



## The Effect of Lactagogue Use on Infant Weight Gain

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**Abstract, Background:** A lot of women discontinue breastfeeding during the first few weeks of the postpartum period because of perceived insufficient milk and approximately 35% of all women that wean early report perceived insufficient milk as the primary reason. Lactagogum is a food or drug that is used to stimulate, maintain and increase the production of breast milk.

**Method:** The research method used in this research is cross sectional. The samples in this study were breastfeeding mothers who had babies ranging in age from 3 to 6 months spread throughout Indonesia, totaling 109 people. This research was conducted by distributing questionnaires.

**Result:** Based on the results of the research that has been done, it was found that there was a relationship between the use of Lactagogum and an increase in baby weight with a p value <0.005 and OR 5.795.

**Conclusion:** There is a relationship between the use of Lactagogum and increased baby weight. Breastfeeding mothers can use lactagogue as a way to increase milk production and as an effort to realize exclusive breastfeeding

**Keywords:** Laktagogue, Breast Milk Production, Baby Weight

### Background

According to WHO, exclusive breastfeeding is defined as giving only breast milk to infants, either from biological mothers or foster mothers, or expressed breast milk, without any additions in the form of liquids or solid foods and even water, except for babies who need assistance with adding liquids, drops or syrups that are needed. contain vitamins,

mineral supplements or other drugs (Heird, 2012) (Thatrimontrichai and W Janjindamai, 2012).

Breast milk contains a variety of nutrients that babies need in the process of growth and development and is also the first and best natural food. The existence of appropriate protective factors and nutrients in

breast milk ensures that the baby's nutritional status is good and that child morbidity and mortality are reduced (Putri, 2021).

The thing that must be considered in meeting the nutritional intake needs of nursing mothers is a balanced menu arrangement, mothers are recommended to consume 8-12 glasses of water / day. Breastfeeding mothers do not need very perfect feeding arrangements. The principle of fulfilling nutrition for breastfeeding mothers is to meet balanced nutrition. There is no abstinence from eating for breastfeeding mothers as long as the mother does not suffer from diseases that require a diet. Maternal nutrition plays an important role to support maximum milk production. To meet the nutritional needs of breastfeeding mothers, adhere to the 4 healthy 5 perfect guidelines. Breastfeeding mothers generally eat 6 times a day according to the frequency of breastfeeding their babies, because after each feeding the mother will feel hungry (Endah and Oktavianti, 2014).

Galactagogues are foods or drugs used to stimulate, maintain and increase milk production. Considerations for the use of galactagogues themselves include effectiveness, safety and time of use. Several kinds of galactagogues known to date are divided into two kinds, namely chemical and herbal drugs (Wulandari and Wardani, 2020).

Increasing breast milk production can be done in various ways, one of which is increasing lactagogum intake. Lactagogum is a drug that can increase or facilitate milk production. Synthetic lactagogums are little known and relatively expensive. This causes the need to look for alternative lactagogum drugs (Istiqomah, Wulanadari and Azizah, 2015).

A lot of women discontinue breastfeeding during the first few weeks of the postpartum period because of perceived insufficient milk and approximately 35% of all women that wean early report perceived insufficient milk as the primary reason. Parity and previous breastfeeding experience is often reported as a significant factor in predicting successful breastfeeding. Specifically, women who are breastfeeding for the first time are

usually thought to be at higher risk for problems or early cessation when compared to women who have previously breastfed (Gatti *et al.*, 2008).

One of the factors that affect the production of breast milk is food. The food eaten by mothers who are breastfeeding does not directly affect the quality or amount of milk produced. In the body there are reserves of various nutrients that can be used when needed. However, if the mother's food continuously does not contain enough of the necessary nutrients, it will cause the milk-making glands in the mother's breast to not be able to work perfectly, and will eventually affect milk production. Because food has a big influence on human health. Therefore, a healthy body must consume safe and nutritious foods (Suksesty and Ikhlasiah, 2017).

One of the criteria that can be used as a benchmark for the amount of milk production is knowing the baby's weight gain during exclusive breastfeeding. In previous studies that measured the effectiveness of increasing the amount of breast milk for breastfeeding mothers by assessing the baby's weight as well as the frequency of defecating at least 6 times in 24 hours (Novi *et al.*, 2020).

## Method

The research method used in this research is cross sectional. The sample in this study were breastfeeding mothers who had babies ranging in age from 3 to 6 months spread throughout Indonesia, totaling 109 people. This research was conducted by distributing questionnaires to assess infant weight and using Lactagogue as a food to increase milk production.

The distribution of the questionnaires can be done manually or via Google Drive links which are distributed to several regions in Indonesia. The source of data in this study is primary data. The research results obtained will be analyzed using both univariate and bivariate data. Univariate analysis using Chi Square.

## Result and Discussion

**Tabel 1 Distribution and frequency of weight gain and use of Lactagogum.**

| weight gain  | use of Lactagogum |      |     |      | Total |     |
|--------------|-------------------|------|-----|------|-------|-----|
|              | no                |      | yes |      | l     |     |
|              | n                 | %    | n   | %    | n     | %   |
| not increase | 17                | 85,0 | 3   | 15,0 | 20    | 100 |
| increase     | 44                | 49,4 | 45  | 50,6 | 89    | 100 |
|              | 61                | 53   | 48  | 65,6 | 109   | 100 |

Based on the results of the study above, it can be seen that 15.0% of mothers who used lactagogum and their babies did not gain weight and 50.6% of those who used lactagogums and their babies gained weight. Meanwhile, 85.0% of mothers who did not use lactagogums and their babies did not gain weight and did not use lactagogums as much as 44% and and their babies experienced weight gain.

**Tabel 2 Relationship to use of Lactagogum to the baby's weight gain.**

| weight gain  | use of Lactagogum |      |     |      | Total |     | P     | OR    |
|--------------|-------------------|------|-----|------|-------|-----|-------|-------|
|              | No                |      | Yes |      |       |     |       |       |
|              | n                 | %    | n   | %    | n     | %   |       |       |
| not increase | 17                | 85,0 | 3   | 15,0 | 20    | 100 | 0,004 | 5,795 |
| increase     | 44                | 49,4 | 45  | 50,6 | 89    | 100 |       |       |
|              | 61                | 53   | 48  | 65,6 | 109   | 100 |       |       |

Based on table 2 above, the results show that there is a relationship between the use of Lactagogum and increased body weight with a p value <0.005 and OR 5.795, which means that mothers who use lactagogum have the possibility that their babies will gain weight by 5.795 times than mothers who do not use lactagogum.

In the first week the infant's weight loss is part of normal physiology as excess

extracellular fluid is expressed, but a properly nourished infant should not continue to lose weight after lactogenesis II. By 8% -10% the majority of the baby's weight loss is still said to be normal but requires evaluation of the breastfeeding technique. A decrease of greater than 10% of birth weight indicates a possible breastfeeding problem and requires more intensive evaluation (Suksesty and Ikhlasiah, 2017).

Insufficient milk production causes infants to lack nutritional intake and will have a negative impact on growth and development, even on aspects of infant intelligence. Breast milk production is strongly influenced by the food consumed by the mother, because if the mother eats regularly and contains enough nutrients it will affect the production of breast milk, because the glands that make breast milk cannot work perfectly without adequate food (Samion, 2019).

Based on research conducted by Ratna (2021), the results of a paired difference test with a p-value of 0.000 (p-value <0.05) showed that the administration of moringa leaf extract and katuk leaf extract could effectively increase breast milk production by increasing baby weight (Putri, 2021).

One of the factors that affect infant weight is maternal nutrition. The nutritional needs of breastfeeding mothers increase during breastfeeding to support the growth and development of the baby. The quantity of breast milk consumed by infants and the nutritional content in breast milk are often used to assess nutritional adequacy during the lactation process. However, the volume of milk produced is significantly reduced if the mother is malnourished (Suksesty and Ikhlasiah, 2017).

Lactagogue / laktagogum is a drug or substance that is believed to help stimulate, maintain or increase the production of breast milk (ASI) of nursing mothers. Low milk production is the most common reason for mothers/parents to stop breastfeeding their

babies, so mothers and doctors are trying to find drugs to overcome this problem. (Panjaitan, 2013).

Research conducted by Riski (2020) concerning the Study of the Effect of Sauteed Papaya Leaves (*Carica papaya* L.) on Breast Milk Production and Increased Baby Weight showed that pre-test and post-test baby weight in the intervention group before giving stir-fried leaves papaya the average baby weight is 2946.67 gr and in the post-test it has an average increase of 3206.67 gr. There is an effect of giving papaya leaf stir-fry on the milk production of breastfeeding mothers seen from the baby's weight criteria (Novi *et al.*, 2020).

## Conclusion

Based on the results of the research that has been carried out, it is found that there is a relationship between the use of Lactagogum on increasing infant weight. Breastfeeding mothers can try to use lactagogum as a way to increase milk production and as an effort to realize exclusive breastfeeding which can have an impact on increasing baby's weight.

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