

## DEFINING TRADITIONAL PRACTICES RECOMMENDED BY HEALTHCARE PROFESSIONALS TO INCREASE BREASTMILK

Ayfer Acikgoz and \*Mukaddes Baskaya

*Eskisehir Osmangazi University, Faculty of Health Sciences, Department of Children's Health and  
Diseases Nursing, Turkey*

*\*Author for Correspondence*

### ABSTRACT

The puerile woman's diet is one of the most common diets that are involved in traditional methods. Mothers who believe that they have insufficient breastmilk can try different foods, beverages and other methods to increase their breastmilk. In addition, some traditional practices may be suggested to mothers by healthcare professionals. The aim of this study is to determine the traditional practices of breastfeeding that are recommended by healthcare professionals to lactating mothers. This study includes medical doctors, nurses and midwives who work in varied health institutions in Eskisehir province and who provide breastfeeding education to lactating mothers. The study determined that healthcare professionals frequently recommended avoiding stress, and continuing breastfeeding at night. In addition, water, milk, milk producing teas and boza were determined to be beverages that increased breastmilk. Also, yogurt, milk puddings and date palm were found as foods that increase breastmilk. The study found that healthcare professionals recommend some traditional practices to lactating mothers to have them increase their breastmilk. We recommend that further evidence-based studies should be conducted on these traditional methods.

**Keywords:** *Healthcare Professionals, Traditional Practices, Breastmilk*

### INTRODUCTION

Breastmilk contains the nutritional elements that are necessary for the healthy growth and development of the baby, and it provides innumerable short and long-term benefits to the mother and child, such as immunity support (Bazzano *et al.*, 2016; Mosca and Giannì, 2017).

The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) recommend that babies should breastfeed only for the first six months (without any additional food, including water). Some additional solid and liquid foods should be started after six months and breastfeeding should be continued until the age of two (WHO & UNICEF, 2003).

In contrast to these recommendations, the WHO Global Breastfeeding Report has shown that only 40% of infants in 194 countries are breastfed for the first six months. According to the same report, only 23 out of 194 countries have breastfeeding rates of over 60% (WHO, 2014).

Recent studies also showed that breastfeeding rates are not at the desired level, and additional food supplementation is started earlier than is recommended (Unalan *et al.*, 2008; Unsal *et al.*, 2005; Tuncel *et al.*, 2006; Sun *et al.*, 2017; Tewabe *et al.*, 2017; Khamis *et al.*, 2017).

Mothers usually think that breastmilk is not sufficient to feed the baby, and this is the main reason for beginning food supplementation earlier than six months.

Mothers who think that their milk is not enough for their baby try various traditional practices, eating certain foods, including certain plants, and drinking certain beverages to increase their breast milk (Tanriverdi *et al.*, 2014).

However, some of these methods can be harmful to babies and mothers.

For this reason, healthcare professionals should have adequate knowledge on the safety and effectiveness of traditionally consumed food, beverages and plants in order to provide accurate information to lactating mothers.

This study was conducted to determine the traditional practices, foods and beverages (galactagogic) recommended by healthcare professionals to lactating mothers to increase breastmilk.

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### **MATERIALS AND METHODS**

This study includes medical doctors, nurses and midwives who work in various health institutions in Eskisehir province and whose job includes providing breastfeeding education to lactating mothers. The study was conducted at Eskisehir Osmangazi University Health Practice and Research Hospital, Eskisehir State Hospital and Eskisehir Public Health Institution. Approval was obtained from the Ethics Committee of Anadolu University prior to the study. Also, written consents were obtained from each institution. Only volunteers who wanted to participate were included in the study, and it was completed with 220 individuals.

A questionnaire that was developed by the researchers was used as a data collection tool. This questionnaire form includes questions about the participants' sociodemographic characteristics, their opinions on traditional methods, and their own recommendations for increasing breastmilk. The questionnaire form was completed using face-to-face interviews by the researchers after verbal and written approvals were obtained from the participants. The data were collected between February 2017 and May 2017.

The data analysis was completed using the SPSS program. Descriptive statistics (percentage, mean, standard deviation) and the chi square test were used in the analysis.

### **RESULTS AND DISCUSSION**

#### **Results**

This study was conducted with 220 volunteers. The descriptive characteristics of the participants are presented in Table 1. The mean age of the participants was  $35.24 \pm 9.022$ .

Table 2 shows the characteristics and opinions of healthcare professionals regarding traditional methods. 17.3% of the participants stated that they believed that some traditional practices are beneficial in increasing breastmilk. They reported that they were aware of the benefits of these practices because of their own experiences, as well as the experience of their parents, others, and physicians.

There was no significant relationship between age, gender, occupation, professional experience, educational status, residence, type of family, number of children, and opinions regarding the use of traditional practices in order to increase breastmilk ( $p > 0.005$ ).

Table 3 presents the methods, foods, drinks and spices recommended by the participants to increase the mother's breastmilk. The most frequently recommended practices by healthcare professionals were frequent breastfeeding (94.5%), avoiding stress (92.7%), continuing breastfeeding at night (86.4%) and getting enough sleep (83.2%). The most frequently recommended foods were yogurt (41.4%), milk (41.4%), date palm (39.1%) and bulgur (35.9%). The most frequently recommended drinks were water (97.7%), milk (48.2%), milk increasing tea (46.8%) and boza (36.4%). Cumin (25.9%) was the only spice suggested.

#### **Discussion**

In this study, it was determined that healthcare professionals recommend traditional methods as well as modern methods in order to increase breast milk.

No studies were found in the literature regarding healthcare professionals' recommending traditional methods. Therefore, we used the results of the current study in discussing traditional practices used by mothers.

It was determined that 10.5% of the participants in the study took courses on these traditional methods. When the participants were asked if there should be courses on these traditional methods in the curriculum, 40% of the participants were uncertain, 35% of the participants said that these courses were not needed, and 25% of the participants said that these courses were needed (Table 2). In the study done by Altan *et al.*, (2014), it was determined that medical students are interested in complementary / alternative medicine practices. However, they did not have enough information and experience on this topic, and they stated that some courses regarding this topic should be added to their curriculum (Altan *et al.*, 2014). In the study of Lafci and Kara Kasikci (2014), it was found that only 4.8% of the healthcare professionals had training in alternative / complementary therapies. In the same study, it was determined

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that 75% of the healthcare professionals thought that alternative / complementary treatment methods should be discussed during or after practical training (Lafci and Kasikci, 2014). In our study, most of the participants were uncertain about the necessity of training in traditional methods, or they thought that this training was not necessary.

**Table 1: Definitive Characteristics of the Healthcare Personnel**

	Number of Cases (n)	Percent (%)
<b>Age</b>		
19-25 years	36	16.4
26-32 years	61	27.7
33-39 years	48	21.8
40-46 years	44	20
47-53 years	24	10.9
54-60 years	7	3.2
<b>Gender</b>		
Female	201	91.4
Male	19	8.6
<b>Marital Status</b>		
Single	146	66.4
Married	74	33.6
<b>Number of children</b>		
Number	90	40.9
1-2	118	53.6
3-4	12	5.5
<b>Place where they were raised</b>		
Province	149	67.7
County/District	37	16.8
Village	30	13.6
Town	4	1.8
<b>Type of family in which they were raised</b>		
Nuclear family	193	87.7
Extended family	27	12.3
<b>Occupation</b>		
Nurse	121	55.0
Doctor	32	14.5
Midwife	67	30.5
<b>Years at present job</b>		
0-4 years	51	23.1
5-9 years	42	19.1
10-14 years	27	12.3
15 years and move	100	45.5
<b>Educational status</b>		
High school	24	10.9
Associate's degree	55	25.0
Bachelor's degree	88	40.0
Graduate degree	27	12.3
Medical specialization	17	7.7
Doctorate	9	4.1
<b>TOTAL</b>	<b>220</b>	<b>100</b>

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**Table 2: Case Characteristics Related to Traditional Methods**

	n	%
Taking training related to traditional methods		
Yes	23	10.5
No	197	89.5
Opinion about having a course related to traditional methods in the curriculum		
It is necessary	77	35
It is not necessary	55	25
No idea	88	40
Opinion about the use of traditional methods to increase breastmilk		
They should never be used.	37	16.8
Some of them can be used.	181	82.3
All of them can be used.	2	0.9
Suggesting traditional methods to the mothers to increase breastmilk		
Yes	82	37.3
No	138	62.7
The existence of traditional methods which increase breastmilk		
Do Not exist	182	82.7
Exist	38	17.3
TOTAL	220	100

The Traditional Medicine Report of the WHO (2014-2023) states that member countries have increased complementary / alternative treatment training (including in undergraduate, postgraduate and doctoral programs) to improve the safety and quality of the complementary / alternative treatment implementations (WHO, 2014). There are complementary / alternative medicine departments and professors in France, Germany, Hungary, Italy, Norway, Sweden, the United Kingdom and Switzerland (Nicolai, 2014). Due to the widespread use of complementary / alternative medical treatments around the world, it is necessary to support Turkey's curricula and in-service training programs in complementary / alternative treatments.

**Table 3: Suggestions to Increase Breastmilk**

	n	%**
<b>Applications which are suggested to increase breastmilk*</b>		
Frequent breastfeeding	208	94.5
Avoiding stress	204	92.7
Continuing breastfeeding during the night	190	86.4
Sleeping enough	183	83.2
Applying warm compress to breast	155	70.5
Taking a shower everyday	133	60.5
Breastfeeding for a long time	117	53.2

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	Massaging breasts	48	21.8
	Praying/ Having prayed against the evil eye	10	4.5
	Not breastfeeding in front of other people	8	3.6
	Carrying an evil eye	1	0.5
<b>Foods increasing breastmilk*</b>			
	Yogurt	91	41.4
	Milk puddings	91	41.4
	Date palm	86	39.1
	Bulgur	79	35.9
	Nuts/peanuts/chestnuts	74	33.6
	Pekmez	64	29.1
	Tahini halva	53	24.1
	Onion	53	24.1
	Dessert with sherbet	37	16.8
	Honey	37	16.8
	Garlic	24	10.9
	Black-eyed pea	21	9.5
	Bread	19	8.6
<b>Drinks recommended to increase breastmilk*</b>			
	Plenty of water	215	97.7
	Milk	106	48.2
	Teas which increase breastmilk (humana, etc.)	103	46.8
	Boza	80	36.4
	Fennel tea	76	34.5
	Juice	69	31.4
	Linden tea	55	25.0
	Puerperal sherbet	50	22.7
	Sage tea	37	16.8
	Malt drinks	31	14.1
	Anise tea	24	10.9
	Rose hip tea	14	6.4
	Dead nettle tea	13	5.9
	Quince leaf tea	8	3.6
<b>Spices recommended to increase breastmilk*</b>			
	Cumin	57	25.9

\*More than one option was chosen.

\*\*Percentages were calculated on 'n'.

This study showed that health professionals also recommend various traditional methods such as praying / praying against evil (4.5%), not breastfeeding in the company of others (3.6%), and wearing an evil eye (0.5%), in addition to modern methods. The traditional methods that mothers practice to increase breastmilk are frequent breastfeeding, wearing an evil eye / praying, lengthy breastfeeding, massaging the breast, repelling the evil eye, sleeping, body massage, swimming, sauna, yoga, acupuncture and rest (Dinc *et al.*, 2015) (Derin and Ozel, 2016). In the literature, there are some interventions recommended to

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increase breastmilk, such as early breastfeeding, visual stimuli (watching and cuddling the baby), and breast pumping (Temizsoy *et al.*, 2010).

The study found that the foods that were suggested to increase breastmilk were yoghurt, milk pudding, date palm, bulgur, hazelnut / pistachio / walnut, molasses, tahini halva, onion, dessert with sherbet, honey, garlic, black eyed peas and bread. Also, foods recommended in other studies were milk puddings, dried grape, hazelnut / pistachio / walnut, black eyed peas, honey and date palm (Dinc *et al.*, 2015), tahini halva, dead nettle, parsley, liver, chestnut (Tanriverdi *et al.*, 2014), dessert, fig, fruit, vegetables (Gokduman and Balkaya, 2013), black eyed peas, potato, tarhana soup (Ozsoy and Katabi, 2008), soup, fruit (Erkaya *et al.*, 2015), onion (Tanriverdi *et al.*, 2014; Dinc *et al.*, 2015; Gokduman and Balkaya, 2013), bulgur, molasses (Tanriverdi *et al.*, 2014; Dinc *et al.*, 2015), green vegetables (Dinc *et al.*, 2015; Gokduman and Balkaya, 2013; Erkaya *et al.*, 2015). The foods recommended by healthcare professionals were similar to the foods in the literature.

Moreover, beverages recommended by healthcare professionals in our study were water, milk, milk increasing teas, boza, fennel tea, fruit juice, linden, puerperal sherbet, sage, malt beverages, aniseed tea, rose hip and quince leaf. In the literature, beverages which are consumed by lactating mothers to increase breastmilk were found to be compote, milk increasing teas (Erkaya *et al.*, 2015), fruit juice, puerperal sherbet (Derin and Ozel, 2016), water, fennel tea, and dairy products (Derin and Ozel, 2016; Erkaya *et al.*, 2015). In the study conducted by Gokduman and Balkaya (2010), it was detected that 30.1% of the participating mothers consumed milk increasing teas to increase their breastmilk. In that study, 57% of these mothers confirmed the beneficial effects of milk increasing teas, and 46.2% of these mothers also confirmed the beneficial effects of fennel tea on their breastmilk (Gokduman and Balkaya; 2010). In another study conducted by El Sakka *et al.*, (2014), it was reported that fenugreek plant and date palm have beneficial effects on increasing breastmilk during the postpartum period (El Sakka *et al.*, 2014). In the study conducted by Temizsoy *et al.*, (2010), it was found that herbal teas with a galactagogic effect are effective in increasing breastmilk (Temizsoy *et al.*, 2010). A study conducted in Canada showed that the thistle, fennel, fenugreek, raspberry leaf and dead nettle were reported as plants used as galactagogues (Westfall, 2003). Moreover; alfalfa, black sesame and fenugreek were reported as the most common galactagogic plants in a study conducted in Malesia (Othman *et al.*, 2014). Fenugreek, ginger, dongquai, yellow daisy, garlic and dead nettle were the most common galactagogues reported in a study conducted in Australia (Sim *et al.*, 2013).

There are differences within varied societies regarding the traditional galactagogues used to increase breastmilk. The reason behind boza being one of the most highly recommended beverages in our study may be due to the high consumption of boza in Eskisehir province.

In almost all societies, a special diet is applied to lactating women. The most important aims in this diet are the recovery of the woman from childbirth, and preparing woman for breastfeeding. These methods applied to increase breastmilk are called galactagogues. However, studies investigating the efficacy of galactagogically active plants, beverages and medications have indicated that well-designed, randomized control studies should be conducted to gain a better understanding of breastfeeding (Sim *et al.*, 2013; Donovan and Buchanan, 2012; Grezeskowiak *et al.*, 2013).

## **Conclusion**

The results of this study showed that healthcare professionals recommend some traditional practices to lactating mothers in addition to modern methods. However, these recommended practices can be different from one another. We suggest that healthcare professionals should inform lactating mothers about traditional practices that are proved to be effective. We also suggest that randomized controlled studies be conducted to test the effectiveness of other traditional practices, beverages, foods and spices, which were recommended because of personal experiences and observations, but which have not yet been proved in practice.

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