

The Effect of Storage Selection and Fat Level of Breast Milk on Breastfeeding Women

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ABSTRACT

Bosom milk is an optimal supplement for newborn children since bosom milk contains the perfect measure of fat, carbs, protein, also, water for development and advancement, as well as the baby's digestion. The fat substance in bosom milk should be overwhelmed because of the breast milk storage container. The purpose of this study was to describe the determination of capacity places and the fat content of bosom milk in breastfeeding moms. This exploration is an expressive report with a cross-sectional methodology. In the Andalas Padang Health Center Work Area. The populace incorporates bosom milk from breastfeeding moms in the Andalas Health Center Work Area. Tests were taken by the consideration models (n = 24) trailed by the determination of a spot to store bosom milk and an assessment of the fat substance was completed in the Livestock Biotechnology Laboratory, Faculty of Animal Husbandry, Andalas University, Padang from March 2019 to January 2020. The information were dissected and shown in the recurrence dispersion table and rate. The outcomes showed that the most favored spot to store bosom milk was in the cooler (62.5%), the least room (8.3%). The normal fat substance dependent on the capacity space of the fridge, cooler pack, the room was 2.70 ± 0.60 /dl, 2.72 ± 0.54 /dl, and 2.19 ± 0.77 g/dl, with the greatest differentiation in the cabinet. ice, littlest in the room. This review infers that the portrayal of the choice of capacity places and the fat substance of bosom milk in breastfeeding moms has diminished from new bosom milk.

Keywords: *Bosom milk stockpiling, Fat.*

1. INTRODUCTION

Mother's Milk (ASI) is the best sustenance for children since bosom milk contains the perfect measure of fat, carbs, protein and water for the development and improvement of the cerebrum, just as the child's processing. The interesting wholesome substance found in bosom milk can't be compared with recipe milk. Bosom milk plays a significant part that affects child development and advancement and keeps up with and keeps up with the child's endurance.[1]

The fat in bosom milk has the type of bumps comprising of fatty substances with a combination of phospholipids, nutrient A, cholesterol, and carotenoids. As much as 90% of bosom milk fat is as fatty oils, fat levels are expected to help cerebrum development since bosom milk contains unsaturated fats linoleic (omega 6) and linolenic woman workforce support rate in 2017 was 55.44% and in 2018 it was 59.49%. [5]

corrosive (omega 3). What's more, bosom milk additionally contains long-chain unsaturated fats, in particular decosaheptaenoic corrosive and aridonat corrosive (DHA and ARA) which accept a section in the progression of eye tissue and eye nerves. The WHO suggests that children be bosom milk for somewhere around a half year [2], [3]. According to the 2018 Basic Health Research (Risksdas) data, select breastfeeding for newborn children as long as a half year of age is only 37.3%. Taking into account data from the Padang City Health Office 2018, the Andalas Health Center in East Padang District is the most minimal select bosom milk inclusion with a level of 57.1%. [4]

As indicated by information in Indonesia, the woman workforce loan cost in 2016 was 50.77%, extending in 2017 to 50.89%. In West Sumatra, the

In view of Legislation No. 33 of 2012 that each mother who conceives an offspring should give

selective breastfeeding to her child. Guideline of the Minister of Health of the Republic of Indonesia No. 15 of 2013 that each organization should uphold the elite breastfeeding program by giving exceptional offices to working moms to communicate bosom milk.

One of the parts that pick the achievement of select bosom milk is the mom's work status. This is kept up with by research in the towns of East Sawahan and Simpang Haru Padang that the business status of moms shows that there is less select breastfeeding for working moms than moms who don't work. To address this, moms can store bosom milk that has been recently communicated to be given to children when the mother isn't at home or work.[6]–[8]

Breastfeeding moms need to realize how to store bosom milk appropriately and securely to keep up with the healthful substance in bosom milk. In view of capacity suggestions, bosom milk can be put away in a room with a maximum temperature of 25oC with a capacity season of 6-8 hours, in a cooler sack at 15oC for 24 hours, in a fridge (cooler) 4oC for as long as 5 days, a cooler at -18oC for 3 days. - a half year, frozen bosom milk stockpiling at - 20oC can be put away for 6 a year. The capacity interaction in the cooler is helpful for keeping up with the nature of bosom milk, however capacity regions that are not after the suggestions will influence the nature of bosom milk.[3]

The capacity of bosom milk completed by moms during work which is then given to their infants is here and there not exactly ideal. Many breastfeeding moms don't have the foggiest idea how to pick the ideal spot to store bosom milk. This is upheld by research where there are 27.2% of breastfeeding moms know the right method of putting away communicated bosom milk.[9]

From the underlying study led by analysts on breastfeeding moms who have infants a half year in the workspace of the Andalas Health Center, Padang City, it was tracked down that out of 10 bosom milk moms, 5 people kept it in the refrigerator (refrigerator), while 2 people kept it in the freezer, while 2 people store in the cooling bag, and 1 person store in the room.

Considering the importance of choosing a place to store breast milk for breastfeeding moms, which can because changes in the sythesis of bosom milk, particularly fat in breast milk which is very useful for the nutrition, growth, and development of babies, this research needs to be done.

In view of the above foundation, the scientists are keen on leading a review describing the determination of bosom milk stockpiling with fat substance in breastfeeding moms.

2. MATERIAL AND METHODS

This review utilized an unmistakable plan with a cross-sectional methodology. The example of this review was breastfeeding moms in the Andalas Padang Health Center work area. after random sampling with a total of 24 breastfeeding mothers. The sample criteria in this study are breastfeeding mothers who store breast milk, expressed breast milk obtained from mothers who have babies born at term, and breastfeeding mothers who express breast milk and are willing to be respondents. This research was conducted after obtaining permission to conduct research and has been tested through an ethical test process by the morals council of the Faculty of Medicine, Andalas University.

3. RESULTS

This research obtained research results include:

An overview of the selection of breast milk storage and fat content

Table 1. Distribution of the Frequency of Choise of Breast Milk Storage Places and Fat Fill

Storage	n	%	Average ±SD	Min - Max
Fresh Breast Milk	24	100	3,81 ± 1,16	2,07 – 6,39
Room	2	8,3	2,19 ± 0,77	1,65 – 2,74
Cooler Bag	7	29,2	2,72 ± 0,54	1,90 – 3,52
Refridgerator	15	62,5	2,70 ± 0,60	1,56 – 3,68

The table above shows that breast milk plastic bags are the most commonly used breast milk stockpiling compartment (66.7%), while plastic bottles are the least preferred breast milk storage container (8.3%). The average fat content of breast milk in light of the choice of glass bottles, plastic containers, and chest milk plastic sacks was 2.88 ± 0.75 g/dl, 1.78 ± 0.31 g/dl, and 2.69 ± 0.46 g/dl. Furthermore, an analysis of the difference in fat substance of new bosom milk with bosom milk stored according to the selected container was carried out which can be seen in the table below.

Table 2. Normal Fat Substance of New Bosom Milk and Put Away Bosom Milk by Capacity Compartment

Storage		%	Average ±SD	Min - Max
Fresh Breast Milk	4	100	3,81 ± 1,16	2,07 - 6,39
Room		8,3	2,19 ± 0,77	1,65 - 2,74
Cooler Bag		29,2	2,72 ± 0,54	1,90 - 3,52
Refridgerator	5	62,5	2,70 ± 0,60	1,56 - 3,68

The table above shows the distribution of the depiction of the determination of bosom milk storage by fat content. The results of the study found that the mother chose more storage places in the refrigerator with a total of 15 people (62.5%) with an average of 2.70 ± 0.60 .

4. DISCUSSION

Overview of Choice of Breast Milk Storage and Fat Content

The data of this study found that the depiction of the determination of bosom milk storage locations with the fat content contained in breast milk. It was found that the mother's preferred storage place had more refrigerators, namely 15 people (62.5%), an average of 2.70 ± 0.60 with a difference of 1.32 ± 0.91 from fresh breast milk.

The consequences of this review demonstrate that the determination of bosom milk stockpiling in the fridge diminishes the fat substance in bosom milk. In addition, the storage time also affects the fat content in breast milk where the average is 108.09 ± 153.7 . Although some nutrients and important components of breast milk change during storage, at least there is a better approach in handling related to the selection of storage places so that breast milk remains safe for consumption by infants and still contains an optimal nutritional value for infant growth and development. In this study, the storage area for breast milk that was obtained during the research conducted by the response was by the recommendations for a long period, one of which was stored in the refrigerator, the storage period was up to 10 days. max temperature 25oC with a storage time of 6-8 hours, in a cooler bag at 15oC for 24 hours, in the refrigerator (refrigerator) 4oC to 5 days, freezer - 18oC for 3-6 months, frozen breast milk storage at - 20oC can be stored for 6-12 months. The storage process in the refrigerator is useful for maintaining the quality of breast milk, but storage areas that are not as recommended will affect the quality of breast milk.

During storage, breast milk can undergo lipolysis, a process of hydrolysis of ester bonds in fats (tryacylglycerols) to produce free fatty acids and glycerol. Lipase enzymes produced from the metabolism of lactic acid bacteria (LAB) as well as those found naturally in breast milk and their lipolytic properties hydrolyze fat, where the lipase enzyme comes from microbes or occurs naturally in breast milk.[10]

In accordance with the consequences of exploration led by Iqbal showed that there was a decrease in breast milk nutrition, namely the fat content in breast milk that was stored in the room, refrigerator and freezer for 3 days, this was thought to be due to the activity of lipolytic bacteria. Research conducted by Hamosh, et al. that lipolysis runs very quickly starting from the first 1 hour of storage and the process reaches 8% at 24 hours of storage.[11], [12]

5. CONCLUSION

1. Mothers chose the most place for breast milk storage in the Andalas Health Center Work Area, namely the refrigerator, while the room that was the least was chosen by the mother.
2. The average fat content of bosom milk dependent on the decision of spot from the most elevated levels, namely refrigerator, cooler bag, the room was 2.70 ± 0.60 /dl, 2.72 ± 0.54 /dl, and 2.19 ± 0.77 g/dl.

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