

A Study to Determine the Consumption of Packaged and Fresh Milk in Community

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Abstract

In this research, the purpose of the study was to assess the consumption of packed and fresh milk in community. Sample preferred fresh milk over packed milk due to its better quality, on basis of its taste. Majority of sample believe that fresh milk is best because fresh milk is more nutritious it contains more vitamins and minerals because it is natural and not went through milk processing unit.

Keywords: Consumption; Packaged Milk; Fresh Milk

Introduction

Milk is a white liquid produced by the mammary glands of mammals. It is the primary source of nutrition for young mammals before they are able to digest other types of food. Early-lactation milk contains colostrum, which carries the mother's antibodies to the baby and can reduce the risk of many diseases in the baby. It also contains many other nutrients [1].

In many cultures of the world, especially the Western world, humans continue to consume milk beyond infancy, using the milk of other animals (especially cattle, goats and sheep) as a food product. Initially, the ability to digest milk was limited to children as adults did not produce lactase, an enzyme necessary for digesting the lactose in milk. Milk was therefore converted to curd, cheese and other products to reduce the levels of lactose.

Many consumers believe that raw milk is higher in nutritional content than packed milk, which may have some merit. Raw milk comes from cows that graze on grass. Some evidence suggests that milk from these cows is likely to have higher levels of fat-soluble vitamins and other nutrients. Cows fed fresh green forage, especially those grazing grass, have been shown to have higher levels of conjugated linoleic acid (CLA) and essential fatty acids in their milk. Cows are natural herbivores and are healthiest when they eat grass, rather than the grain they are fed in confinement dairy operations.

The pasteurization process also reduces the nutritional quality of milk products. Research has shown a decrease in manganese, copper, and iron after heat treatment. The FDA acknowledges that pasteurization destroys a substantial portion of the vitamin C in milk, and sterilization is also known to significantly impair the bioactivity of vitamin B6 contained in milk. Beta-lactoglobulin, a heat-sensitive protein in milk that is destroyed by pasteurization, increases intestinal absorption of vitamin A, so the supplemental vitamin A in packed milk may be harder to absorb. While pasteurized milk does retain some level of nutritional value, it seems that unpasteurized milk is superior in vitamin and mineral content overall [2].

There is an ongoing debate over the nutritional attributes of organic versus conventional milk with published studies supporting both sides of the argument. Hence, the present survey study is conducted to assess the consumption of processed and fresh milk among different families of community and to assess their awareness about both kinds of milk.

Methodology

It was a survey study. The purpose of this study was to find out consumption of fresh milk and packed milk among community.

Population

The universe of the study was the students of Government College University (GCU).

Sample Size

50 students of Government College University (GCU) belonging to bachelors session were selected. Purposive sampling method was used for sample selection.

Data Collection Tools

Following tools were used for collecting data:

· Interview schedule

Interview Schedule

Interview schedule was structured in order to assess the consumption of fresh and packed milk from sample. Questions were asked about the basic information of milk and its usability.

Data Analysis

The data collected was statistically analyzed by using MS word and MS excel.

Results and Discussions

Type of milk being used

Options	Frequency	Percentage (%)
Fresh milk	25	50
Packaged milk	8	16
Both	17	34
Total	50	100

The purpose of asking question was just to know the type of milk, being used by the people. About 50 % respondents replied that they use fresh milk so, it is concluded that majority of people use fresh milk.

Which kind of milk has better shelf life in your opinion

Options	Frequency	Percentage (%)
Fresh milk	14	28
Packaged milk	36	72
Total	50	100

The purpose of asking question is to assess knowledge of respondents about shelf life of milk. According to sample 72% respondents think that packaged milk has better shelf life and 28% respondents think that fresh milk has better shelf life.

Basis of your preference in buying fresh milk

Options	Frequency	Percentage (%)
Price	4	8
Quality	33	66
Availability	3	6
Taste	10	20
Any other	0	0
Total	50	100

The purpose of this question was to know about the preferences regarding the use of Fresh milk. 66% respondents replied that they prefer Fresh milk due to its better quality, 20% preferred due to its taste 8% answered because of price and 6% replied due to availability.

Quantity of fresh milk being used daily (kg)

Quantity(kg)	Frequency	Percentage (%)
0 - 2	18	36
3 - 4	19	38
5 - 6	6	12
7 - 8	4	8
9 - 10	2	4
11 - 12	1	2
Total	50	100

This question is designed to know the quantity of fresh milk used daily in the home. The minimum quantity is 1 kg and maximum quantity used daily is 12 kg. About 38 % respondents replied that the quantity of fresh milk used per day is 3 - 4 Kg, 36% people replied 0 - 2 kg quantity of fresh milk in a day, 12% replied 5 - 6 kg in a day, 8% replied, 7 - 8 kg in a day 4% replied 9 - 10 kg in a day and 2% replied 11 - 12 kg in a day.

Purpose of using fresh milk

Options	Frequency	Percentage (%)
Drinking	20	40
Tea	24	48
Yogurt	5	10
Any other	1	2
Total	50	100

The purpose of asking this question was to know that for which purpose the fresh milk is used which shows that 48% respondents use fresh milk for tea 40% for drinking it only 10% for yogurt and 2% for other purposes.

Affordability of Fresh Milk

Options	Frequency	Percentage (%)
Yes	30	60
No	20	40
Total	50	100

The purpose of asking this question was to know that whether the prices of packed milk are affordable. 60% respondents replied that the prices of packed milk are not affordable and 40 % respondents replied that the prices of packed milk are not affordable.

Availability of packed milk

Options	Frequency	Percentage (%)
Near the residence	42	84
Away the residence	8	16
Total	50	100

This question was asked to know whether packed milk is easily available, near the residence or away from the residence. 84 % respondents replied that the packed milk is available near the residence. Only 16% respondents replied away from the residence.

Basis of preferences in buying packed milk

Options	Frequency	Percentage (%)
Price	21	42
Quality	17	34
Availability	0	0
Taste	12	24
Any other	0	0
Total	50	100

The purpose of designing this question with a view to know that what are the basis preference to use the packed milk.42% respondents replied that they prefer packed milk due to price, 34% respondents replied that they prefer packed milk due to its quality and 24% due to taste.

Purpose of using packed milk

Options	Frequency	Percentage (%)
Drinking	13	26
Tea	24	48
Sweets	11	22
Any other	0	0
Don't use	0	0
Total	50	100

The purpose of asking this question was to know that for what purpose the packed milk is used. Table shows that 50 % respondents use packed milk for making tea, 27% for drinking and 23% for sweets.

Quantity of packed milk bought on daily basis (packs or kg)

Options	Frequency	Percentage (%)
1.2 kg - 1 kg	8	16
2kg	17	34
More	0	0
Never	25	50
Total	50	100

The purpose of this question was to know that how much quantity of packed milk does a person buy. Only 8 respondents replied that the minimum quantity of packed milk they buy is ½ Kg and the maximum quantity of packed milk they buy is 2 Kg, 17 respondents replied that they sometimes use packed milk and quantity is 1 - 2 kg, remaining sample that is 25 respondents never use packed milk.

Have you started using packed milk as to whether due to advertisement

Options	Frequency	Percentage (%)
Yes	12	24
No	38	76
Total	50	100

The purpose of this question was to know that what role the advertisement has played in the introduction of packed milk. About 76 % respondents replied in negative and 24% people replied in positive.

Brand of packed milk being preferred

Options	Frequency	Percentage (%)
Haleeb	5	10
Olpers	5	10
Nestle	18	36
Milk powders	11	22
Any other	3	6
Don't use	8	16
Total	50	100

This question was asked to know which brand of packed milk peoples prefer. About 36 % people answered brand "Nestle", 22 % respondents answered in favor of "Milk Powders that is "Nido and Every Day", 10% respondents answered in the favor of brand "Haleeb", other 10% replied in favor of "Olpers", 6% replied they use other brands of milk like "Tarang and Daily Queen" and 16% of respondents never use packed milk.

Has any doctor recommended the use of packed milk for your infants

Options	Frequency	Percentage (%)
Yes	9	18
No	41	82
Total	50	100

This question was asked to know that whether packed milk is suggested for the infants by doctors. 82 % respondents said yes and 24% said no. Majority of people believe that mother feed is best for the infants.

Hygiene of Milk

Options	Frequency	Percentage (%)
Fresh milk	17	34
Packed milk	33	66
Total	50	100

The purpose of asking this question was to know that what type of milk is more hygienic 60% respondents replied in favor of the packed milk due to better food processing techniques and better shelf life while 40% respondents replied in favor of fresh milk to be more hygienic after boiling.

Nutrition of Milk

Options	Frequency	Percentage (%)
Fresh milk	28	56
Packed milk	22	44
Total	50	100

This question was asked to assess awareness of sample about nutritive value of both milk.56% respondents thinks that fresh milk is more nutritious than packed milk and 44% respondents think that packed milk is more nutritious as compared to fresh milk.

Vitamins and Minerals Content of Milk

Options	Frequency	Percentage (%)
Fresh milk	33	66
Packed milk	17	34
Total	50	100

According to above table 66% respondents thinks that fresh milk contains more vitamins and minerals because it is natural and not went through milk processing units while 34% respondents think that packed milk is more nutritious because it is fortified with vitamins and minerals during milk processing.

What do you think which milk is better for health of an individual

Options	Frequency	Percentage (%)
Fresh milk	35	70
Packed milk	15	30
Total	50	100

According to above table 70% respondents think that fresh milk is better for their health due to its nutritive value while 30% respondents thinks that packed milk is better for their health due to its fortification (addition of nutrients during milk processing).

Do you suffer from any kind of illness after consuming fresh and packed milk

Options	Frequency (yes)	Percentage (%)
Fresh milk	21	42
Packed milk	29	58
Total	50	100

According to above table 58% respondents fell ill after consuming packed milk, and 42% fell ill after consuming fresh milk. Illness include nausea, vomiting, stomach pain, stomach infection

Any allergies from milk

Options	Frequency	Percentage (%)
Yes	11	22
No	39	78
Total	50	100

According to above table, 78% respondents are not allergic to milk while 22% of respondents are allergic to milk.

If yes, then what kind of allergy.

Allergies include Lactose Intolerance (inability to digest milk due to absence of lactase enzyme), nausea, vomiting.

Consumption of milk by you and your family on regular basis

Options	Frequency	Percentage (%)
Yes	23	46
No	27	54
Total	50	100

According to above table 54% respondents and their family do not consume milk on daily basis while 46% respondents and their family consume milk on regular basis due to their health issues.

In your opinion can drinking milk can cause any disease

Options	Frequency	Percentage (%)
Yes	3	6
No	47	94
Total	50	100

According to above table 94% of respondents think that milk can not cause any disease while 6% respondents think that milk can cause gastrointestinal diseases and infections.

Conclusion

It is concluded from the above study that majority of sample i.e 50% consumed fresh milk while 34% of sample consumed both kind of milk (packed and fresh). Sample preferred fresh milk over packed milk due to its better quality, on basis of its taste, most of the sample use fresh milk for tea and for drinking purpose. Majority of people believe that fresh milk is best for the infants, also because fresh milk is more nutritious than packed milk and they also believe that fresh milk contains more vitamins and minerals because it is natural and not went through milk processing units and Most of them believe that fresh milk is better for their health due to its nutritive value. One main reason for their preference of fresh milk is due to their previous illness like nausea, vomiting, gastrointestinal problem after drinking packed milk.

Remaining sample i.e 34% who consumed both packed and fresh milk and 18 % who only consumed packed milk prefer packed milk due to its better shelf life, its affordable price, taste, quality, better hygienic conditions. Milk brands used by sample are Nestle, Haleeb, Olpers, Milk powders like Nido and Every day.

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Bibliography

- 1. World Health Organization (WHO). The World Health Organization's infant feeding recommendation (2001).
- 2. Chris Kresser Health for 21st Century. Raw Milk Reality: Benefits of Raw Milk (2014).

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