http://ejournal.poltekkes-smg.ac.id/ojs/index.php/MANR

p-ISSN: 2685-2020 ; e-ISSN: 2685-2012

Effect Of Pumpkin Leaves On Milk Production Of Breastfeeding Mother

Warsinah[1)]; Erna Widyastuti[2)]; Sri Wahyuni[3)]
warsinah486@gmail.com

ABSTRACT

Background: Pumpkin (*Cucurbita Mochata Durch*) leaves is considered as traditional food that can increase breast milk production. Only a few people know the benefit of this local wisdom in Technical Implementing Service Unit (UPTD) of Dayeuhluhur Community Health Center I Cilacap Regency. Consequently, a research is required to examine its effect. This research is to examine the effect of pumpkin leaves on breast milk production of postpartum women.
Methods:This research used quasi experiment method with post-test control group design. There were 22 breastfeeding mother recruited with purposive sampling and divided into treatment group (11 breastfeeding mother) and control group (11 breastfeeding mother). The respondents of each group were selected randomly. The research instruments were Omened digital weighing scale and observation sheets. Breast milk production was measured based on the increase of infant weight in 7 days during treatment and converted to breast milk volume in ml. Data Analysis using Independent t–Test.
Results: The research results show a significant effect of pumpkin leaves on breast milk production of postpartum women with Independent t-Test statistical test results (p-value 0.001) < (0.05). Show that the average of breast milk volume on treatment group is 103.29 ml and on control group is 45.15 ml. It is obtained from the measurement of infant weight that increases by 363.73 gram on the treatment group and 159.00 gram on the control group with an average difference of 204.73.
Conclusion: The findings of this research show that pumpkin leaves can be used as an alternative daily menu for postpartum women and solution for midwives in handling postpartum women with inadequate breastmilk production

Keywords: Pumpkin Leaves; Breast Milk Production

[1] Puskesmas Dayeuhluhur 1
Jl. Jendral Sudirman No. 97 RT 1 / RW 7Dsn, Jl. Sindanglangu, Lamegede, Dayeuhluhur, Kec. Dayeuhluhur, Kabupaten Cilacap, Jawa Tengah
[2,3]*Department of Midwifery, Health Polytechnic of Semarang, Indonesia*
Jl. Tirto Agung Pedalangan Banyumanik, Semarang, Jawa Tengah, Indonesia
[2,3]*Handling Non Communicable Diseases, P2PTM, Pusat Unggulan Ipteks*,
Poltekkes Kemenkes Semarang, Indonesia

Received: August 31, 2022; Revised: September 25, 2022; Accepted: September 27, 2022

Backgrounds. Lactation is a time when mother's breast change so that it is able to produce breast milk and is a very complex interaction between mechanical stimuli, nerves and various hormones so that breast milk can come out (Wiknyosastro, 2016). The main factors that affect it are hormonal factors, namely the hormone prolactin which plays a role in the production of breast milk and oxytocin which plays a role in stimulating the release of breast milk. When the baby sucks the mother's breast, neurohormonal stimulation occurs in the mother's milk putting and areola. This stimulation is passed to the hypophyse through the vagus nervus directly to the anterior lobe. From this lobe will secrete the hormone prolactin, enter the bloodstream and reach the glands of breast milk makers. These glands will be aroused to produce breast milk (Wiknyosastro, 2016).

Other factors that can affect the smooth production and production of breast milk include infant factors, maternal factors, socio-culture, nutrition / food intake, frequency of breastfeeding and Initiation of Early Breastfeeding. Maternal nutrition is related to

http://ejournal.poltekkes-smg.ac.id/ojs/index.php/MANR

p-ISSN: 2685-2020 ; e-ISSN: 2685-2012

the hormone prolactin, the more the intake of nutrients is good then the production produced will also be a lot. Breastfeeding mothers need an additional 300-500 calories each day in order to breastfeed their babies successfully. The 300 calories needed by the baby come from fat accumulated during pregnancy. This means that mothers who breastfeed do not need to overeat, but simply maintain a balance of nutritional consumption. Mothers who are not well nourished are not able to breastfeed their babies exclusively, some even breast milk does not come out, on the contrary, nursing mothers with good nutrition will be able to breastfeed their babies for at least 6 months or exclusively (Proverawati & Asfuah, 2017).

Nationally, the coverage of infants receiving exclusive breastfeeding in 2020 is 66.06%. This figure has exceeded the 2020 Strategic Plan target of 40%.(Ministry of Health, 2020). Exclusive breast milk coverage in Central Java in 2020 is 81.4%. (DinKes Jateng, 2020). According to the Cilacap Regency Health Profile, the achievement of exclusive breast milk for infants 0-6 months in 2019 reached 85.5% (4th in Central Java), an increase from the previous year of 76.9% in 2015 and 70.1% in 2014. UPTD Puskesmas Dayeuhluhur I always ranks first in the achievement of exclusive breast milk in the last three years, namely 90.16% in 2016, amounting to 91.7% in 2015, and 87% in 2014 (Dinkes Kab Cilacap, 2019). UPTD Puskesmas Dayeuhluhur I is a health center whose exclusive breast milk coverage is always above the target of Minimum Service Standard which is 80% (SPTP Puskesmas Dayeuhluhur I, 2016). According to a preliminary study in the UPTD area of The Dayeuhluhur I Health Center of Cilacap regency in October 2017 there were 35 postpartum mothers, 29 people (82.85%) consumed yellow pumpkin leaf vegetables (Cucurbita Moschata Durch) from the first day of post-partum and continued for up to 1 week. Giving yellow pumpkin leaf vegetables to post-partum mothers the first week in Dayeuhluhur I Health Center, almost all mothers do not experience problems in breastfeeding, breast milk production meets the needs of the baby, it is proven that the baby's weight has increased in the first week, although in theory the baby's weight will experience a decrease of < 10% of BB born in the first week (Ministry of Health RI, 2010). Pumpkin is a type of vegetable plant spread from the family Cucurbitaceae, which belongs to the type of annual plant. Yellow pumpkin plants are numerous and easily grow in both low and high altitudes. In sunda area or West Java called Waluh Ageung, in Central Java called Waluh. Yellow pumpkin plant consists of stems that spread and propagate quite strongly, branched a lot, hairy rather sharply, the length of the stem can reach 5-10 meters. The shape of the leaves of the yellow pumpkin is twisted, the edges are slightly pointed, the bones are clearly visible, fluffy and slightly mushy. Yellow pumpkins are broadleaf, the center line can reach 20 cm, green or slightly gray (USDA, 2016). According to the results of laboratory tests in 100 grams of pumpkin leaves containing calories 42 kcal, protein 5.14 grams, fat 0.85 grams, carbohydrates 6.42 grams, calcium 197, 14 mg, phosphor 141.42 mg, iron 5.28 grams, vitamin A 1. 071 SI, vitamin B1 0.2 mg, vitamin C 51,42 mg (BKKP DIY, 2016).

The nutritional content of pumpkin leaves is not too much different from the nutritional content of some plants that are believed to increase breast milk production, which has been researched before in increasing breast milk production, such as katuk leaves (Sauropus androgynus), sweet potato leaves (ipomoea batatas), stone banana flowers (musa balbisiana colla) and Moringa leaves (Moringa Oleifera) (Wahyuningsih, 2017). According to the results of laboratory tests conducted in December 2017 in the integrated laboratory of Diponegoro University, in addition to containing the above nutrients, in 100 grams of pumpkin leaves also contain polyphenol compounds as much as 136.10 ppm and antioxidants as much as 25.88%. Polyphenols are active lactagogum compounds that play a role in increasing levels of the hormones prolactin and oxytocin which has been proven

http://ejournal.poltekkes-smg.ac.id/ojs/index.php/MANR

p-ISSN: 2685-2020 ; e-ISSN: 2685-2012

in a study entitled Uses of Nigella Sativa (Ranunculaceae): A Traditional Medicine, with the results of polyphenols in black cumin can increase breast milk production in nursing mothers in India (Susilani & Kurniawan, 2016) and research on the Effect of Musa Balbisiana Colla Extract on Breastmilk Production In Breastfeeding Mothers who produced that polyphenols in stone banana flowers were shown to increase the average milk volume of 470,681 ml in the treatment group and 364,650 ml in the control group (Wahyuningsih, 2017)

Based on the background above, with the local wisdom of the community in the Dayeuhluhur I Health Center utilizing yellow pumpkin leaves that are easy to obtain, and no one has ever researched before, researchers want to research more about "The influence of pumpkin leaves on breast milk production in the Dayeuhluhur I Health Center Cilacap".

Methods. This research was conducted in Dayeuhluhur I Health Center from March 19 to May 1, 2018. This study used the quasy experimental method with the static group comparison post test design. The study population was all postpartum mothers in 9 villages of Dayeuhluhur I Health Center of Cilacap which amounts to 30 people based on day of birth in March - May 2018.

A sample of 22 respondents was taken with purposive sampling techniques with inclusion and exclusion criteria, divided into treatment groups (11 respondents) and control groups (11 respondents). Inclucion criteria is post-partum mother first until seventh day, healthy mom's and babies, mother was to giveThe respondents of each group was done randomly.

The research instrument used Onemed's digital weight scales and observation sheets. Data retrieval was carried out by researchers and 6 enumerators who had been done briefing before to equalize perception. Breast milk production is measured based on the baby's weight gain within 7 days during treatment and converted to the volume of breast milk in ml by means of the baby's weight gain in ounces x 28.4 ml. Statistical test for data analysis using Independent t - Test after data normality test with Saphiro-Wilk data distribution is normal and the results of homogeneity test homogeneous data variants. Independent t – Test is done to compare the average milk production in the treatment group and control group so that it can be known the effect of pumpkin leaves on breast milk production. In this study, the control group obtained the same standard nifas care, exclusive breast milk leaflets, maternal nutritious food leaflets and blood-added tablet supplements that were the same as the treatment group.

Result and Discussion.

Table 1. Characteristics of Respondents

Characteristic	Group					
	Treatment		Control		Total	
	F	%	F	%	F	%
Age						
<20 dan >35	0	0	1	9,1	1	4,5
20-35	11	100	10	90,9	21	95,5
TOTAL	11	100	11	100	22	100
Education						
Primary	6	54,5	10	90,9	16	72,7
Secondary	5	45,5	1	9,1	6	27,3
Higher	0	0	0	0	0	0
TOTAL	11	100	11	100	22	100
Pekerjaan						
Employed	2	18,2	0	0	2	9,1
Unemployed	9	81,8	11	100	20	90,9
TOTAL	11	100	11	100	22	100
Parity						
Primiparity	4	36,4	3	27,3	7	31,8
Multi-parity	7	63,6	8	72,7	15	68,2
Grande-multiparity	0	0	0	0	0	0
TOTAL	11	100	11	100	22	100

Table 1 is divided into treatment groups and characteristic control groups based on age, education, occupation and parity. The characteristics of respondents based on the age of 22 respondents were all aged 20-35 years with the number of 11 people (100%) in the treatment group and 10 people (90.9%) in the control group. Only one respondent (9.1%) was > 35 years old. Education showed that of the 22 respondents to nifas mothers, most were elementary educated (SD, Junior High School) as many as 6 people (54.5%) in the treatment group and 10 people (90.9%) in the control group. Respondents who did not work were 9 people (81.8%) in the treatment group and 11 people (100%) in the control group. There were only 2 working respondents (9.1%). The parity of respondents was mostly multipara

http://ejournal.poltekkes-smg.ac.id/ojs/index.php/MANR

p-ISSN: 2685-2020 ; e-ISSN: 2685-2012

7 people (63.6%) in the intervention group and 8 people (72.7%) in the control group. In this study there was no parity of grande multiparity.

Table 2. Distribution of baby weight respondents

Group	N	Birth weight			Weight Gain After Treatment		
		Min	Max	Mean	Min	Max	Mean
Treatment	11	2500	3406	2899,55	170	501	363,73
Control	11	2500	3500	2909,64	-50	330	159,00

Based on table 2 obtained data that the weight of babies born in the treatment group was on average 2899.55 grams with the lowest baby weight was 2500 grams and the highest was 3406 grams, while in the control group the average baby weight was 2909.64 grams with the lowest baby weight of 2500 grams and the highest 3500 grams. The average weight gain of the infant treatment group was 363.73 grams and the control group was 159.00 grams.

Table 3. Description of Breast Milk Production After Being Given Yellow Pumpkin Leaves in Treatment Groups and Control Groups

Variable	Group	N	Mean	SD	Min	Max
Breast milk production	Treatment	11	103,29	34,12	48,28	142,28
	Control	11	45,15	36,87	-14,20	93,72

Based on table 3, breast milk production in 11 respondents of the average treatment group was 103.29 ml, at least 48.28 ml and at most 142.28 ml of normal breast milk production. While in 11 respondents the control group averaged 45.15 ml of breast milk production, with the least production was -14.20 ml of normal milk production and the most was 93.72 ml.

Breast milk production was calculated based on the results of data on 22 respondents after the treatment of yellow pumpkin leaves, the average weight gain of infants in the treatment group was 363.73 grams, at least 170 grams and the highest 501 grams. While in the control group the average baby's weight gain was 159 grams, the lowest was a decrease of 50 grams (-50) and a maximum of 330 grams. The baby's weight gain in grams is made into ounces and multiplied by 28.4 ml of breast milk.

Table 4. Difference in Breast Milk Production After Treatment in Treatment Groups and Control Groups

Variable	Group	N	Mean	SD	Mean Diff	p-value
Breast milk production	Treatment	11	103,29	34,12	58,14	0,001
	Control	11	45,15	36,87		

Based on table 4 shows that in the average treatment group the production of breast milk was 103.29 ml with a standard deviation of 34.12 and in the average control group the production of breast milk was 45.15 ml with a standard deviation of 36.87. There was an average difference between the treatment group and the control group of 58.14 ml. This was obtained based on indicators of average infant weight gain in both groups after being given yellow pumpkin leaf vegetables, namely 363.73 grams in the treatment group and 103.20 grams in the control group with an average difference of 204.73.

Based on the results of the independent sample T-test analysis shows that the pvalue value is 0.001. Thus the p-value of the < 0.05 so that Ha is accepted and Ho is rejected or in other words there is an influence of yellow pumpkin leaves on the production of post partum mother's breast milk in the UPTD area of Dayeuhluhur I Health Center Cilacap Regency in 2018.

Based on the results of the study, it can be known that of the 22 respondents all aged 20-35 years with the number of 11 people in the treatment group (100%) and 10 people (90.9%) in the control group. There was only one respondent (9.1%) who was > 35 years old in the control group. The results of this study showed that the age of the most mothers was in the age range of 20-35 years and showed a tendency to gain enough baby weight. There was one respondent who was 37 years old and had a baby weight loss in the first week. Age will affect the ability and readiness of the mother in passing the period of nifas and breastfeeding (Maritalia, 2012) in (Fatmawati,

http://ejournal.poltekkes-smg.ac.id/ojs/index.php/MANR

p-ISSN: 2685-2020 ; e-ISSN: 2685-2012

2017). Based on the results of this study, post partum mother respondents, most were educated basic (elementary, junior high) as many as 6 people (54.5%) in the treatment group and 10 people (90.9%) in the control group. While the rest is secondary education (SMA) which is 5 people (45.5%) in the treatment group and 1 person (9.1%) in the control group. There were no respondents with higher education.

The results of this study showed that the characteristics of education had no effect on breast milk production, by looking at the data on respondents with primary and secondary education there was no difference in breast milk production. Proven in respondents with basic education (SD, SMP) as many as 16 respondents, 14 respondents of whom had good milk production with indicators of babies having weight gain in the first week and no different from respondents with secondary education (SMA).

This shows that the education of respondents is low when supported by the husband and closest family (mother respondent) who care for the mother of the nifas period so as to avoid excessive stress and worry so that the mother has a sense of confidence that greatly affects the production of breast milk (Saraung et al., 2017).

Although in theory it is said that the higher a person's education, the higher the demands on the quality of health will be higher. Mothers whose education level is higher have greater attention in understanding the benefits of breast milk for babies (Motee et al., 2013). The results showed that post partum mothers in the UPTD area of The Dayeuhluhur I Health Center of Cilacap Regency were mostly housewives and only 2 people worked as PAUD teachers. Of the 22 respondents to post-partum mothers, almost all of them did not work, namely 9 people (81.8%) in the treatment group and 11 people (100%) in the control group. From the results of the study obtained data that working mothers as many as 2 people (9.09%) have good milk production characterized by the baby's weight gain in the first week of 370 grams and 200 grams. This does not show any difference compared to mothers who do not work. This is different from the theory that mothers who do not work successfully produce breast milk and provide exclusive breast milk compared to mothers who work outside the home. This is because housewives have plenty of time to breastfeed their babies. Because the more often the frequency of breastfeeding will affect the hormone prolactin which affects breast milk production (Saraung et al., 2017).

The results of the study showed that respondents with primipara as many as 7 people (31.81%) and multipara 15 people (68.18%) showed a tendency that did not differ in the weight gain of their babies. This indicates that the parity characteristics of respondents have no effect on the breastfeeding/lactation process. This is in line with Mardiyaningsih (2011) who said that there is no influence on age, education, employment and parity on breast milk production in both the treatment group and the control group. Enok (2011) said that there is no meaningful relationship between age, parity, education and work towards breast milk production, but the factors that have a meaningful effect are pain, fluid intake, anxiety, and family support (Fitriani and et al, 2015). Soetjiningsih (2013) mentioned that the production of multipara mother's breast milk is more than primipara on the fourth day of post partum, but after breastfeeding patterns can be built well with family support, there is no significant difference (Susilani & Kurniawan, 2016).

In addition to the characteristics of respondents, the factors that influenced this study were also the birth weight of the respondents' babies. The baby weight of the two groups respondents was within the normal limits, namely in the average treatment group was 2899.55 grams with the lowest body weight was 2500 grams and the highest body weight was 3406 grams. While in the control group the average baby's weight was 2909.64 grams with a lowest body weight of 2500 grams and a high of 3500 grams. This showed no

p-ISSN: 2685-2020 ; e-ISSN: 2685-2012

difference in both groups in terms of infant factors that affect breast milk production. As maritalia theory (2012) baby weight is one of the factors that affect the production of breast milk because babies of low birth weight (BBLR) have a lower sucking ability than babies with normal birth weight. The ability to suck lower breast milk includes the frequency and length of breastfeeding so that it will affect the stimulation of the hormone's prolactin and oxytocin.

Previous research supporting this theory is research on factors that affect breast milk production, where the result is that a healthy baby can empty the breast for about 5-7 minutes and the breast milk in the baby's stomach will empty within 2 hours. So according to researchers found that more than half of the respondents had a good baby suction, namely as many as 20 respondents (64.5%). Good baby suction is caused by the condition of a healthy baby, so the baby will be active in sucking milk (Putri and Mahanani, 2014).

In table 3 can be seen the production of breast milk based on the volume of breast milk in 11 respondents of the treatment group, the average is 103.29 ml and in 11 respondents the average control group is 45.15 ml. This milk production was calculated based on measurements of baby weight after being given yellow pumpkin leaves in the treatment group and control group that out of 11 respondents of the treatment group, after being given yellow pumpkin leaf vegetables for 7 days all babies experienced weight gain with an average of 363.73 grams and 11 respondents of the control group experienced infant weight gain 9 respondents with an average of 159.0 grams and 2 people decreased. In the infant treatment group no one experienced weight loss although in theory it is stated that the newborn will lose normal birth weight by about 10% in the first few days and will return to birth weight at 2 weeks of age. Babies who get enough milk will gain weight 0.5 -1 ounces / day so that they get a satisfactory increase according to age, namely 700 grams / month at the age of 1-3 months, 600 grams / month at the age of 4-6 months, 400 grams / month at the age of 7-9 months and 300 grams / month at the age of 10-12 months (Cadwell & Turner, 2015).

According to theory, the dietary factors consumed by nursing mothers greatly affect the production of breast milk. In order for the milk produced to meet the needs of the baby, it is necessary to pay attention to the quality and quantity of mother's food (Waryana, 2010). This is in accordance with the results of the analysis of food recall respondents in this study that in respondents with nutritious food intake was shown to produce breast milk better which was characterized by better infant weight gain than respondents with less food intake. Breast milk production is also influenced by breast anatomy. The number of lobes in the breast, anatomy and the state of the mother's nipples (Maritalia, 2012). This is proven in this study, there are 2 people out of 22 respondents (9.09%) with nipples that do not protrude and babies have difficulty breastfeeding so that using nipple aids, the baby's weight rises not too significantly compared to respondents with breasts that are not problematic. The description above is in accordance with Sulistyoningsih's theory (2010) that breast milk production can be influenced by several factors including dietary factors or maternal nutrient and fluid intake and psychic conditions. Therefore, a post-partum mother should pay attention to nutritional intake and try not to stress or excessive anxiety because it can affect the production of breast milk, especially in the first weeks of breastfeeding the baby (Saraung et al., 2017). According to the food recall analysis of the two groups of respondents with adequate intake of nutritious food, as many as 17 people from 22 respondents (77.27%) experienced better infant weight gain as an indicator of breast milk production.

Bivariate Analysis of the effect of yellow pumpkin leaves on the milk production of the Treatment Group and Control Group After the analysis test, the results were obtained that in the treatment group given yellow pumpkin

http://ejournal.poltekkes-smg.ac.id/ojs/index.php/MANR

p-ISSN: 2685-2020 ; e-ISSN: 2685-2012

leaves 200 grams a day for 7 days post-partum in 11 respondents of the average ASI production treatment group was 103.29 ml and in 11 respondents the control group averaged 45.15 ml with an average difference of 58.14 ml. The results of statistical test analysis using the Independent Sample T test showed that there was a significant difference in breast milk production of the treatment group respondents who were given clear vegetables of pumpkin leaves and the control group that was not given with a p-value of 0.001 (<0.05). Thus, the result of this study is that Ha was accepted and Ho rejected or in other words the results of this study are in accordance with the hypothesis compiled in the study, namely the influence of yellow pumpkin leaves on breast milk production in the UPTD area of Dayeuhluhur I Health Center Cilacap Regency.

The results of this test showed that the role of pumpkin leaves in breast milk production is influenced by its nutritional content and contains polyphenols that increase the hormone prolactin which can increase breast milk production. The nutritional content per 100 grams according to BKPP DIY (2016) is 42 kcal calories, 5.14 grams of protein, 0.85 grams of fat, 6.42 grams of carbohydrates, 197.14 mg of calcium, 141.42 mg of posfor, 5.28 grams of iron, 1,071 grams of vitamin A, 1,071 SI of vitamin B1 0.2 mg, vitamin C 51.42 mg. The results of food technology laboratory, Diponegoro University in December 2017 contained 136.10 ppm polyphenol content and 25.88% antioxidants. The nutritional content contained in yellow pumpkin leaves is not much different from the nutritional content contained in sweet potato leaves that have been studied before and proven to increase breast milk production in mothers of nifas (Fatmawati, 2017). In addition, polyphenols contained in pumpkin leaves are lipid elements where this active compound plays an active role in the process of milk production because it shows the effect of lactogogum.

Although there has been no research on the influence of pumpkin leaves before, this study is supported by previous research that examined the influence of polyphenols found in black cumin to increase the hormones prolactin and oxytocin in increasing breast milk production (Fitriani and et al, 2015). The results of another supportive study conducted by Khafidhoh et al (2017) on the Effect of Musa Balbisiana Colla Extract on Breast Milk Production In Breasfeeding Mothers resulted that the pilifenol in stone banana flowers was shown to increase the average milk volume by 470,681 ml in the control group and 364,650 ml in the control group with an SD of 113,502.

Conclusion and Suggestions. Characteristics of respondents based on age, most are in healthy reproductive age, namely the age of 26.09 years. most of them have basic education. in terms of work are housewives, mostly multiparity.

The average milk production in the treatment group was 103.29 ml while in the control group it was 45.15 ml with an average difference of 58.14 ml which was measured based on the measurement of the baby's weight gain after receiving treatment. The difference in the baby's weight gain is 204.73 grams.

The results of the Independent Sample T test showed a p value of 0.001 (<0.05) so that there was a significant difference. on the difference in the average milk production between the groups that were treated with pumpkin leaves and those who were not treated or Ha was accepted and Ho was rejected or in other words there was an effect of giving pumpkin leaves to the mother's milk production. in the UPTD area of Dayeuhluhur I Public Health Center, Cilacap Regency in 2018.

It is hoped that midwives, health workers and the public can take advantage of the local wisdom of yellow pumpkin leaves to increase breast milk production so that it can support the success of the breastfeeding program.

Acknowledgements. We would like to thank Health Polytechnic of Semarang for supporting our research and preparation of the manuscript.

http://ejournal.poltekkes-smg.ac.id/ojs/index.php/MANR

p-ISSN: 2685-2020 ; e-ISSN: 2685-2012

References

BKKP DIY. (2016). *Data Wilayah dan Potensi Bahan Pangan dan Olahan*.

Cadwell, K., & Turner, C. (2015). *Pocket Guide For Lactation Management (Buku Saku Manajemen Laktasi). Kedua. Edited by D. Widiarti and A. O. Tampubolon*. Buku Kedokteran EGC.

DinKes Jateng. (2016). *Profil Kesehatan Provinsi Jawa Tengah*.

Dinkes Kab Cilacap. (2016). *Profil Kesehatan Kabupaten Cilacap Tahun 2016*.

Fatmawati, L. (2017). *Pengaruh Air Rebusan Daun Ubi Jalar Pada Ibu Nifas Terhadap produksi ASI di wilayah kerja Puskesmas Lerep Kecamatan Ungaran Barat Kabupaten Semarang* (Skripsi).

Maritalia, D. (2012). *Asuhan Kebidanan Nifas dan Menyusui*. Pustaka Pelajar.

Proverawati, A., & Asfuah, S. (2017). *Buku Ajar Gizi Untuk Kebidanan*. Nuha Medika.

Saraung, M., W, R., & Bataha, Y, B. (2017). Analisis Faktor-Faktor yang Berhubungan Dengan Produksi Asi Pada Ibu Postpartum Di Puskesmas Ranotana Weru. *E -Jurnal Keperawatan*, *5*(2), 1–8.

SPTP Puskesmas Dayeuhluhur I. (2016). *Sistem Pelaporan Terpadu Puskesmas. Cilacap*.

Susilani, T. A., & Kurniawan, H. (2016). Pemberian Jintan Hitam (Nigella sativa) Dalam Peningkatan Kadar Hormon Produksi ASI (Prolaktin dan Oksitisin) Serta Jumlah Neutrofil Neonatus dari Ibu Post Seksio Sesarea di Yogyakarta. *Permata Indonesia*, *7*(2086–9185), 1–14.

USDA. (2016). National Nutrient Database for Standard Reference. *USDA*, *8*, 1–5.

Wahyuningsih, D. et al. (2017). Effect of Musa Balbisiana Colla Extract on Breast Milk Production In Breastfeeding Mothers. *Belitung Nursing Jurnal*, *3*(3), 174–182.

Wiknyosastro, H. (2016). *Ilmu Kebidanan. Edisi 4.* Yayasan Bina Pustaka Sarwono Prawirohardjo.