*Macedonian Pharmaceutical Bulletin*, 72 (Suppl 1) 375 - 376 (2026)
Online ISSN: 1857-8969
DOI: 10.33320/maced.pharm.bull.2026.72.03.181
*Short communication*

# Pediatric nutritive care and counseling: from infancy to adolescence

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## Introduction

Proper nutrition during childhood is essential for optimal growth, cognitive development, immune function, and prevention of chronic diseases later in life. Nutritional needs vary significantly from infancy through adolescence, requiring age-appropriate dietary guidance and continuous parental education. Dietitians and pharmacists, as highly accessible healthcare professionals, play a key role in providing nutritional counseling, facilitating the early recognition of nutritional disorders, and promoting healthy lifestyle habits among children and adolescents (World Health Organization, 2023).

## Materials and methods

This paper presents a narrative review and practical overview of pediatric nutritional care based on current international nutritional recommendations, clinical guidelines, and everyday pharmacy and dietetic counseling experiences. The review includes infant feeding practices, breastfeeding recommendations, complementary feeding schedules, micronutrient supplementation, food allergies and intolerances, adolescent nutritional challenges, and the role of dietitians in preventive healthcare in children and adolescents and their role in nutritional care in pediatric diseases.

Relevant literature, pediatric nutrition guidelines, and practical counseling approaches were analyzed to emphasize evidence-based nutritional guidance across different pediatric age groups.

## Nutritional considerations from infancy to adolescence

Exclusive breastfeeding during the first six months of life remains the gold standard for infant nutrition due to its optimal nutritional composition and immunological benefits (WHO and UNICEF, 2023). Breast milk provides essential nutrients, immunoglobulins, enzymes, and bioactive compounds that support infant growth and reduce the risk of infections, allergies, and gastrointestinal diseases (Victora et al., 2016). Timely introduction of complementary foods, adequate intake of vitamins and minerals such as vitamin D and iron, and balanced nutrition during childhood are crucial for healthy development of children.

Inadequate dietary habits, early introduction of cow’s milk, excessive sugar consumption, and highly processed foods may contribute to nutritional deficiencies, obesity, allergies, GI disorders, and eating disorders (Agostoni and Turck, 2011).

Food allergies and intolerances represent an increasing clinical concern in pediatric populations and require multidisciplinary management and

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individualized dietary counseling. The most common pediatric food allergens include cow's milk, eggs, peanuts, soy, fish, and shellfish (Crittenden and Bennett, 2005). Adolescence is additionally associated with increased nutritional demands and greater risk of unhealthy eating behaviors, including restrictive diets and eating disorders such as anorexia nervosa and bulimia nervosa (American Psychiatric Association, 2022). In children with obesity, dietitians can establish balanced dietary habits and lifestyle modifications that reduce long-term cardiovascular and metabolic risks (Styne et al., 2017). In cases of type 1 diabetes mellitus, dietitians are essential for carbohydrate counting education and optimization of glycemic control (American Diabetes Association, 2024). In GI disorders such as celiac disease and inflammatory bowel disease, dietitians provide specialized gluten-free or disease-specific nutrition plans that support intestinal healing and adequate nutrient intake (Fewtrell et al.,2017). Children with malnutrition, failure to thrive, or chronic illnesses require individualized nutritional interventions to support recovery, immunity, and normal growth (WHO, 2023). In oncology patients, dietitians help maintain nutritional status during chemotherapy and reduce treatment-related complications (Ladas et al., 2016).

Community pharmacists serve as an accessible source of advice on infant feeding, dietary supplementation, digestive disorders, allergies, and other nutrition-related concerns. Appropriate referral to a dietitian is therefore crucial for providing evidence-based nutritional counseling and parental education and counseling. Together, dietitians and pharmacists can support healthy eating behaviors and promote optimal growth and development throughout childhood and adolescence, contributing to disease prevention.

## Conclusion

Pediatric nutritional care requires a multidisciplinary and preventive approach focused on education, early intervention, and promotion of healthy eating habits from infancy to adolescence. Dietetitians have an essential role in providing accessible nutritional counseling, supporting parents, and contributing to improved public health outcomes. Strengthening nutritional awareness and preventive healthcare strategies during childhood can help establish healthier future generations.

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