

Title: Is There a Relationship between Breastfeeding Status and Life Style Changes, Eating Behaviors, Attitudes, and Orthorexia Nervosa tendencies of Mothers? A Web Based Study

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Running Title: Breastfeeding Status and Life Style Changes, Eating Behaviors, Orthorexia Nervosa

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ABSTRACT

Purpose: It was aimed to compare the breastfeeding status and healthy life style changes, eating behaviors, attitudes, and orthorectic tendencies of mothers.

Materials and Methods: All volunteered mothers who have a child between the ages of 0 and 2 were included in this cross-sectional study. 514 individuals were included. Five parted questionnaire and "ORTO-11" test and "Eating Attitude Test" was used.

Results: A statistically significant relationship was found between breastfeeding status and working status and professions of mothers. Mothers who did not breastfeed, skipped main meal more frequently, and smoking and occasional alcohol consumption was higher. The mean score of the participants on the ORTO-11 scale was 25.09 ± 4.80 , EAT-40 scale mean score was 18.80 ± 10.42 . High risk in eating attitudes was found in 12.0% of all participants. It was observed that mothers who did not breastfeed were mostly in high risk group in terms of eating attitude.

Conclusion: Mothers who did not breastfeed were mostly in high risk group in terms of eating attitude compared to breastfeeding mothers. It is of great importance that healthcare professionals organize trainings for increasing the general level of knowledge of mothers and provide healthy living and breastfeeding counseling.

Keywords: Breastfeeding, Life Style Changes, Eating Attitudes, Eating Behaviors, Orthorexia Nervosa

WHAT'S KNOWN? While breastfeeding mothers are sensitive to many issues in order to feed their baby adequately and with high quality milk, they cannot display healthy lifestyle behaviors for some reasons (stress, sleep problems, lack of support, lack of time, etc.)

WHAT'S NEW? Mothers who did not breastfeed were mostly in high risk group in terms of eating attitude compared to breastfeeding mothers; breastfeeding mothers who thought that their baby was

not healthy, who had anxiety about the quality and quantity of milk and who thought that the change in their nutrition was effective on the growth of the child had higher tendencies to ON.

Introduction

The mother's lifestyle changes, effects on the health of the mother and infant during breastfeeding. One of the most affected elements of lifestyle changes; balanced feeding of breastfeeding mothers is necessary for both meeting their physiological needs and for healthy growth and development of the baby by secreting optimal breast milk in terms of content and quantity (1). Regardless of whether there is a diagnosis of eating disorder in the past, it was stated that some of the women have concerns about body image in the postpartum period, and therefore they have conscious or unconscious practices about healthy nutrition. The postpartum period may also be a period in which women are more susceptible to mental illnesses such as anxiety disorder, depression, eating disorder and psychosis (2). Postpartum feeding and lifestyle behaviors also suffers from this new conditions (3,4).

The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) recommend that all babies be fed only breastmilk in the first six months from birth, starting complementary feeding in the seventh month, and continuation of breastfeeding until the age of two (5). During breastfeeding, the mother's energy and nutrient needs are higher than during pregnancy, and there may be concerns about the quality and nutrition of milk given to her baby during breastfeeding. This may encourage the mother in a healthier and frequent diet. This situation can bring mothers to a pathological point related to consuming healthy food and may cause a tendency to orthorexia “obsession with healthy eating”. Actually, healthy eating habits are not pathological conditions; however, a pathology is mentioned in case of being overly busy with healthy eating, spending a lot of time and deterioration in daily life quality (6). Orthorexia nervosa (ON) is an important type of eating disorder, in which excessive efforts in the obsession dimension are at the forefront of the quality, purity and healthy diet of the food consumed. It has been observed that excessive occupation of these individuals with strict rules on healthy nutrition occupies a significant part of their time and can lead to disruption of their social lives (7). There is no universal definition of

ON, yet (8). In recent years, it has been receiving great attention as a research topic by clinicians all over the world. Whether a mother who is breastfeeding has a healthy eating obsession at a pathological level is very important in terms of both mother's health and baby's health. The mother, who has to feed her child with her maternal instinct, may be obsessed with consuming healthy foods for herself and her child.

In the literature there are studies about the relationship of breastfeeding status of mothers and healthy life style changes of them (9,10); however, no study was conducted up to date on this group for ON tendencies. With this study, it was aimed to compare the breastfeeding status and healthy life style changes, eating behaviors, attitudes, and orthorectic tendencies of mothers.

Materials and Methods

Design & Setting and Sample

Our research is a cross-sectional research. The universe of the research was all mothers who have children between 0-2 years old and can be reached on social media. The study was conducted between 13/09/2019 - 12/11/2019. The mothers in the universe were reached through the groups named, "giving birth in 2017", "giving birth in 2018" and "giving birth in 2019". The groups currently have 21.369 members. Participants who have more than one child between the ages of 0-2 were asked to answer the questions according to their youngest child. A survey form was applied to the mothers who agreed to participate in the study on a voluntary basis. Our study did not include mothers under the age of 18 and those with chronic diseases. Based on the measurement of the difference between two independent groups with the G POWER 3.1.5 program, a minimum sample size was? 105 in a total of 210, with an average error of 0.05 and an average effect size of 0.95 in each group. All mothers who can be reached on the internet and have a child between the ages of 0 and 2 and also who is volunteering to participate in the study, were included. The survey was applied to 600 participants who agreed to conduct the survey. 86 mothers whose babies were older than 24 months were excluded from the study and 514 individuals were included to study.

Measurement

A questionnaire was structured by the researchers. The questionnaire consisted of five parts. The questions about socio-demographic characteristics of the participants were in the first part, healthy lifestyle behaviors (smoking, alcohol use, physical exercise status) and eating behaviors (frequency, order, content) were in the second part, breastfeeding situations (breastfeeding and non-breastfeeding status) and lactation-related features (breastfeeding related problems, concern about the quality and quantity of milk) were questioned in the third part and in the fourth part the "ORTO-11" test was used for evaluating the healthy eating obsession and the "Eating Attitude Test" was used for evaluating the eating attitude in the fifth part.

ORTO-11 Scale: Two instruments have been developed to assess ON. The Bratman test is based mostly on clinical experience, and its validity has not been investigated by the author himself or by others (11). In 2005, Donini and colleagues developed the ORTO-15 based on Bratman's test (12). The translation into Turkish was made by Arusoğlu in 2006 and adapted to Turkish as ORTO-11 (13). In the evaluation of the scale, the increase in score shows that the risk of orthorexia nervosa is reduced. Cronbach's Alpha of the scale was informed as 0.62. The cut-off point used for the evaluation of the ORTO-11 scale in our study was determined by using the cut-off point in Arusoğlu's Turkish adaptation study (13). Individuals who participated in the study were divided into quarterly according to ORTO-11 scores. The cut-off point of the study was determined as 27 points in 25%, and under this value was evaluated as orthorexia tendencies. The cut-off point was not determined for the ORTO-11 scale used in our study and was evaluated based on the orthorexia susceptibility scoring.

Eating Attitude Test: This scale was developed by Garner & Garfunkel (14) as 'the scale of self-assessment' for measuring the symptoms of anorexia nervosa, the Turkish version of the scale has been made by Savaşır & Erol (15). Eating Attitude Test is a scale formed of 40 items, with total of 6 points, comprising multiple choice questions in the Likert type and the cut-off point of the scale has been determined as 30. High grades indicate the impairment in eating attitude and behavior. Cronbach alpha credibility coefficient of the scale has been found as 0.70 (15). Considering that there are similarities between ON and other eating disorders, in our study, EAT and ORTO-11 scale were used together.

Data collection

Our questionnaire was reached through the groups of “mothers who gave birth in 2017”, “those who gave birth in 2018” and “those who gave birth in 2019” on the internet via the online questionnaire form. The questionnaire was updated for two months at five days’ intervals and presented online by the researcher. The targeted number of participants was reached within two months and 600 participants answered the questionnaire. 86 people whose babies are older than 24 months were excluded from the study and 514 participants were evaluated.

Data Analysis

Mean \pm standard deviation for the variables that were continuous from the demographic information of the participants, and frequency tables for the qualitative data were created. The consistency of continuous variables to normal distribution was examined using visual (histogram and possible graphics) and analytical methods (Kolmogorov-Smirnov / Shapiro-Wilk). Correlation coefficients and statistical significance were calculated by Pearson test when both variables were normally distributed in correlation analyzes, or by Spearman test for at least one normal distribution or ordinal variables. Chi-Square test was used to investigate the relationships between qualitative data. Differences between group values of continuous variables were investigated with t test, ANOVA test or tests with their nonparametric equivalents. The value of $\alpha = 0.05$ was chosen as the level of error and probability values obtained from statistical analysis were interpreted accordingly. Statistical analysis was done with SPSS 23 package program.

Permission and approval of the ethics committee

The study was conducted in accordance with the principles of the Helsinki Declaration related to conducting clinical trials on humans, and the research proposal was approved by the Ethics Committee of the Ankara City Hospital with the number of E-19-023 at 05/09/2019.

RESULTS

Five hundred fourteen mothers completed the online questionnaire. Mean age of the participants was 30.6 ± 4.24 (min=20, max= 47). Most participants (73.9%) were at least undergraduate, 48.6% of them have a profession, but currently on maternity leave. 79.8% of the participants were breastfeeding during the study.

When the sociodemographic data of the mothers according to their breastfeeding status were analyzed, it was observed that age range, last graduated school, family type, monthly income and number of children did not have a statistical relationship with breastfeeding status ($p > 0.05$); however, a statistically significant relationship was found between breastfeeding status and working status ($p = 0.030$) and professions of mothers ($p = 0.009$). Women who had a profession and who were at maternity leave were more likely than others to breastfeed. The details of the data are presented in Table 1.

Table 1. Comparison of some features of the participants according to breastfeeding status

Breastfeeding Status and Healthy Life Style Changes

52.3% of the participants were in the normal weight range. Mean BMI of the participants were 24.83 ± 4.54 kg / m². When the self-health assessment scores given by the participants were grouped as 1-3: bad, 4-6: medium, 7-10: good; 65% expressed their own health status as well. 51% of the participants did not think that they have a sufficient and balanced diet. 88.3% did not do regular physical activity. There was no statistically significant difference between breastfeeding status and BMI, self-health assessment, self-adequate and balanced eating assessment, the number of main meals/ snacks and regular physical activity ($p > 0.05$). It was observed that mothers who did not breastfeed skipped main meal more frequently ($p=0.021$), and smoking ($p=0.000$) and occasional alcohol consumption ($p=0.009$) was higher than breastfeeding mothers. The details of the data regarding the health behaviors of the participants are presented in Table 2.

Table 2. Comparison of some healthy life behaviors of the participants according to breastfeeding status

Breastfeeding Status and Changing Eating Behaviors

Changes in food consumption of the participants in the postpartum period compared to the pre-pregnancy period were evaluated. It was observed that the consumption of ready-made meat products, ready-made fruit juice, sweetened and acidic beverages decreased, oilseed consumption increased, the amount of consumption of other food types did not change mostly. When the nutritional consumption changes of the breastfeeding and non-breastfeeding mothers after birth were compared, only a statistically significant difference was found between the groups in fish consumption ($p = 0.001$). The details of the data are presented in Table 3.

Table 3. Comparison of Breastfeeding Status and Food Consumption Changes

Breastfeeding Status and Eating Attitudes and Orthorexia Nervosa tendency

The mean score of the participants on the ORTO-11 scale was 25.09 ± 4.80 and the median was 25.00 (min = 13, max = 40). EAT-40 scale mean score was 18.80 ± 10.42 and median was 16.00 (min = 2, max = 81). There was a moderate negative correlation between ORTO-11 and EAT-40 scale ($r = -0.308$, $p < 0.000$).

The mean score of ORTO-11 in breastfeeding mothers was 25.19 ± 4.78 (min = 13, max = 40), and 24.71 ± 4.86 (min = 14, max = 35) in non-breastfeeding mothers; there was no statistically significant difference between the groups ($p = 0.325$).

The mean EAT-40 score in breastfeeding mothers was 17.70 ± 9.79 (min = 2, max = 73) and 20.07 ± 12.47 (min = 4, max = 81) in non-breastfeeding mothers; there was no statistically significant difference between the groups ($p = 0.160$).

High risk in eating attitudes was found in 12.0% of all participants. It was observed that mothers who did not breastfeed were mostly in high risk group in terms of eating attitude compared to breastfeeding mothers ($p = 0.030$). According to EAT, ON susceptibility of breastfeeding mothers who were in the high risk group was higher ($p = 0.001$), there was no statistically significant relationship between ON susceptibility of non-breastfeeding mothers according to EAT risk groups. The details of the data are presented in Table 4.

Table 4. ORTO-11 Score Distribution According to EAT-40 Risk Groups

The mean score of ORTO-11 was lower in breastfeeding mothers who thought that their baby was not healthy ($p = 0.018$). Comparison of ORTO-11 scores and some features of the participants' babies according to breastfeeding status are given in Table 5.

Table 5. Comparison of ORTO-11 scores and some features of the participants' babies according to breastfeeding status

55.8% of breastfeeding mothers stated that they had no problem with breastfeeding, and 46.7% ($n = 398$) expressed no concern about the quality and quantity of milk. 84.8% thought that the change in their diet would affect the growth and development of the baby. The mothers who had anxiety about the quality and quantity of milk had lower ORTO-11 scores ($p = 0.012$). The ORTO-11 scores of breastfeeding mothers who thought that the change in their nutrition was effective on the growth of the child was lower than others ($p = 0.000$). Some features of breastfeeding mothers related to breastfeeding period are presented at Table 6.

Table 6. Some Features of Breastfeeding Mothers Related to Breastfeeding Period

Discussion

The postpartum period is a transitional period of women life which involve lifestyle and body weight changes. To show these changes, evaluation of life style changes, eating behaviors, attitudes,

and orthorectic tendencies of mothers is important. While breastfeeding mothers are sensitive to many issues in order to feed their baby adequately and with high quality milk, they cannot display healthy lifestyle behaviors for some reasons (stress, sleep problems, lack of support, lack of time, etc.) (16). The aim of this study was to evaluate the changes in the life style behaviors of these women in this process, as well as the obsession of healthy nutrition (ON), which has been emphasized recently.

All mothers could develop behaviors towards healthy nutrition during pregnancy and postpartum period (17). Breastfeeding mothers could create concerns about the quality of milk and those who starts complementary feeding for their babies can have intense efforts to feed their babies and the quality of the food consumed (18). This can bring mothers to a pathological point related to consuming healthy food and could cause ON tendency. Our study was conducted in this population considering that ON susceptibilities of mothers with children between the ages of 0-2 according to breastfeeding status. In conducted studies, the ON susceptibility rate for the general population was reported to be 6.9-7.3% (19,20), for high-risk groups (healthcare professionals, artists) between 35% and 57.8% (21-25).

In studies in the literature; health workers (doctor, nurse, dietitian, physiotherapist, etc.), university students (medical school students, nutrition and dietetics department students, physical education students), performance artists (dancer, musician) and athletes were reported to be at risk on ON (21-25), but there was no study on ON susceptibility of mothers according to breastfeeding status.

In this study, the mean score of ORTO-11 scale of all participants was 25.09 ± 4.80 and there was no relationship between ORTO 11 scores and breastfeeding status of mothers. Compared to other studies in the groups at risk in the literature, the score of ORTO-11 scale was lower in mothers compared to other risk groups; in other words, ON tendencies of this group was higher (20-25). In this study we did not found relationship between the breastfeeding status and ORTO-11 and EAT scores of mothers. 12.0% of mothers were found at high risk in eating attitudes. It was observed that mothers who did not breastfeed were mostly in high risk group in terms of eating attitude compared to breastfeeding mothers. The idea of healthy and adequate feeding of the baby in the breastfeeding mothers may explain the eating behaviors of the mothers in this group. According to EAT, ON susceptibility of breastfeeding mothers who were in the high risk group was higher than low risk

group. In other words, it can be said that mothers who are likely to have an eating behavior disorder have more healthy eating obsessions. These results reveal that this group (mothers who have 0-2 age of child) should be taken into consideration about nutritional disorders regardless of breastfeeding status.

In our study, the other aim was to compare the breastfeeding status and healthy life style changes of mothers. Healthy lifestyle behaviors are defined as a combination of activities such as nutritional habits, exercise habits, self-actualization, health responsibility, interpersonal support, and stress management (26). The frequency of skipping the main meals of non-breastfeeding mothers was found to be higher than breastfeeding mothers. Diets with severe calorie restrictions are not recommended during breastfeeding. Since non-breastfeeding mothers will not worry about milk quantity and quality, it is thought that they may behave towards a stricter slimming diet in order to lose weight after birth and they may go to calorie restriction by skipping the main meal. The main gain of the slimming diet to people is the ability to eat healthy. It is thought that this effort has become pathological by reaching excessive dimensions may make the person prone to ON. On the other hand, considering that both the need for calories and breastfeeding behavior can create a rhythmic order in breastfeeding mothers, it is thought that the mother's own diet is more likely to gain rhythmitis. In our study, 49.0% of the participants thought that they were fed well. It was thought that mothers have high sensitivity regarding healthy nutrition as of the period they are in. How mothers perceive the issue of good nutrition should be examined, the reasons for thinking that they could not be fed well should be understood and necessary interventions should be made. It was observed that 88.3% of all participants in our study did not perform regular physical activity. Similar results were found in other studies in the literature (27). Although the same sensitivity is expected to show in the direction of regular physical activation behavior, which is a sine qua non of healthy living behavior, the mother does not have sufficient social support, the baby's responsibility for the care is mostly on the mother. In addition, it is thought that regular physical activity behavior is not observed in the mothers due to possible reasons such as the mother's not wanting to leave her baby. In the study by Shelton, smokers were found to have a lower incidence of ON susceptibility (28). In accordance with our study, Fidan et al found no significant difference between smoking and ON susceptibility (29). The frequency of non-

breastfeeding mothers was found to be significantly higher than that of mothers who were breastfeeding. Although it is thought that smokers are avoiding smoking during breastfeeding due to the fact that mothers have a closer relationship with their baby during breastfeeding and the negative effects of smoking on breast milk, the high rate of smoking in breastfeeding mothers is remarkable.

In our study, breastfeeding mothers who thought that their baby was not healthy were more prone to ON. This condition suggests to us the following: the reason for this may be the idea of breastfeeding mothers who think that their babies are unhealthy, making their nutrition healthier and pure and increasing the quality of milk. Mothers who think that their baby is not healthy should be careful against the anxiety experienced and should be evaluated in many ways, and the risk of developing mother's eating disorder should not be ignored.

Among the factors that negatively affect breastfeeding were the mothers' belief that their milk and breastfeeding are not sufficient, lack of self-confidence, difficulties in breastfeeding and mental problems. In our study, breastfeeding mothers who were concerned about the quality and quantity of milk were found to have lower ORTO-11 scores than expected, in other words, their ON tendencies were evaluated as more. It was thought that mothers with high anxiety cannot control their anxiety and may be at risk of developing an eating disorder in case of excessive struggle with nutrition.

It is also reported in the literature that milk production and milk content are largely independent of the mother's diet (30,31). In our study, breastfeeding mothers, who thought that the change in their diet was effective on the growth of the child, were found to be more likely to have ON tendency. Although healthy nutrition of nursing mothers is of great importance, it is thought that it will be beneficial to consider the principle of profit loss rate, which is the basis of medicine, in order to prevent the healthy diet desire to reach the level that will cause eating disorders.

Eating attitude test is a scale used to detect disorders in eating behavior of patients with eating disorders and normal people without eating disorders (14,15). It was observed that mothers who did not breastfeed on the scale of EAT-40 were in a higher risk group compared to breastfeeding mothers, that is, a higher rate of deterioration in their eating behavior in this group. The idea of healthy and adequate feeding of the baby in the breastfeeding mother may explain the eating behaviors of the mothers in this group to be more smooth. According to EAT, mothers in high risk group had lower

mean ORTO-11 scores. In other words, it can be said that mothers who are likely to have an eating behavior disorder have healthier eating obsessions.

Limitations: The fact that a clear cut-off point was not calculated in the validity and reliability study of the ORTO-11 scale causes uncertainties in the interpretation of the scale. Reviewing the scale and determining the cut-off point will allow the interpretation of the results of these studies to be interpreted more accurately, thus preventing the problems arising in comparing similar study results.

Our study was carried out on social media through Facebook groups for mothers with children between the ages of 0-2. The fact that the sample group was reached via social media user Facebook group members is the limitations of our study. In our literature, more inclusive research should be done by using a new sample group.

Our study was conducted in mothers with children between the ages of 0-2, to the authors knowledge, no study was conducted up to date on this group for ON tendencies.

Conclusion

As a results of this study, mothers who did not breastfeed were mostly in high risk group in terms of eating attitude compared to breastfeeding mothers; breastfeeding mothers who thought that their baby was not healthy, who had anxiety about the quality and quantity of milk and who thought that the change in their nutrition was effective on the growth of the child had higher tendencies to ON. So, breastfeeding mothers who had anxiety in any subject were more susceptible to ON. It is of great importance that healthcare professionals organize trainings for increasing the general level of knowledge of mothers and provide healthy living and breastfeeding counseling.

Family physicians are very important during pregnancy and postpartum period to help meet these goals by educating and supporting pregnant women, new mothers, and their families, and by working to remove barriers to breastfeeding within their own practices and their communities. Studies have shown that a physician's recommendation increases breastfeeding initiation and duration rates.

Compliance with Ethical Standard

Disclosure of potential conflicts of interest

Tuba Fenercioğlu Eken declares that she has no conflict of interest concerning the research, authorship, or publication of this article. Duygu Ayhan Baser declares that she has no conflict of

interest concerning the research, authorship, or publication of this article. İsmail Kasım declares that she has no conflict of interest concerning the research, authorship, or publication of this article. İrfan ŞENCAN declares that he has no conflict of interest concerning the research, authorship, or publication of this article. Adem Özkara declares that he has no conflict of interest concerning the research, authorship, or publication of this article.

Research involving Human Participants and/or Animals

Research involve only human participants.

Ethical approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent Informed consent was obtained from all individual participants included in the study

Funding

This study received no funding

DATA AVAILABILITY STATEMENT

The Authors declare that materials described in the manuscript, including all relevant raw data, will be freely available to any scientist wishing to use them for non-commercial purposes, without breaching participant confidentiality. Moreover, the Authors ensure that their datasets are presented in the main manuscript.

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TABLES

Table 1. Comparison of some features of the participants according to breastfeeding status

	Total		Breast-feeding (n = 104)		Non- breastfeeding (n = 410)		p
	n	%	n	%	n	%	
Age range							
20-29 years	214	41.6	167	78.0	47	22.0	0.671
30-34 years	211	41.1	172	81.5	39	18.5	
> 35 years	89	17.3	71	79.8	18	20.2	
Education							
Primary education and below	21	4.1	18	85.7	3	14.3	0.148
Secondary education	113	22.0	83	73.5	30	26.5	
High education	380	73.9	309	81.3	71	18.7	
Working Status							
Working	155	30.2	116	74.8	39	25.2	0.030
Free / on maternity leave	250	48.6	198	79.2	52	20.8	
	109	21.2	96	88.1	13	11.9	
Not working							
Profession							
Housewife	87	16.9	103	81.1	24	18.9	0.009
Health employee	62	12.1	52	83.9	10	16.1	
Teacher	112	21.8	99	88.4	13	11.6	
Other	213	41.4	156	73.2	57	26.8	
Family Type							
Nuclear family	52	10.1	377	79.0	10	21.0	0.252
Extended family	302	58.8	30	90.9	0	9.1	
Fragmented family	160	31.1	3	75.0	3	25.0	
Monthly Income							
2020 TL and below	477	92.8	41	78.8	11	21.2	0.943
2021 TL - 6500 TL	33	6.4	240	79.5	62	20.5	
> 6500 TL	4	0.8	129	80.6	31	19.4	
Number of child							
1	267	51.9	217	81.3	50	18.7	0.574
2	215	41.8	166	77.2	49	22.8	
3	30	5.8	25	83.3	5	16.7	
4 and above	2	0.4	2	100.0	0	0.0	

Table 2. Comparison of some healthy life behaviors of the participants according to breastfeeding status

	Total		Breast-feeding (n = 104)		Non- breastfeeding (n = 410)		p
	n	%	n	%	n	%	
BMI							
Under normal weight	24	4.7	16	66.7	8	33.3	0.170
Normal weight	270	52.5	215	79.6	55	20.4	
Overweight	150	29.2	118	78.7	32	21.3	
Obese	70	13.6	61	87.1	9	12.9	
Health Status Assessment	334	65.0	266	79.6	68	20.4	0.736
Good	136	26.4	107	78.7	29	21.3	
Medium	44	8.5	37	84.1	7	15.9	
Bad							
Adequate, Balanced Nutrition							
Yes	252	49.0	205	81.3	47	18.7	0.222
No	262	51.0	205	78.2	57	21.8	
Daily Main Meals							
1	10	1.9	9	90.0	1	10.0	0.120
2	271	52.7	225	83.0	46	17.0	
3	231	44.9	1751	75.8	56	24.2	
4 and above	2	0.4		50.0	1	50.0	
Daily Snakes							
1	48	9.3	40	83.3	8	16.7	0.823
2	172	33.5	132	76.7	40	23.3	
3	193	37.5	156	80.8	37	19.2	
4	76	14.8	60	78.9	16	21.1	
5 and above	25	4.9	14	82.4	3	17.6	
Skip the Main Meal							
Yes	142	27.6	102	71.8	40	28.2	0.021
No	102	19.8	85	83.3	17	16.7	
Sometimes	270	52.5	223	82.6	47	17.4	
Regular Physical Activity	60	11.7	46	76.7	14	23.3	0.314
Yes	454	88.3	364	80.2	90	19.8	
No							
Smoking							
Never	288	56.0	238	82.6	50	17.4	0.000
Quit	69	13.4	62	89.9	7	10.1	
Occasional	78	15.2	63	80.8	15	19.2	
Everyday	79	15.4	47	59.5	2	40.5	
Alcohol							
Never used	334	65.0	272	81.4	62	18.6	0.009
Quit	82	16.0	71	86.6	11	13.4	
Occasional	97	18.9	66	68.0	31	32.0	
Everyday	1	0.2	1	100.0	0	0.0	

Table 3. Comparison of Breastfeeding Status and Food Consumption Changes

NUTRITION	Breast-feeding (n = 104)	Non-breastfeeding (n = 410)	p
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	Increased		Decreased		Unchange d		Increased		Decreased		Unchange d		
	n	%	n	%	n	%	n	%	n	%	n	%	
The fish	95	69.3	66	80.5	249	84.4	42	30.7	16	19.5	46	15.6	0.001
Milk	63	72.4	117	83.0	230	80.4	24	27.6	24	17.0	56	19.6	0.143
Milk Product	137	77.8	58	76.3	215	82.1	39	22.2	18	23.7	47	17.9	0.403
Egg	151	80.3	59	76.6	200	80.3	37	19.7	18	23.4	49	19.7	0.758
Red Meat	143	75.3	28	84.8	239	82.1	47	24.7	5	15.2	52	17.9	0.141
Chicken	75	73.5	84	86.6	251	79.7	27	26.5	13	13.4	64	20.3	0.072
Sausage, Salami	23	85.2	234	79.1	153	80.1	4	14.8	62	20.9	38	19.9	0.742
Dried Legume	114	80.9	57	90.5	239	77.1	27	19.1	6	9.5	71	22.9	0.051
Oily Seeds	181	79.0	68	80.0	161	80.5	48	21	17	20.0	39	19.5	0.930
Dry Fruit	109	76.2	62	73.8	239	83.3	34	23.8	22	26.2	48	16.7	0.076
Fresh Fruit/Vegetables	175	80.6	34	79.1	201	79.1	42	19.4	9	20.9	53	20.9	0.914
Rice	52	75.4	91	77.8	267	81.4	17	24.6	26	22.2	61	18.6	0.436
Bulgur	130	81.3	42	84.0	238	78.3	30	18.8	8	16.0	66	21.7	0.553
Pasta	62	75.6	79	79.8	269	80.8	20	24.4	20	20.2	64	19.2	0.580
Juice Box	31	79.5	218	82.0	161	77.0	8	20.5	48	18.0	48	23.0	0.415
Sugary/Fizzy Drinks	47	83.9	217	78.9	146	79.8	9	16.1	58	21.1	37	20.2	0.695
Soda	127	77.4	82	86.3	201	78.8	37	22.6	13	13.7	54	21.2	0.200
Vegetable Oils	78	80.4	21	70.0	311	80.4	19	19.6	9	30.0	76	19.6	0.390
Honey	95	81.9	50	78.1	265	79.3	21	18.1	14	21.9	69	20.7	0.790
Boiled Grape Juice	121	80.1	37	84.1	252	79.0	30	19.9	7	15.9	67	21.0	0.726
Spice	55	82.1	126	84.6	229	76.8	12	17.9	23	15.4	69	23.2	0.141
Herbal tea	82	78.8	139	84.8	189	76.8	22	21.2	25	15.2	57	23.2	0.142

Bread	70	83.3	107	77.5	23 3	79.8	14	16. 7	3 1	22.5	5 9	20. 2		0.5 81
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Table 4. ORTO-11 Score Distribution According to EAT-40 Risk Groups

	Breastfeeding mothers' ORTO-11 score			Non-Breastfeeding mothers' ORTO-11 score		
	Mean	Standard Deviation	p	Mean	Standard Deviation	p
EAT						
Low risk	25,47	4,71	0,001	25,07	4,66	0,140
High risk	22,79	4,76		23,11	5,52	

Table 5. Comparison of ORTO-11 scores and some features of the participants' babies according to breastfeeding status

	Breastfeeding mothers' ORTO-11 score			Non-Breastfeeding mothers' ORTO-11 score		
	Mean	Standard deviation	p	Mean	Standard deviation	p
Gender						
Female	25.32	4.76	0.601	24.69	4.75	0.959
Male	25.08	4.81		24.74	5.01	
Baby's percentile by age						
≤25p	25.63	4.94	0.492	25.14	4.77	0.645
26p-50p	25.05	4.2		24.24	4.40	
51p-75p	25.30	4.84		24.03	4.43	
>75p	24.63	4.48		25.48	5.74	
Perception of their babies' health status according to mothers						
Healthy	25.36	4.00	0.018	24.76	4.96	0.714
Non healthy	23.32	5.33		24.00	3.16	

Table 6. Some Features of Breastfeeding Mothers Related to Breastfeeding Period

	Breastfeeding mothers' ORTO-11 score		
	Mean	Standart deviation	p
Having problems with breastfeeding (n = 389)			
Yes, I have	23.83	5.40	0.150
I had but I have no problem right now	25.07	4.50	
I've never had	25.51	4.92	

Anxiety about the quality and quantity of milk (n = 398)			
I'm still worried	23.78	5.18	0.012
I was worried for a while now there is no anxiety	25.15	4.23	
I was never worried	25.75	4.99	
Thinking that the change in self-feeding is effective on the growth of the child (n = 396)			
Yes	24.83	4.65	0.000
No	27.28	5.25	