

THE STATE OF MOTHERS' KNOWLEDGE ABOUT INFANT FEEDING

Ewa Malczyk¹, Agnieszka Malczyk², Joanna Wyka³, Natalia Uliczka¹

¹Faculty of Health Science and Physical Education, University of Applied Science in Nysa, Poland

²Faculty of Medicine, Medical University of Wrocław, Poland

³Department of Human Nutrition, Faculty of Biotechnology and Food Science, Wrocław University of Environmental and Life Sciences, Poland

ABSTRACT

Background. The correct nutrition of infants is crucial for their proper mental and physical development, as well as for adequate metabolic programming. Programming is the influence of environmental factors, including nutrition, during critical periods of early development (including fetal life and the first years of life) on the risk of disease in adulthood.

Objective. The aim of the study was to investigate the level of knowledge of mothers on infant feeding.

Material and Methods. The study involved 1100 mothers of different ages who were active in online groups interested in maternity and infant feeding. The inclusion criterion for the study was having a child born between 2021 and 2023. The study used a CAWI (Computer-Assisted Web Interview) method and the survey was conducted in November 2024.

Results. It was shown that most of the mothers surveyed had very good knowledge of infant feeding. A good level of knowledge was recorded among younger mothers of children under 6 months of age, with primary/high school education and living in rural areas.

Conclusion. It is recommended to provide more detailed information on expanding the diet of infants after 6 months of age, e.g. on the labels of foods dedicated to children.

Keywords: *mothers, knowledge, feeding, infants, breastfeeding*

INTRODUCTION

The first and best food for the baby is breast milk, which has proven health benefits and is considered the gold standard in infant nutrition [1, 2]. It has nutritional and immunological properties, supporting the normal physical, emotional and intellectual development of infants. Breastfeeding reduces the risk of many diseases, both during breastfeeding and later in life. Among these diseases, the following are distinguished: low risk of leukaemia, lymphoma, Crohn's disease and reduces the risk of sudden infant death. Breastfeeding has many benefits for the mother, including reducing the risk of breast cancer. It is also likely to reduce the risk of allergic diseases, overweight and obesity, type 1 and 2 diabetes and hypertension [3, 4].

All organisations concerned with infant feeding, such as the World Health Organisation (WHO), the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) and the American Academy of Paediatricians (AAP), recommend exclusive breastfeeding for the first six months of a child's life [1].

After the six-month period, breast milk feeding should be continued if both mother and baby want it. But the infant's diet should be expanded with new products as breast milk becomes insufficient to cover the needs of the developing organism [5]. According to ESPGHAN, it is recommended to start dietary expansion after the infant is 17 weeks old, but no later than 26 weeks of age [6]. It is important to introduce a new food, e.g. cereal or egg, into the diet one at a time and monitor the baby's health. In the traditional method, the baby is fed with a spoon, starting with creamy foods and then introducing foods that require biting. In another method, called BLW (Baby Led Weaning), the use of spoons and purees is omitted, offering food that the child can grasp, chew and consume [5, 7]. According to the recommendations of the Polish Society of Gastroenterology, Hepatology and Child Nutrition (PTGHiZD), this method should be implemented from the seventh month of child's life [1]. During the expansion of the diet with the BLW method, the principle of single introduction of new foods and observation also applies. The child must not be left unattended during meals because of the possibility of

Corresponding authors: Joanna Wyka, Department of Human Nutrition, Faculty of Biotechnology and Food Science, Wrocław University of Environmental and Life Sciences, 37th Chelmońskiego St., 50-375 Wrocław, Poland; email: joanna.wyka@upwr.edu.pl; phone: +48 71 320 77 57

This article is available in Open Access model and licensed under a Creative Commons Attribution-Non Commercial 4.0 International License (CC BY-NC) (<https://creativecommons.org/licenses/by-nc/4.0/>)

Publisher: National Institute of Public Health NIH - National Research Institute

choking. Another method of feeding infants takes into account the principle 'the parent/carer decides when and what the child eats, while the child decides how much to eat' [8]. The above principle and the BLW method promote the child's independence and motor development.

Aim of the study

The aim of the study was to investigate the level of knowledge of mothers on infant feeding.

MATERIAL AND METHODS

Study design and settings

A survey to analyse women's knowledge on infant feeding was conducted in November 2024 in Poland, using the CAWI (Computer-Assisted Web Interview) technique. A total of 1,100 women participated in the study, gathered in online social media groups with a profile related to motherhood and infant diet. The inclusion criterion for the study was: being a mother, having a baby in 2021-2023. The study was conducted using a proprietary survey questionnaire, consisting of two parts: the first part concerned socio-demographic data (including age, number of children had, baby's gender place of residence, education) and the second part included 14 questions on knowledge about infant nutrition. Knowledge was assessed on the basis of correct answers, awarding 1 point for each answer.

A maximum of 14 points could be obtained. The level of knowledge was assessed on the basis of the criteria:

- less than 25% of correct answers (0-3.5 points) – inadequate knowledge,
- 25-50% of correct answers (3.6-7.0 points) – satisfactory knowledge,
- 50-75% of correct answers (7.1-10.4 points) – good knowledge,
- 75%+ of correct answers (10.5-14 points) – very good knowledge.

Statistical analysis

Statistical analysis was performed using the Statistica v.13.3. (TIBCO Software Inc. USA). The distribution of variables was analysed using the Shapiro-Wilk test. To compare the level of infant feeding knowledge of the study mothers with their sociodemographic parameters, Kruskal-Wallis tests and post hoc test (distribution different from normal distribution) were performed. The significance level was taken at $p < 0.05$.

RESULTS

Participants

The largest group were mothers aged between 26 and 32 (54.9%) and the smallest were women over 40 (3%). The average age of the mothers surveyed was 30.1 years. The majority of women in the survey lived

Table 1. Characteristics of respondents (N = 1100)

Variables		N	%
Age [years]	19-25	185	16.8
	26-32	604	54.9
	33-39	278	25.3
	40 and above	33	3.0
Education	primary/vocational	44	4.0
	secondary	286	26.0
	higher	770	70.0
Place of residence	rural areas	336	30.6
	city up to 50,000	274	24.9
	city over 50,000	490	44.5
Number of children	1	895	81.3
	2	163	14.8
	3 and more	42	4.0
Baby's gender	boy	564	51.3
	girl	536	48.7
Child's age	0 - ≤ 6 months	140	12.7
	> 6 - ≤ 12 months	521	47.4
	> 1 year and older	439	39.9
Total		1100	100.0

N – number of observations

in cities with more than 50,000 inhabitants (44.5%), and one third lived in rural areas. The majority of female respondents (70%) had a university education and 26% had a secondary education. The remaining mothers declared primary or vocational education. More than 80% of the women surveyed had one child and 15% had two children. The remaining respondents had three or more children. There were slightly more mothers of boys (564) than girls (536) among the respondents. Most women had children aged > 6-12 months (47.4%) (Table 1).

Questionnaire

Table 2 (part 1) shows the percentage of infant feeding responses given by mothers. About 61.4%

agreed with the statement that breast milk is better digested than modified milk. A large group of women, i.e. 87.1% knew that breastfeeding should last for 6 months. Almost the entire group of mothers agreed that the infant should be fed on demand. About 92.6% of the respondents believed that a woman should feed for as long as the baby and the mother want. Breast milk has nutritional, immunological and nourishing properties, 63.9% of the respondents agreed with this statement. About half of the women (48.9%) agree that there is no set order in which new products should be added to the infant's diet. Almost all mothers (94.6%) stated that infant food cannot be salted.

Table 2 (part 2) shows further responses of the surveyed women on infant feeding. Approximately

Table 2. Assessment of mother's knowledge about infant nutrition (Questions/Answers), part 1

Questions/Answers	N	%
Is it true that breast milk is better digested than formula milk?		
True	675	61.4
False	106	9.6
I don't know	319	29.0
Do you know how long a baby should be fed exclusively with breast milk?		
For a period of 5 months	20	1.8
For a period of 6 months	958	87.1
For a period of 7 months	38	3.5
I don't know	84	7.6
Is it true that babies should be fed on demand?		
True	1089	99.0
False	6	0.5
I don't know	5	0.5
Is there a specific time until which a baby should be breastfed?		
Up to 6 months	16	1.5
Up to 1 year	59	5.4
As long as mother and child want	1019	92.6
According to paediatrician recommendations	6	0.5
Which milk has nutritional, immunological and trophic properties?		
Formula milk	7	0.6
Breast milk	703	63.9
Formula and breast milk	390	35.5
What products do we start expanding our baby's diet with?		
Vegetables	555	50.5
Fruits	6	0.5
Grain products	1	0.1
There is no set order for introducing products into a child's diet	538	48.9
Can you add salt to your food when expanding your diet?		
Yes	8	0.7
No	1040	94.6
Sometimes	52	4.7

N – number of observations

Table 2. Assessment of mother' knowledge about infant nutrition (Questions/Answers), part 2

Questions/Answers	N	%
Should an infant be given water to drink in the first six months of life?		
Yes	42	3.8
No	926	84.2
Sometimes	122	11.1
I don't know	10	0.9
What drinking water is recommended for babies?		
Highly mineralized water	22	2.0
Medium mineralized water	21	1.9
Low mineralized/spring water	915	83.2
I don't know	142	12.9
When should you introduce allergenic products such as eggs, gluten, nuts into your diet?		
From the beginning of expanding the diet	950	86.4
After the end of one year	116	10.5
After the end of two years	4	0.4
I don't know	30	2.7
Can children under 1 year old eat honey?		
Yes	15	1.4
No	1055	95.9
I don't know	30	2.7
What set of products can be given to a child only after the age of 3?		
Beef and pork	35	3.2
Goose and duck	50	4.5
Sausages, hot dogs, cold cuts	1001	91.0
Lamb and rabbit	14	1.3
What color vegetables are recommended first when expanding your diet?		
Red	76	6.9
Green	595	54.1
Yellow	65	5.9
I don't know	364	33.1
Is it true that when expanding the diet using the BLW method, the parent feeds the child, for example, with a spoon?		
True	76	6.9
False	958	87.1
I don't know	66	6

N – number of observation

84.2% of the mothers stated that infants should not be fed with water for the first 6 months of life. Spring water or low mineralised water is recommended for infants after the age of 6 months, 83.2% of the mothers surveyed thought so. Furthermore, the majority of women (86.4%) confirmed that allergenic foods (e.g. eggs) should be introduced from the beginning of the expansion of the diet. The majority (95.9% of women) agreed with the statement that honey should not be given to infants before the age of 1 year. Almost the entire surveyed group (91% of mothers) stated that sausages and cold cuts should not be given to infants until the age of 3 years. Half of the respondents (54.1%)

knew that green-coloured vegetables should be the first to be given to infants when expanding their diet. The majority of the women surveyed (87.1%) knew what the BLW method was for expanding the diet of infants and it does not refer to spoon feeding of food.

Knowledge vs. sociodemographic parameters

The average number of points obtained by the female respondents was 11.3 points, which classified their knowledge at a very good level (more than 75% correct answers). The majority of 664 (60.3%) female respondents scored between 11 and 13 points. The lowest scores (3 points) were obtained by 2 respondents

and the maximum score (14 points) was obtained by 10% of the respondents (114 women).

Age appeared to be one of the factors influencing the level of knowledge (Table 3). Women over 25 years of age had very good knowledge about infant feeding (above 11 points) compared to younger respondents. Education had a similar effect on knowledge levels. Respondents with higher education scored better for knowledge (11.6 points) than those with secondary education (10.7 points) and primary or vocational education (9.6 points). Place of residence also influenced the survey results. Women living in cities with more than 50,000 inhabitants scored higher for knowledge of infant feeding (above 11.3 points) than those from smaller towns or rural areas (Table 3). The age of the child was another factor that influenced the survey results. Women who had children older than 6 months showed better knowledge of infant feeding (11.4 points) compared to mothers of younger children (10.5 points) (Table 3). The number of children had and the gender of the child did not influence the level of knowledge on infant feeding among the mothers surveyed.

Age appeared to be one of the factors influencing the level of knowledge (Table 3). Women over 25 years of age had very good knowledge about infant feeding (above 11 points) compared to younger respondents.

Education had a similar effect on knowledge levels. Respondents with higher education scored better for knowledge (11.6 points) than those with secondary education (10.7 points) and primary or vocational education (9.6 points). Place of residence also influenced the survey results. Women living in cities with more than 50,000 inhabitants scored higher for knowledge of infant feeding (above 11.3 points) than those from smaller towns or rural areas (Table 3). The age of the child was another factor that influenced the survey results. Women who had children older than 6 months showed better knowledge of infant feeding (11.4 points) compared to mothers of younger children (10.5 points) (Table 3). The number of children had and the gender of the child did not influence the level of knowledge on infant feeding among the mothers surveyed.

DISCUSSION

Childhood, especially infancy, is a key life stage where health knowledge and behaviours, including those related to nutrition, are formed. The transmission of appropriate dietary patterns has an important impact on the child's health throughout life. Parents', and especially mothers', knowledge of infant feeding is an indispensable part of shaping their eating habits [9].

Table 3. Mean scores on infant feeding knowledge of the mothers studied according to sociodemographic parameters

Variables		Points		Test K-W p-value
		Mean	SD	
Age [years]	19-25	10.5 ^a	2.2	0.0006
	26-32	11.5 ^b	1.8	
	33-39	11.3 ^b	1.9	
	40 and above	11.2 ^b	2.3	
Education	primary/vocational	9.6 ^a	2.6	< 0.0001
	secondary	10.7 ^b	2.1	
	higher	11.6 ^c	1.8	
Place of residence	rural areas	10.9 ^a	1.9	< 0.0001
	city up to 50,000	11.3 ^b	2.0	
	city over 50,000	11.5 ^b	2.0	
Number of children	1	11.3 ^a	1.9	0.2987
	2	11.4 ^a	2.0	
	3 and more	10.8 ^a	2.4	
Baby's gender	boy	11.3 ^a	1.9	0.7184
	girl	11.3 ^a	2.0	
Child's age	0 - ≤ 6 months	10.5 ^a	2.4	0.0003
	> 6 - ≤ 12 months	11.4 ^b	1.9	
	> 1 year and older	11.4 ^b	1.9	
Total		11.3	1.9	

SD – standard deviation; test K-W – test Kruskal-Wallis; a, b, c – differences statistically significant for post hoc test at $p < 0.05$; a, a – no statistically significant differences for post hoc test at $p < 0.05$

In the study conducted, the knowledge of the mothers interviewed regarding infant feeding was at a very good level. Łukasik and Berek [10] investigated the knowledge of child nutrition in a group of 70 parents of children hospitalised in the infant ward at the Paediatric Hospital in Bielsko-Biała. More than half of the respondents in this study believed that their knowledge of child nutrition was sufficient, and the Internet was the main source of information. It was shown that 57.1% of the women fed their child naturally at least until the first six months of life. Approximately 45.7% of respondents used both home-prepared and ready-made certified meals for infant feeding.

The basis of infant nutrition in the first year of life is breast milk, which ideally meets the needs of the developing body. Breastfeeding has both short-term and long-term health benefits, which have been repeatedly confirmed in the literature. Breast milk provides infants with essential immunity, active nutrients and probiotics to promote growth and safeguard intestinal microbiota. As evidenced by reports from the United Nations and some studies on neonatal deaths caused by nutritional problems annually, breast milk is closely linked to infant health. Furthermore, some research has shown that non-breastfed infants have a higher risk of major diseases compared to those who are breastfed [11]. Mulcaire-Jones and Scanlon [12] also highlight in their study, that the first thousand days of life, composing the 270 days of pregnancy and the first two years (730 days) of life, is at once a critical and vulnerable time for human development. Breastfeeding can reduce stress for both the infant and mother, imparting the child mother bonding and can literally be called 'packed with love'. Breastfed children are more likely to achieve full intellectual potential and can ultimately perform better in later life. Breastfeeding has advantages for mothers in terms of birth spacing and decreased incidence of breast and ovarian cancer [13].

In a study by Zielińska et al. [14] involving a group of 446 mothers aged 18-42 years, it was observed, similarly to the present study, that women with vocational education and living in the countryside scored lower on knowledge of infant feeding than those with higher education or living in cities. Mekebo et al. [15], in a study from Ethiopia involving 566 infants with their mothers, found that 83% of them used breastfeeding for 6 months of the child's life. In this study exclusive breastfeeding practice among under-6 month infants was significantly associated with place of residence and maternal educational level.

In total of 676 healthy mothers living in Bangkok, whose most recent child was between 6 and 18 months old, were recruited in Topothai's et al. [16] study. Although the benefits of breastfeeding are widely recognized, only 14% of mothers in Thailand

exclusively breastfed their children during the first six months of their lives in 2019, which dropped from 23% in 2016.

An interesting study was a randomised trial conducted by Rapson et al. [17], which looked at starting infants on complementary feeding with vegetables only. It showed that infants who started their dietary expansion with vegetables consumed more spinach and broccoli than infants in the control group. The authors of the study concluded that giving vegetables as the first food promotes higher vegetable intake in later months of life, which may be an effective strategy to increase the amount of vegetables in children's diets. Similarly, in this study, mothers (50.5%) indicated vegetables as a product that should be introduced into the diet of infants after 6 months of life. The current recommendations do not specify the order in which individual product groups should be introduced into the diet of infants after 6 months of age. However, in order to help mothers make the right choice, manufacturers of food products for infants and young children should include detailed and understandable information on expanding their diet on the product packaging. Another study by Issa et al. [18] found that more than half of the parents gave water to their infants as early as between three and four months of age.

Mastalerz-Kozubek et al. [19] study showed that at least half of the Polish and majority of the Austrian mothers, especially of the older toddlers, did not follow the recommendations about avoiding salt use during the first years of children's life. Even though the prevalence of the use of added sugar was lower, those results are also disconcerting, especially as the use of sugar, like salt, should be limited in children's nutrition. Furthermore, the obtained results revealed that the use of added salt, sugar, or both salt and sugar in the toddlers' diet was associated with multiparity and lower maternal age.

The objective of Bournez et al. [20] study was to describe the frequency of use of added sugar, salt, and fat during the complementary feeding period and the associated infant caregiving practices in France. In conclusion, it was showed that the use of added sugar and salt occurred early in life, but the frequency of their use remained relatively low. The use of added fat also occurred early and was more frequent than the use of added sugar and salt, but approximately 35% of the infants never received added fat during their complementary feeding period. The authors' promoted the current recommendation should be enhanced, taking into account the fact that the use of these added ingredients seems to be related to maternal habits or culinary practices.

Breastfeeding is still popular, and there is a large amount of easily accessible public information on the

benefits of breastfeeding for both women and children. Women's awareness in this area is also growing, forcing baby food manufacturers to intensify their promotional activities in order to keep up with the latest knowledge on feeding children after 6 months of age. Nonetheless, promotion and marketing of breastmilk substitutes are thought to be the supplementary hurdle for breastfeeding. Exposure of individuals to this strategic marketing led to reduced breastfeeding initiation and duration, irrespective of the country. Moreover, the consumption of these infant formulas is rising day by day because of key drivers such as the increasing number of working mothers, rising cases of malnutrition, a concern about infant nutrition and the growing income of the middle class [21, 22].

CONCLUSIONS

Having offspring is a person's top priority in life. For many parents, a healthy child who develops well and grows harmoniously is the main goal. Preparing for the role of a parent also includes acquiring knowledge about his or her nutrition from the first day of life. It is recommended that more accurate information on expanding the diet of infants after 6 months is provided. Producers of food dedicated to infants and young children should also be helpful in this regard. Nutritional information on product packaging should be precise and understandable to caregivers.

Conflict of interest

The authors declare no conflict of interest.

REFERENCES

1. Szajewska H, Socha P, Horvath A, Zalewski B, Nehring-Gugulska M, Mojska H, et al. Nutrition of healthy term infants. Recommendations of the Polish Society for Paediatrics Gastroenterology, Hepatology and Nutrition. *Stand Med Pediatr.* 2021;18:7-24. doi: 10.17444/SMP2021.18.02.
2. Patro-Gołab B, Zalewski BM, Socha P. Metabolic programming. *Practical medicine for doctors.* [cited 2024 Jan 24]. Available from: <https://www.mp.pl/pytania/pediatrica/zywienie-dzieci-zdrowych/kompedium/352381,programowanie-metaboliczne>.
3. Kaczorowska M, Bulsa K, Bulsa M, Janasik-Zwarzany M, Czaja-Bulsa G. Breastfeeding in theory and practice in the region of Western Pomerania. *Pediatr Pol.* 2016;91(3):199-207. doi: 10.1016/j.pepo.2016.03.009.
4. Szajewska H. Choices do matter. What should you know when choosing milk for infants? *Stand Med Pediatr.* 2023;20:21-32. doi: 10.17443/SMP2023.20.01.
5. Białek-Dratwa A, Szczepańska E, Trzop P, Grot M, Grajek M, Kowalski O. Practical Implementation of the BLW Method During the Expansion of the Infant Diet-A Study Among Polish Children. *Front Nutr.* 2022;9:890843. doi: 10.3389/fnut.2022.890843.
6. Białek-Dratwa A, Soczewka M, Grochowska-Niedworok E. Introduction of complementary foods to infant diet using baby-led weaning. *Pediatr Med Rodz.* 2020;16(4):362-367. doi: 10.15557/PiMR.2020.0065.
7. Białek-Dratwa A, Kowalski O, Szczepańska E. Traditional complementary feeding or BLW (Baby Led Weaning) method? – A cross-sectional study of Polish infants during complementary feeding. *Front Pediatr.* 2022;10:992244. doi: 10.3389/fped.2022.992244.
8. Kalinowski P, Mirosław K. Knowledge of parents on alimentary allergy occurring in their children. *Med Og Nauki Zdr.* 2014;20(1):88-91.
9. Baird J, Jacob C, Barker M, Fall CHD, Hanson M, Harvey NC, et al. Developmental Origins of Health and Disease: A Lifecourse Approach to the Prevention of Non-Communicable Diseases. *Healthcare.* 2017;5(1):14. doi: 10.3390/healthcare5010014.
10. Łukasik R, Berek A. Parents knowledge on child nutrition. *Probl Pielęg.* 2018;26(1):24-30. doi: 10.5603/PP.2018.0004.
11. Hu Y, Wu X, Zhou L, Liu J. Which is the optimal choice for neonates' formula or breast milk? *Nat Prod Bioprospect.* 2024;14(1):21. doi: 10.1007/s13659-024-00444-0.
12. Mulcaire-Jones G Dr, Scanlon R Dr. The First Thousand Days of Life. *Issues Law Med.* 2022;37(2):249-256.
13. Bakshi S, Paswan VK, Yadav SP, Bhinchhar BK, Kharkwal S, Rose H, et al. A comprehensive review on infant formula: nutritional and functional constituents, recent trends in processing and its impact on infants' gut microbiota. *Front Nutr.* 2023;10:1-27. doi: 10.3389/fnut.2023.1194679.
14. Zielińska MA, Sobczak A, Hamułka J. Breastfeeding knowledge and exclusive breastfeeding of infants in first six months of life. *Rocz Panstw Zakł Hig.* 2017;68(1):51-59.
15. Mekebo GG, Argawu AS, Likassa HT, Ayele W, Wake SK, Bedada D, et al. Factors influencing exclusive breastfeeding practice among under-six months infants in Ethiopia. *BMC Pregnancy Childbirth.* 2022;22(1):630. doi: 10.1186/s12884-022-04955-x.
16. Topothai C, Topothai T, Suphanchaimat R, Patcharanarumol W, Putthasri W, Hangchaowanich Y, et al. Breastfeeding Practice and Association between Characteristics and Experiences of Mothers Living in Bangkok. *Int J Environ Res Public Health.* 2021;18(15):7889. doi: 10.3390/ijerph18157889.
17. Rapson JP, von Hurst PR, Hetherington MM, Mazahery H, Conlon CA. Starting complementary feeding with vegetables only increases vegetable acceptance at 9 months: a randomized controlled trial. *Am J Clin Nutr.* 2022;116(1):111-121. doi: 10.1093/ajcn/nqac080.
18. Issa C, Hobeika M, Khairallah W, Al-Jawaldeh A, Batal M; "Breastfeed for a Healthier Lebanon" study group. Timing and types of fluids and foods first introduced in a representative sample of toddlers attending day care programs across Lebanon: Are parents following

- international recommendations? *J Pediatr Nurs*. 2022;62:e45-e53. doi: 10.1016/j.pedn.2021.07.003.
19. Masztalerz-Kozubek D, Zielinska MA, Rust P, Majchrzak D, Hamulka J. The Use of Added Salt and Sugar in the Diet of Polish and Austrian Toddlers. Associated Factors and Dietary Patterns, Feeding and Maternal Practices. *Int J Environ Res Public Health*. 2020;17(14):5025. doi: 10.3390/ijerph17145025.
20. Bournez M, Ksiazek E, Charles M-A, Lioret S, Brindisi M-C, de Lauzon-Guillain B, et al. Frequency of Use of Added Sugar, Salt, and Fat in Infant Foods up to 10 Months in the Nationwide ELFE Cohort Study: Associated Infant Feeding and Caregiving Practices. *Nutrients*. 2019;11(4):733. doi: 10.3390/nu11040733.
21. Baker P, Russ K, Kang M, Santos TM, Neves PAR, Smith J, et al. Globalization, first-foods systems transformations and corporate power: a synthesis of literature and data on the market and political practices of the transnational baby food industry. *Glob Health*. 2021; 17:58. doi: 10.1186/s12992-021-00708-1.
22. Pérez-Escamilla R, Tomori C, Hernández-Cordero S, Baker P, Barros AJD, Bégin F, et al. Breastfeeding: crucially important, but increasingly challenged in a market driven world. *Lancet*. 2023;401:472-85. doi: 10.1016/S0140-6736(22)01932-8.

Received: 10.06.2025

Revised: 20.08.2025

Accepted: 26.08.2025