



THE EFFECT OF KEPOK BANANA HEART NUGGETS (NGET-JAPOK) AGAINST BREAST MILK PRODUCTION (ASI)

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ABSTRACT

Mother's Milk (ASI) is the best source of food for babies, because breast milk has many ingredients that are very beneficial for babies. One of the benefits obtained is as immunity in the body. So that the achievement of exclusive breastfeeding will reduce the infant mortality rate Data from the World Health Organization (WHO) in 2020 stated that the rate of exclusive breastfeeding was 44% during the 2015-2020 period, this is also in line with a survey conducted by Lambantorium in 2018 which stated that the coverage of exclusive breastfeeding in Indonesia was still very minimal at 27,6% Efforts that can be made in increasing the coverage of breast milk production are by paying attention to the nutrition of nursing mothers, where one of the efforts that can be done is to utilize plants as the fulfilment of nutrition for breastfeeding mothers. The plant that can be used is the kapok banana heart. Where this kepok banana heart is a type of plant that is easily obtained and the content contained in the kapok banana heart is useful in increasing breast milk production. The purpose of this study is to improve the status of the coverage of successful exclusive breastfeeding and to provide the latest study materials related to methods of increasing breast milk production. The method used in this research is to use pre test and post test designs. In this study a sample of one intervention group Based on statistical tests, it was found that the production of breast milk before the intervention was only 5.4, while after it increased to 9.9. The correlation between the two variables is 1.580, the difference in the average value of increasing breast milk production with a sig value of 0.000. in conclusion there is an Effect of Kepok Banana Heart Nugget (NGET-JAPOK) on the Production of Breast Milk (ASI) in Postpartum Mothers.

INTRODUCTION

Breastfeeding for babies is important because it can increase the baby's immune system. So that the success of exclusive breastfeeding will be in line with the government's efforts to reduce infant mortality. (Wulan and Girsang, 2020)

Efforts that can be made in increasing the coverage of exclusive breastfeeding are by paying attention to the nutrition of breastfeeding mothers. There are many ways that can be done in the mother's nutritional intake, one of which is by utilizing the heart of a kapok banana, because in the banana heart there is a lactogogum content that can increase milk production. (Wulan and Girsang, 2020)

Breast milk production is influenced by the hormone prolactin and the hormone oxytocin, where the hormone prolactin is very influential on breast milk products. (Masmuni Wahda Aisyah and Ishak, 2019)

Based on data from the World Health Organization (WHO) in 2020, exclusive breastfeeding was provided by 44% during the 2015-2020 period, while based on the results with the Lambantorium survey in 2018 which stated that the coverage of exclusive breastfeeding in Indonesia was still very minimal at 27.6%. (Fk and Andalas, 2017)

The percentage of exclusive breastfeeding coverage contained in the West Java Open Data web shows that in Ciamis itself it is 48.22%. (<https://opendata.jabarprov.go.id/id>, 2021)

Efforts that can be made to increase breast milk production are by paying attention to nutritional intake. The food that can be consumed is the heart of the kepok banana because the heart of the kapok banana contains vitamins B1 and C, calories, protein, fat, carbohydrates, vitamin A, important minerals such as phosphorus, calcium and Fe (iron) which can affect breast milk production. (Astuti Husada Gemilang Tembilahan Midwifery Academy, 2020)

This banana heart is part of the banana fruit that can be used for milk production. This is in line with research conducted by Rilyandi and Renda Wulansari in 2019 with the title "Banana Heart Vegetable Consumption Towards Increased Breast Milk Production for Postpartum Mothers"

the results showed that there was an effect of increasing breast milk production after consuming banana heart vegetables. (Wulandasari and Batu Wells in Bandar Lampung City, 2019)

METHOD

The method used in this research is to use a one group pretest and post test approach. (Zainuddin and Munadhir, 2020)

The population in this study were all post partum mothers 2 to 7 days in the PMB work area of the midwife Fitri Ciamis. Based on a preliminary study conducted in December that the population in the period from January to February amounted to 15 people. Inclusion criteria in this research include the mother's 2 to 7 days and not treating treatment dan the exclusion criteria mothers who were not willing to be a respondent. Sampling using probability sampling method with accidental sampling technique. (Zainuddin and Munadhir, 2020)

RESULTS

1. Characteristics of Respondents

a. Respondent Age

The age of the respondents in this study were grouped into 3 age groups, namely 15-20 years old, 20-35 years old, and 35-49 years old. For more details can be seen in table 4.1 below:

Table 4.1
Frequency Distribution of Respondents Based on Age in the Work Area of PMB Midwife Fitri Ciamis

No	Age	f	%
1	< 20 years	1	6.7
2	20-35 years	13	86.7
3	>35 years	1	6.7
Total		15	100

Source: Primary Data Research Results in 2022

The results of data analysis in table 4.1 above show that most respondents are aged between 20-35 years, namely 13 people (86.7%), respondents aged < 20 years are 1 person (6.7%), and respondents aged > 35 years are as many as 1 person (6.7%).

b. Respondent's Education

The education of respondents in this study was grouped into 3 groups, namely basic education, secondary education, and higher education and can be seen in table 4.2 below:

Table 4.2

Frequency Distribution of Respondents Based on Education in the PMB Midwife Fitri Ciamis Working Area

No	Education	f	%
1	Elementary	0	0
2	Secondary	15	100
4	Higher Education	0	0
Total		15	100

Source: Primary Data Research Results in 2022

The results of data analysis in table 4.2 show that all respondents have secondary education, namely 15 people (100%).

c. parity

The parity of respondents in this study was grouped into 3 groups which can be seen in table 4.3 below:

Table 4.3

Frequency Distribution of Respondents Based on Parity in the Work Area of PMB Midwife Fitri Ciamis

No	Parity	f	%
1	Primipara	3	20.0
2	Multipara	12	80
3	Grandemulti	0	0
Total		15	100

Source: Primary Data Research Results in 2022

The results of the data analysis in table 4.3 show that the parity of the respondents was mostly multipara, as many as 12 people (80%), primiparas as many as 3 people (20%), and no grandemulti.

d. Respondent's Job

The work of respondents in this study was grouped into 2 groups which can be seen in table 4.4 below:

Table 4.4

Frequency Distribution of Respondents Based on Occupation in the Work Area of PMB Midwife Fitri Ciamis

No	Work	f	%
1	Housewife (Not Working)	15	100.0
2	Working	0	0
Total		15	100

Source: Primary Data Research Results in 2022

The results of data analysis in table 4.4 show that all of the respondents' occupations are 15 people (100%) as housewives.

e. Consumption of Breast Milk

Consumption of the respondents' breast milk in this study were grouped into 2 groups which can be seen in table 4.5 below:

Table 4.5

Frequency Distribution of Respondents Based on Consumption of Breastfeeding Smoothing in the Work Area of PMB Midwife Fitri Ciamis

No	Consumption of Breastmilk Smoothing	f	%
1	No	15	100.0
2	Yes	0	0
Total		15	100

Source: Primary Data Research Results in 2022

The results of the data analysis in table 4.5 show that all of the respondents, namely 15 people (100%) did not consume breast milk enhancers.

f. IMD

Early Initiation of Breastfeeding Respondents in this study were grouped into 2 groups which can be seen in table 4.6 below:

Table 4.6

Frequency Distribution of Respondents Based on IMD in the Work Area of Midwife Fitri Ciamis PMB

No	IMD	f	%
1	IMD	15	100.0
2	No	0	0
Total		15	100

Source: Primary Data Research Results in 2022

The results of data analysis in table 4.6 show that all of the respondents, namely 15 people (100%) did IMD.

g. Type of Delivery

Types of labor respondents in this study were grouped into 2 groups which can be seen in table 4.7 below:

Table 4.7

Frequency Distribution of Respondents by Type of Delivery in the Work Area of PMB Midwife Fitri Ciamis

No	Childbirth	f	%
1	Normal	15	100.0
2	SC	0	0
Total		15	100

Source: Primary Data Research Results in 2022

The results of the data analysis in table 4.4 show that all of the respondents' deliveries, namely 15 people (100%) were normal.

h. Gestational Age

Childbirth age respondents in this study were grouped into 2 groups which can be seen in table 4.8 below:

Table 4.8

Frequency Distribution of Respondents Based on Gestational Age in the Work Area of PMB Midwife Fitri Ciamis

No	Gestational age	f	%
1	< 36 Weeks	0	0
2	36-40 Weeks	15	100.0
3	> 40 Weeks	0	0
Total		15	100

Source: Primary Data Research Results in 2022

The results of data analysis in table 4.8 show that all of the respondents' gestational age were 15 people (100%) 36-39 weeks.

i. Breastfeeding Frequency

The frequency of breastfeeding respondents in this study were grouped into 2 groups which can be seen in table 4.9 below:

Table 4.9

Frequency Distribution of Respondents Based on Gestational Age in the Work Area of PMB Midwife Fitri Ciamis

No	Breastfeeding Frequency	f	%
1	Scheduled	0	0
2	Often	15	100.0
Total		15	100

Source: Primary Data Research Results in 2022

The results of data analysis in table 4.9 show that all of the respondents, namely 15 people (100%) often breastfeed (not scheduled).

Table 4.10

Distribution of Average Frequency of Breastfeeding Production for Postpartum Mothers Before and After Giving Kepok Banana Heart Nugget in the Work Area of PMB Midwife Fitri Ciamis

Variable	N	Mean	Min	Max	Std. Deviation
Before being given the consumption of Nugget Heart Kepok Banana	15	88,67	60.00	120.00	16.60321
After being given the consumption of Nugget heart Banana Kepok	15	108,73	84.00	145.00	17.77023

Source: Primary Data Research Results in 2022

Based on the results of the above analysis, the average milk production before being given the consumption of kapok banana heart nuggets was 88.67cc with a minimum score of 60cc and a maximum of 120cc and the average milk production after being given the consumption of Kepok banana heart nuggets was 108.73cc with a minimum value of 84cc and maximum value 145cc.

The Effect of Banana Kepok Heart Nugget (NGET-JAPOK) on the Production of Mother's Milk (ASI)

in Postpartum Mothers in the PMB Midwife Fitri Ciamis Work Area can be seen in table 4.11 below:

Table 4.11

The Effect of Kepok Banana Heart Nugget (NGET-JAPOK) on the Production of Mother's Milk (ASI) for Postpartum Mothers in the Work Area of PMB Midwife Fitri Ciamis

Variable	N	p-Value	T
Differences in Milk Production Before and After Consumption of Banana Heart in the Intervention Group and Control Group	30	0,005	2.740

Source: Primary Data Research Results in 2022

Based on the results of the research above, the independent t-test results obtained p value $0.005 < (0.05)$ meaning that H_0 is rejected and H_a is accepted, which means that there is an effect of the Banana Kepok Heart Nugget (NGET-JAPOK) on the Production of Breast Milk (ASI) in Postpartum Mother in the Work Area of PMB Midwife Fitri Ciamis.

DISCUSSION

The results showed that there was an effect of the Banana Kepok Heart Nugget (NGET-JAPOK) on the Production of Breast Milk (ASI) in Postpartum Mothers in the PMB Midwife Fitri Ciamis Work Area. This is in accordance with the theory that breastfeeding is the best method of feeding babies, especially for babies aged less than 6 months, as well as being beneficial for mothers. Breast milk contains all the nutrients and fluids needed to meet all infant nutrition in the first 6 months of life.

Mothers who are breastfeeding their babies must receive additional food to be able to provide exclusive breastfeeding, avoiding setbacks in the manufacture and production of breast milk. If the mother's food continuously does not meet adequate nutritional intake, of course the milk-making glands in the mother's breast will not work perfectly and will ultimately affect milk production. Breastfeeding mothers should pay attention to several things to increase the quality and volume of breast milk they have. There are

several suggestions that need to be considered by mothers who are breastfeeding their babies, namely: consuming vegetables and fruits that can increase the volume of breast milk. A small amount of breast milk can be overcome by the mother by consuming vegetables such as katuk, chayote, long beans, and banana heart. These vegetables are proven to increase the volume of breast milk. In addition to these vegetables, fruits that contain lots of water will help mothers produce abundant milk, such as dates, melons, watermelons, pears, and many other juicy fruits that are very good for breastfeeding mothers.

Nutritional content per 100 grams of fresh banana heart according to the Directorate of Nutrition, Ministry of Health, Republic of Indonesia (2021): 31 kcal energy, 1.2 g protein, 0.3 g fat, 7.1 g carbohydrates, 3.0 mg calcium, 50 mg phosphorus, iron 0.1 mg, vitamin A 170 mg, vitamin B1 0.05 mg, vitamin C 10 mg, water 90.2 g and BDD 25%.¹³ In terms of characteristics, banana heart is safe for consumption by diabetics, can prevent stroke, coronary heart disease, and accelerate the blood cycle (anticoagulant). Banana heart contains saponins which function to lower cholesterol and increase immunity and prevent cancer. Banana heart also contains flavonoids which function as anti-free radicals, anti-cancer, and anti-aging, and contains iodine to prevent goiter. In addition to carbohydrates, the heart also contains protein, minerals (especially phosphorus, calcium and iron, as well as a number of vitamins A, B1 and C, calcium and iron). Therefore, it is highly recommended for women who are pregnant and giving birth, because it is recommended to eat it during the puerperium (after giving birth).

Iron and calcium levels are able to stimulate the cells in the alveoli to produce breast milk. Iron and calcium levels can replace the depleted mothers during childbirth or breastfeeding. Iron and calcium are two elements that are effective and important for baby's growth. These two elements are the most influential elements in the formation of blood and bone marrow. The results of this study are in line with research conducted by Ely Wahyuni (2012) that the intensity of the average frequency of breast milk before

consumption of stone banana heart is 5.7 times. After consuming the stone banana heart, it increased to 9.75 times. The difference in the average value of the increase in breast milk production is 5.458 with sig 0.000. Because < 0.05 ,

According to the researcher, based on the results of the study that the milk production of each mother is different, this is because it is not only influenced by the consumption of the banana heart, but is caused by other factors such as the nutrition consumed by breastfeeding mothers is different so that it affects the production of breast milk in postpartum mothers. also caused by the length of pregnancy which in this study was grouped into 36-40 weeks and the mother's weight, the results showed the average value of breast milk production at an older gestational age, breast milk was more than at a younger gestational age at delivery, and in maternal weight, mothers with excess weight have an average value of less milk production than mothers with lower body weight, this is because the dose of banana heart is given so that its absorption is reduced and affects milk production.

Then in the group that did not consume banana buds, the increase in breast milk production was caused by the nutritional consumption of the nursing mother because every day the postpartum mother consumed vegetables and side dishes so that it could affect breast milk production in nursing mothers.

CONCLUSIONS

Based on the results of the analysis and discussion that have been described, it can be concluded that:

1. It is known that the average milk production before being given the consumption of kapok banana heart nuggets is 88.67cc with a minimum score of 60cc and a maximum of 120cc and the average milk production after being given the consumption of kepok banana heart nuggets is 108.73cc with a minimum value of 84cc and a maximum value 145cc.
2. There is an Effect of Kepok Banana Heart Nugget (NGET-JAPOK) on the Production of Breast Milk (ASI) in Postpartum Mothers in the

PMB Midwife Fitri Ciamis Work Area with p value $0.005 < (0.05)$

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