



SPECIFIC FEATURES OF RATIONAL FEEDING OF INFANTS UNDER ONE YEAR OF AGE

Baxtiyor Kholmakhmatovich Yallayev

Rahima Elbabayevna Rahmonova

*Shahrisabz Abu Ali ibn Sino Public Health Technical
College*

ARTICLE INFO:

Received:23.10.2026

Revised: 24.10.2026

Accepted:25.10.2026

KEY WORDS:

*infant, rational
feeding, breast milk,
exclusive breastfeeding,
complementary feeding,
food safety, hygiene,
child development.*

ABSTRACT

This article examines the main principles of rational feeding of infants under one year of age, the importance of breastfeeding, the introduction of complementary foods from around six months of age, and hygiene and safety in food preparation and feeding. Drawing on international recommendations and relevant legal sources of the Republic of Uzbekistan, it summarises recommendations for feeding infants in accordance with their age, development, and individual needs.

Introduction

The first twelve months of life are a critical period for physical growth, the development of the nervous system and other organs, the maturation of immune protection, and the formation of future eating habits. Ensuring that infants receive adequate, age-appropriate, and safe nutrition is therefore an important aspect of family care and primary healthcare. Feeding errors may affect a child's growth rate, intake of iron and other micronutrients, and resistance to infections.

According to recommendations from the World Health Organization (WHO) and UNICEF, breastfeeding should begin within the first hour after birth. Infants should be exclusively breastfed for the first six months, after which safe and nutritious complementary foods should be introduced while breastfeeding continues until two years of age or beyond [1, 2]. This approach helps meet the child's nutritional needs and supports close bonding between mother and child.

The aim of this article is to analyse the main principles of rational feeding for children under one year of age, summarise age-specific considerations, and present practical recommendations for ensuring feeding safety.



Literature Review

International recommendations on infant feeding emphasise exclusive breastfeeding during the first six months, followed by the gradual introduction of complementary foods while breastfeeding continues [1, 2]. The WHO's 2023 guideline identifies feeding during 6–23 months as a period in which the risks of nutrient deficiencies and impaired growth are particularly important. It highlights dietary diversity, food safety, and responsiveness to children's hunger and satiety cues [2].

The legislation of the Republic of Uzbekistan also provides for the support of breastfeeding and establishes requirements for food products intended for infants and young children. In particular, Law No. O'RQ-574 of 23 October 2019 regulates support for breastfeeding and requirements relating to food for children [3]. Information materials issued by the Ministry of Health of the Republic of Uzbekistan provide practical recommendations on preparing and serving complementary foods and limiting certain products [4, 5].

The literature indicates that rational feeding is not limited to determining the quantity of food. A child's age and developmental stage, food texture, interaction during feeding, food safety, and the family's adherence to medical advice must also be taken into account.

Research Methodology

This article is theoretical and analytical in nature. It reviews WHO recommendations on infant and young child feeding, the WHO guideline on complementary feeding, relevant legislation of the Republic of Uzbekistan, and publicly available information from the Ministry of Health. Comparative analysis, thematic synthesis, and classification by age group were used. The article does not present new clinical experiments or original statistical data; its conclusions are based on the sources reviewed.

Results and Discussion

1. Feeding During the First Six Months of Life

During the first six months of life, breast milk is the primary and generally sufficient source of nutrition for most healthy, full-term infants. Exclusive breastfeeding means that no water, tea, juice, or other foods and drinks are given in addition to breast milk; medicines or vitamin supplements prescribed for medical reasons may be exceptions. Breastfeeding is recommended on demand, day and night, in response to the infant's hunger cues rather than according to a rigid schedule [1].

Breast milk contains nutrients and biologically active components essential for a child's growth. Breastfeeding helps reduce the risk of certain infections and supports emotional bonding between mother and infant. If breastfeeding difficulties arise, there are concerns about milk supply, or the infant is not gaining weight adequately, the family should consult a paediatrician or a qualified breastfeeding specialist rather than introducing additional foods or drinks without professional advice.



If breastfeeding is not possible or another feeding method is medically indicated, an age-appropriate commercially prepared infant formula should be selected with professional guidance. Diluting or concentrating formula, preparing homemade substitutes without expert advice, or using cow's milk as the main drink before 12 months of age may be unsafe. Product instructions, preparation hygiene, and storage requirements must be followed carefully.

2. Introducing Complementary Foods from Around Six Months

At around six months of age, an infant's requirements for energy and certain nutrients, including iron, increase. Complementary foods are introduced at this stage alongside continued breastfeeding. They should not be introduced too early or delayed unnecessarily; the child's developmental readiness and medical condition should be considered [2]. Signs of readiness may include stable head control, the ability to sit upright with support, and an interest in food. The decision should be based on the individual child.

Initially, small amounts of soft, mashed, or puréed foods with high nutritional value can be offered. The infant gradually becomes accustomed to new tastes and textures. The diet may include vegetables and fruits, iron-rich foods, meat or other suitable sources of protein, and age-appropriate cereals. It is important not to rely exclusively on sweet fruit purées or thin porridge, but to provide as varied a diet as possible.

The thickness and texture of food should gradually change in line with the development of the child's chewing and swallowing skills. Making food excessively watery may reduce its nutrient density. Infants should be supervised during meals, never forced to eat, and their hunger and satiety cues should be respected. WHO recommendations indicate offering complementary foods two to three times a day at 6–8 months and three to four times a day at 9–11 months. Portion size and meal frequency should be adjusted to the child's needs and development [1, 2].

Table 1. General Feeding Guidelines for Children Under One Year of Age

Age group	Main feeding approach	Key considerations
0–6 oy	Exclusive breastfeeding; an appropriate infant formula when medically necessary	Breastfeed on demand; do not routinely give water, tea, or other foods; monitor weight gain
6–8 oy	Continue breastfeeding and introduce soft complementary foods	Start with small amounts; offer diverse, iron-rich foods; ensure a safe texture
9–11 oy	Continue breastfeeding alongside a variety of complementary foods several times a day	Offer small, soft pieces; develop feeding skills; prevent choking
Approaching 12 months	Age-appropriate, safe	Avoid hard, round, or



	family foods with little or no added salt	sticky pieces; consider the child's individual needs
--	---	--

The table provides general guidance and does not replace an individual feeding plan or consultation with a paediatrician.

3. Food Safety and Hygiene

Infant food should be freshly prepared, clean, and safe. Hands should be washed with soap before preparing food and feeding the child; utensils should be kept clean, and cross-contamination between raw ingredients and ready-to-eat foods should be prevented. Meat, fish, and eggs should be thoroughly cooked, and prepared food should not be left at room temperature for long periods. Failure to follow safe storage and reheating practices increases the risk of foodborne illness [4].

Whole nuts, hard pieces of carrot, whole grapes, round slices of sausage, hard sweets, and similar foods should not be given because they pose a choking risk. Honey should not be given to children under one year of age because of the risk of infant botulism. Unpasteurised dairy products and raw or undercooked eggs and meat are also unsafe choices. Cow's milk is not recommended as the main drink for infants under 12 months [5].

Added salt and sugar should be limited as much as possible, and sweetened drinks and tea should not be used as routine beverages. Fruit juice is not necessary as a substitute for whole fruit. Safe drinking water may be offered with complementary foods. When a new food is introduced, the child's condition should be observed. If a rash, vomiting, difficulty breathing, or other acute symptoms occur, medical attention should be sought.

4. The Role of Parents and Healthcare Professionals in Rational Feeding

Effective rational feeding depends on parents having accurate information and working in partnership with healthcare professionals. Community nurses and paediatricians should regularly assess the child's weight, length, overall development, feeding practices, and the family's concerns. Feeding plans for infants born prematurely or with low birth weight, chronic conditions, or allergy-related risks should be individualised.

Rather than forcing a child to eat or using food as a reward or punishment, caregivers should create a calm and attentive feeding environment. Adults should encourage the child's interest in food without forcing them to finish a predetermined portion. Consistent understanding of feeding recommendations among family members, including grandparents and other caregivers, also helps ensure consistent feeding practices.

Conclusion

Rational feeding of children under one year of age is an ongoing process aimed at supporting healthy growth and development. Its key principles are to promote exclusive breastfeeding during the first six months of life, gradually introduce safe and nutrient-dense complementary foods from around six months, and continue breastfeeding.



The type, quantity, and texture of food should be appropriate to the child's age, development, and individual needs. Particular importance should be given to hygiene, reducing the risks of choking and foodborne illness, and avoiding honey and other unsuitable products. Parents are advised to rely on trustworthy sources and consult a paediatrician when feeding-related concerns arise.

REFERENCES

1. World Health Organization. Infant and young child feeding. Fact sheet. <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding> (accessed 23 October 2026).
2. World Health Organization. WHO Guideline for Complementary Feeding of Infants and Young Children 6–23 Months of Age. Geneva: WHO, 2023. <https://www.who.int/publications/i/item/9789240081864>.
3. Law of the Republic of Uzbekistan No. O'RQ-574 of 23 October 2019, "On Support for Breastfeeding and Requirements for Food Products for Infants and Young Children." <https://lex.uz/uz/acts/-4566077>.
4. Ministry of Health of the Republic of Uzbekistan. "Important Rules for Preparing and Giving Complementary Foods to Children Under One Year of Age." 13 June 2025. <https://gov.uz/oz/ssv/news/view/61123>.
5. Ministry of Health of the Republic of Uzbekistan. "Which Foods Should Not Be Given to Infants?" 29 May 2025. <https://gov.uz/oz/ssv/news/view/57735>.