

Effect of Banana Pupace Heart (*Musa paradisiaca*) Consumption on the Smoothness of Breast Milk in Puerperal Mothers

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ABSTRACT

Breast milk (breast milk) is the best food for babies and every baby has the right to get it. The heart of banana (*Musa paradisiaca*) is useful for increasing the production of breast milk containing lactogogum, which is a nutrient that is able to launch breast milk. The purpose of this study was to determine the effect of banana heart consumption on the smoothness of breast milk in puerperal mothers. The research method used is the one group pre test post test design method. The population studied was all puerperal mothers whose milk production was not smooth with a sample of 15 respondents. The technique used was accidental sampling then using the Wilcoxon test. The results of the study showed that the smoothness of breast milk in puerperal mothers after banana heart consumption was more than before the consumption of banana heart pupae. The results of the analysis showed that ($\alpha = 0.05$ obtained p value = 0.001 so that p value $< \alpha$ means H_0 rejected H_1 is accepted) there is an effect of banana heart consumption on the smoothness of breast milk. The conclusion of all puerperal mothers before the consumption of banana heart kapok breast milk is not smooth (100%). Almost all respondents after consuming banana heart pupae their breast milk smoothly (80.0 %). There is an effect of giving banana heart to the smoothness of breast milk in puerperal mothers.

Keywords: Puerperal mother, Consumption of banana heart pucker, Smooth milk

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INTRODUCTION

The puerperal period is that it begins after the birth of the placenta and ends when the uterine apparatus returns to its original state or in its pre-pregnancy state. The puerperal period begins from 2 hours after the birth of the placenta up to 6 weeks (42 days) after that. The needs of puerperal mothers that must be met, one of which is balanced and complete nutrition, the quality and amount of mother's food greatly affects the amount of breast milk produced. The food menu that must be consumed is a portion that is not excessive and regular, and serves to accelerate the recovery of strength and health, increase breast milk production, prevent infections, and prevent constipation (Rahmawati, 2019).

Breast milk (breast milk) is the best food for babies because it is a perfect natural food, easily digested by babies and contains nutrients that suit the baby's needs for growth, immunity and preventing various diseases as well as for the baby's intelligence, safe and guaranteed cleanliness because it is directly given to the baby to avoid indigestion such as diarrhea, vomiting and so on (Setiawan, 2009).

National wide infant coverage gets Exclusive breastfeeding amounted to 61.33%. The figure has exceeded the 2017 Strategic Plan target that is 44%. The highest percentage of breastfeeding

coverage exclusively found in West Nusa Tenggara (87.35%), while the lowest percentage is in Papua (15.32%), while the Province Lampung is eleventh with percentage achievement 64.98% (Kemenkes RI, 2016).

Exclusive breast milk has a large contribution to the growth and development and endurance of the child's body. Children who are given exclusive breastfeeding will grow and develop optimally and will not get sick easily. Global "The Lancet Breastfeeding Series, 2016" has proven, 1) exclusive breastfeeding reduces the mortality rate due to infection by 88% in infants aged less than 3 months, 2) as much as 31.36% (82%) of 37.94% of sick children, because they do not receive exclusive breastfeeding. Exclusive breast milk is useful in preventing Low Birth Weight Babies (BBLR), stunting, reducing the risk of obesity and chronic diseases (Kemenkes, 2017).

Banana heart is part of the banana plant which is used to increase breast milk production. Banana heart was chosen because it is cheap and to obtain it is very easy. This reason is in accordance with the research that has been carried out by Astawan. According to him, in addition to carbohydrates, the banana heart also contains proteins, minerals (especially phosphorus, calcium and iron, as well as a number of vitamins A, B1 and C (Wahyuni, 2012).

MATERIALS AND METHODS

Design and Samples

Research is conducted in PMB Binti Qoniah, East Java in November-December 2021. The research design used in this research is a quasi-experiment with the form of a post-test. The sampling technique is taken by using purposive sampling with a total of 15 mothers of postpartum primipara and multipara.

Data Collection

The chosen respondent is a primipara and multiparous puerperal mothers from 13 November to 13 December 2021 which has been following the criteria of inclusion. After the permit is completed, the researcher goes to the field to explain to the research respondent and if the respondent agrees, he is asked to sign an informed consent sheet. After that, conducted an interview and gave treatment to respondents pre and post consumption of banana heart.

Data Analysis

Data processing using computer-based SPSS computer programs for windows 24. Univariate analysis was performed to analyze the data that had been collected using the descriptive percentage method and Bivariate analysis was used with a device test marked from Wilcoxon with an error rate of 5%.

RESULTS

Based on table 1, it can be interpreted that most of the respondents were not at risk, namely 20–30 years old as many as 11 people (73.3%). Most of the respondents studied were 10 (66.7%) puerperal mothers who had a high school education. Most of the 11 (73.3%) of the respondents studied were puerperal mothers who were not working or as housewives. Most of the 8 (53.3%) of the respondents studied were primiparous puerperal mothers. Analysis of the Effect of Banana Heart Consumption on the Smoothness of Breast Milk will be presented in table 1

Table 1. Effect of Banana Heart Feeding on Breastfeeding Smoothness in Puerperal Mothers

Smoothness of breast milk	Before Consumption of Banana Heart		After Consumption of Banana Heart	
	Frequency	Presentation (%)	Frequency	Presentation (%)
Breast milk is not current	15	100	3	20,0
Breast milk is current	0	0	12	80,0
quantity	15	100	15	100
	P value =		α = 0,05	

Based on table 2, it is stated that all of the respondents before the consumption of banana heart 15 (100%) mothers puerperal breast milk was not smooth, after consumption of banana heart a small part of respondents 3 (20%) puerperal mothers whose milk production was not smooth. After the consumption of banana heart almost entirely from 12 (80%) of puerperal mothers breast milk became smooth. In $\alpha = 0.05$ obtained p value = 0.001 so that p value $< \alpha$ interpreted H0 rejected H1 is accepted.

DISCUSSION

Analysis of the Effect of Banana Heart Consumption on the Smoothness of Breast Milk in PMB Binti Qoni'ah Nganjuk East Java Based on table 1, it was found that all of the respondents before the consumption of banana heart 15 (100%) mothers puerperal breast milk was not smooth, after consumption of banana heart a small part of respondents 3 (20%) puerperal mothers whose milk production was not smooth. After the consumption of banana heart almost entirely from 12 (80%) of puerperal mothers breast milk became smooth. At $\alpha = 0.05$, p value = 0.001 is obtained so that p value $< \alpha$ interpreted as H0 rejected H1 is accepted. Each 25 grams of banana heart contains 31 kcal of calories, 1.2 grams of protein compounds, 0.3 grams of fat and 7.1 grams of carbohydrate substances. Banana heart also contains vitamin A, vitamin B1, vitamin C, and essential minerals such as phosphorus, calcium and Fe (iron). Not only that, banana flowers contain saponins that function to lower cholesterol and increase immunity and prevent cancer. Banana heart contains flavonoids that function as free antiradical, anticancer, and antiaging. In addition, it also contains judaium which can prevent goiter disease (Astawan, 2008). Banana heart (*Musa paradisiaca*) is a plant that contains lactagogum has the potential to stimulate the hormones oxytocin and prolactin such as alkaloids, polyphenols, steroids, flavonoids and other substances most effective in increasing and facilitating breast milk production. Prolactin reflexes hormonally to produce breast milk, when the baby sucks the nipples of the mother's breasts, neurohormonal stimulation occurs in the nipples and areola of the mother. These stimuli are passed to the pituitary through the nervosvagus, then to the anterior lobe. From this lobe will secrete the hormone prolactin, entering the blood circulation to the glands that make breast milk. This gland will be aroused to produce breast milk (Wahyuni et al, 2012). If the results of the analysis show that there is an influence of banana heart consumption on the smoothness of breast milk in puerperal mothers, then the results of this study are in accordance with previous theories and studies. It is stated that the heart of a banana has several compounds that can increase breast milk production. The increase in breast milk production is influenced by the presence of polyphenols and steroids that affect prolactin reflexes to stimulate alveoli that work actively in the formation of breast milk. The results of this study also stated that the increase in breast milk production is also stimulated by the hormone oxytocin. The increase in the hormone oxytocin is influenced by polyphenols present in the banana heart which will make breast milk flow more rapidly compared to before consuming banana heart. Oxytocin is a hormone that plays a role in encouraging the secretion of milk (milk let down). The role of oxytocin in the mammary glands is to encourage the contraction of myoepithelial cells from the alveolus to be pushed out towards the milk ducts, so that the alveolus becomes empty and spurs for the subsequent synthesis of milk. This correlation is in accordance with the results of Agil's research in Murtiana which states that plants that are efficacious against increased milk secretion (lactagogum) have the possibility of containing active ingredients that work such as Prolactin Releasing Hormone (PRH), containing active ingredients of steroid compounds, containing active ingredients that are efficacious such as oxytocin. One of these substances found in the heart of bananas is oxytocin.

CONCLUSION

The result of this study proves that the massage There is an effect of banana heart consumption on the smoothness of breast milk in puerperal mothers

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CONFLICTS OF INTEREST

The author declares that they have no conflict of interest

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