeding practices examined by the 2020 Dietary Guidelines Advisory Committees during the CFB life stage. Breastfeeding initiation is high (84%), but exclusive breastfeeding at 6 months (26%) is below the Healthy People 2030 goal (42%). Most infants (51%) are introduced to CFBs sometime before 6 months. The primary mode of feeding (ie, human milk fed [HMF]; infant formula or mixed formula and human milk fed [FMF]) at the initiation of CFBs is associated with the timing of introduction and types of CFBs reported. FMF infants (42%) are more likely to be introduced to CFBs before 4 months compared with HMF infants (19%). Different dietary patterns, such as higher prevalence of consumption and mean amounts, were observed, including fruit, grains, dairy, proteins, and solid fats. Compared with HMF infants of the same age, FMF infants consume more total energy (845 vs 631 kcal) and protein (22 vs 12 g) from all sources, and more energy (345 vs 204 kcal) and protein (11 vs 6 g) from CFBs alone. HMF infants have a higher prevalence of risk of inadequate intakes of iron (77% vs 7%), zinc (54% vs <3%), and protein (27% vs <3%). FMF infants are more likely to have an early introduction (<12 months) to fruit juice (45% vs 20%) and cow's milk (36% vs 24%). Registered dietitian nutritionists and nutritional professionals should consider tailoring their advice to caregivers on dietary and complementary feeding practices, considering the primary mode of milk feeding during this life stage to support infants' nutrient adequacy. National studies that address the limitations of this analysis, including small sample sizes and imputed breast milk volume, could refine findings from this analysis.

<https://pubmed.ncbi.nlm.nih.gov/34688966/>

Effect of Hydrolyzed Formulas on Gastrointestinal Tolerance in Preterm Infants: A Systematic Review and Meta-Analysis

Publication: Journal of Maternal-Fetal and Neonatal Medicine

Authors: Mengyuan Li, Yuehui Fang, Yiyao Lian, Xiaodi Lu, Meijuan Qiu, Yuna He

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Abstract: Hydrolyzed formulas (HFs) have been increasingly used in early enteral feeding in preterm infants. The current study aimed to compare the effect of HFs with standard preterm formula (SPF) on gastrointestinal tolerance in preterm infants by systematically reviewing the randomized controlled trials (RCTs) related. Relevant studies published until August 2021 were searched in English and Chinese databases, including PubMed, Embase, Cochrane Library, CNKI, WanFang Data, and VIP. Three outcomes, including the incidence

of feed intolerance (FI), necrotizing enterocolitis (NEC), and the time to full enteral feeding, were chosen to evaluate the effect on gastrointestinal tolerance comprehensively. Ten eligible studies with 886 participants were included in the final analysis. Infants who received HFs showed a lower risk of FI (RR = 0.61, 95% CI = 0.42-0.90; $p < .05$) and shorter time to full enteral feeding (MD = -0.56, 95% CI = -1.03 to -0.10; $p < .05$) compared with those fed with SPF. There was no significant difference in risk of NEC (RR = 0.48, 95%CI = 0.21 - 1.08; $p > .05$) between the two groups. The results showed that HFs may have benefits in improving gastrointestinal tolerance in preterm infants, including reducing the risk of FI and shortening the time to full enteral feeding.

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Preterm Infant Nutrition: Considerations for Infants at Risk of Refeeding Syndrome

Publication: Journal of Perinatology

Authors: Daniel T. Robinson, Sarah N. Taylor, Fernando Moya

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Abstract: Refeeding syndrome (RS) in preterm infants is a scenario of fetal malnutrition, primarily resulting from placental insufficiency, followed by a postnatal physiologic adaptation and response to an imbalance of nutrients provided parenterally. Growth restriction and small gestational age status are common findings in infants at risk of developing RS. Adverse clinical outcomes associated with RS may be severe and life-threatening. The biochemical abnormalities that occur in RS may be mitigated through careful monitoring and adaptation of the clinical management of parenteral and enteral nutrition. This perspective reviews the physiology and metabolism in infants with RS and provides suggested approaches to their clinical monitoring and nutritional management.

<https://pubmed.ncbi.nlm.nih.gov/36414735/>