ANHI August 2025 Nutrition Research Review

Efficacy of Long-Term Oral Nutritional Supplementation with Dietary Counseling on Growth, Body Composition and Bone Mineralization in Children with or at Risk for Undernutrition: A Randomized Controlled Trial

Publication: Nutrition Journal
Publish Date: July 2025
Authors: Ow MYL, Tran NT, Berde Y, Nguyen TS, Tran VK, Jablonka MJ, Baggs GE, Huynh DTT

SUMMARY

The study highlights the importance of addressing not only weight gain but also the quality of the weight gained in children with or at risk of undernutrition. Adding ONS to dietary counselling not only improves linear catch-up growth but also helps to address deficits in lean mass and bone mineralization associated with undernutrition in children. Ow et al. conducted a 240-day randomized trial in Vietnamese preschoolers with or at risk for undernutrition, comparing dietary counseling (DC) alone versus DC plus two daily servings of a complete and balanced oral nutritional supplement The ONS+DC group showed significantly greater gains in

height, weight, lean mass, and bone mineral density, alongside improved vitamin D and K status, fewer sick days, and better parent-reported health indicators. These findings support ONS use to enhance growth quality and overall health in undernourished children.

READ ARTICLE

Expert Opinion on the Current Conceptual, Clinical and Therapeutic Aspects of Disease Related Malnutrition and Muscle Loss: A Multidisciplinary Perspective

Publication: Frontiers in Nutrition
Publish Date: July 2025
Authors: Doganay M, Halil MG, Kaymak C, Selek U, Topcuoglu MA, Yalcin S

SUMMARY

This expert consensus highlights the intertwined nature of disease-related malnutrition (DRM) and muscle loss, emphasizing their shared impact on clinical outcomes across vulnerable populations. A multidisciplinary panel reviewed 181 publications to assess DRM and muscle wasting in people living with advanced age, cancer, neurodegenerative conditions, and critical illness. The authors advocate for early screening and targeted nutritional interventions, particularly high-protein oral supplements enriched with β-hydroxy-β-methylbutyrate (HMB) and vitamin D. These strategies aim not only to meet nutritional needs but also to preserve or restore muscle mass and function. The report underscores the need for individualized, evidence-based nutritional care to mitigate the dual burden of malnutrition and muscle loss.

READ ARTICLE

Guidance for Healthy Complementary Feeding Practices for Allergy Prevention in Developed Countries: An EAACI Interest Group Report

Publication: Pediatric Allergy and Immunology
Publish Date: July 2025
Authors: Vlieg-Boerstra B, Netting M, Vassilopoulou E, Reese I, Jensen-Jarolim E, Marchand S,

Smolinska S, Venter C, Wright K, Santos AF, Skypala I

SUMMARY

This EAACI report provides evidence-based guidance on complementary feeding to prevent allergies in infants from developed countries. Recommendations include introducing allergenic foods (e.g., peanut, egg) around 6 months, maintaining breastfeeding during introduction, and avoiding delayed exposure. The report emphasizes individualized approaches and the importance of parental education. These practices aim to reduce allergy risk and support healthy infant development.

READ ARTICLE

The Effects of Beta-Hydroxy-Beta-Methyl Butyrate Supplementation in Surgical Patients: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

Publication: Frontiers in Nutrition
Publish Date: July 2025
Authors: Hu YG, Shi JH, Yu DX, Huang HB

SUMMARY

This systematic review and meta-analysis evaluated the impact of beta-hydroxy-beta-methylbutyrate (HMB) supplementation on clinical and muscle-related outcomes in surgical patients. Eleven randomized controlled trials involving 575 participants were analyzed. HMB supplementation was associated with significantly reduced hospital length of stay and fewer postoperative complications. Improvements were also observed in mid-arm muscle circumference, appendicular skeletal muscle mass, and six-minute walking distance, though changes in overall skeletal muscle mass and lean body mass were not significant. Nutritional status indicators such as body weight and serum albumin showed no notable differences. The authors call for more rigorous trials to confirm these findings.

READ ARTICLE

Nutrition Interventions in the First 1000 Days and Long-Term Health Outcomes: A Systematic Review

Publication: Pediatric Research
Publish Date: July 2025 (Epub July 18)
Authors: Xu A, Guerlich K, Koletzko B, Grote V

SUMMARY

Xu et al. systematically reviewed 55 studies on nutrition interventions during the first 1000 days of life and their long-term health impacts. Findings show that early interventions—especially those improving maternal and infant nutrition—positively influence growth, cognitive development, and metabolic health into adolescence and adulthood. The review underscores the critical role of early-life nutrition in shaping lifelong health trajectories.

READ ARTICLE

Artificial intelligence in Personalized Nutrition and Food Manufacturing: A Comprehensive Review of Methods, Applications, and Future Directions

Publication: Frontiers in Nutrition
Publish Date: July 2025
Authors: Agrawal K, Goktas P, Kumar N, Leung MF

SUMMARY

Artificial intelligence (AI) is reshaping personalized nutrition and food manufacturing by enabling real-time dietary recommendations, adaptive meal planning, and precision food production. This review outlines AI-driven methods such as deep learning, federated learning, and computer vision that support individualized nutrition based on biomarkers and behavioral data. In food manufacturing, AI enhances quality control, predictive maintenance, and waste reduction, contributing to sustainability and efficiency. The authors also address challenges including data privacy, algorithmic transparency, and equitable access. By integrating healthcare, nutrition, and industrial systems, the review presents a roadmap for ethical and scalable AI applications in building intelligent, inclusive food-health ecosystems.

READ ARTICLE

Provision and Access to Nutrition Care for the Prevention and Treatment of Malnutrition in Older Adults Within Long-Term Care and Community Settings: A Consensus Statement of the Academy of Nutrition and Dietetics

Publication: Journal of the Academy of Nutrition and Dietetics
Publish Date: July 2025
Authors: Simon JR, Munoz N, Chao SY, Litchford M, Moloney L

SUMMARY

This consensus statement from the Academy of Nutrition and Dietetics emphasizes the importance of equitable access to nutrition care for older adults in long-term care and community settings. Drawing on systematic reviews and expert input, the authors identify barriers such as fragmented care, limited reimbursement, and workforce shortages. Strategies include routine screening, individualized nutrition care by registered dietitian nutritionists (RDNs), integration of services across settings, and expanded policy support. The statement calls for improved staffing, enhanced training, and increased research to support evidence-based interventions. Ensuring access to nutrition care is positioned as essential to reducing malnutrition and improving health outcomes in aging populations.

READ ARTICLE

Tackling Disease-Related Malnutrition in Resource-Limited Settings: An International Position Paper Based on Expert Consensus

Publication: Nutrition in Clinical Practice
Publish Date: July 2025
Authors: Cardenas D, Ferreira IR, Correia MITD, Barbagallo M, Lal S, Barazzoni R, Gomes F

SUMMARY

This international position paper outlines expert consensus on addressing disease-related

malnutrition (DRM) in resource-limited settings (RLSs). Based on a global survey and expert panel discussion, key barriers include limited awareness, inadequate screening, lack of trained personnel, and insufficient reimbursement for nutrition care. The authors propose a three-step strategy: evaluating the applicability of existing guidelines, developing resource-stratified guidelines (RSGs), and promoting their implementation. Emphasis is placed on tailoring interventions to local contexts, strengthening health systems, and expanding education and research. The paper calls for global collaboration to ensure equitable access to nutrition care as a fundamental human right.

READ ARTICLE

Like this newsletter? Forward to your colleagues and let them know they can subscribe here.

FOLLOW ANHI

If you'd like to unsubscribe, we'll miss you when you go. You're welcome to subscribe again anytime.