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Characteristics and Preferences of Pure Milk and UHT Milk Consumers in Pamekasan District, Indonesia

Joko Purdiyanto

Lecturer, University of Animal Husbandry, University of Madura, Pamekasan, Indonesia

Riszqina

Lecturer, University of Animal Husbandry, University of Madura, Pamekasan, Indonesia

Selvia Nurlaila

Lecturer, University of Animal Husbandry, University of Madura, Pamekasan, Indonesia

Abstract:

The results showed that in terms of the characteristics of consumer interest which consisted of analysis of consumer interest, pure cow's milk and UHT milk, the average age was 17-25 years (60%), and had a bachelor degree (40%) and work as a civil servant. The preference of pure milk and UHT milk consumers in consuming milk and not consuming it is 90% and 10%. Meanwhile, the reasons for: 40% child nutrition, 10% maternal nutrition, 40% family nutrition and 10% special purpose. The results of the interview showed that most (20%) of the respondents did not consume pure milk, and most (80%) of the respondents did not consume pure milk because it was difficult to get pure milk on the market and the price was more expensive than UHT milk. Most respondents (70%) prefer packaged milk in the form of powdered or liquid milk, 25% sweetened condensed milk and 5% consume factory packaged pure milk.

Keywords: Characteristics, preferences, consumers, pure milk, UHT Milk

1. Introduction

Since the first time a pure cow's milk business has been produced in Tlanakan sub-district, Pamekasan Regency, many consumers have bought at companies in Pamekasan District (Zali, 2019). But now there are many competitors and sellers of pure cow's milk. Milk is a natural drink that is rich in nutrients and is easily digested and absorbed by the body (Nurdiansah, 2008). Furthermore, according to Anonymous (2009), milk is needed to nourish the human body as a building substance, especially during growth. Fresh milk is liquid that comes from healthy cows or goats that are obtained by milking it properly so that it is protected from germs and is sterile. Cow's milk is also beneficial for people who are old, babies, or people who anemia, besides that milk also helps support bones that are already porous or so that they are not porous. Pure cow's milk contains a lot of protein and vitamins, calcium and so on, but there are still many people who don't know the benefits of pure cow's milk and there are still many people who buy packaged milk bringing milk from out of town instead of pure cow's milk.

There are various brands of milk in Pamekasan district such as UHT, dancow, and so on with many choices of flavors and brands. It is different from pure cow's milk which is still original and has not been mixed or has preservatives. The comparison of packaged milk or UHT (Ultra High Temperature) milk with pure cow's milk contains more nutrients and is healthier for the body, but the weakness of pure cow's milk can only last 1 week and must be stored cold, while UHT milk is in a tightly packed package will have a very long shelf life even up to 10 months if stored at room temperature. According to Muchtar (2006), the competition for pure milk products and UHT means that the strengths that are owned must be empowered as much as possible, while the existing weaknesses must be shifted into strengths. Creativity and innovation are important for business development and achieving competitive advantage (competitive advantage). Creativity is needed in a business competition, because creativity is an effort to do new and amazing activities (Yusuf, 2005: 13). Basically, creativity gives rise to creative thinking which will lead to innovations or new findings in the business world. In business, the entrepreneur must be able to determine what strategies should be used in order to create consumer interest to buy whole milk rather than UHT. Consumer interest is needed to attract consumers to buy pure cow's milk in Pamekasan Regency. Service quality has a relationship with consumer interest and customer satisfaction (Sijabat, 2007).

Quality provides an incentive for consumers to build strong relationships with pure cow milk entrepreneurs (Fabiola, 2010). Enterprises can increase customer satisfaction by minimizing or eliminating unpleasant consumer experiences. Consumer interest can create consumer loyalty to pure cow milk businesses that provide satisfying quality (Tjiptono, 2002). Haris (2008) research results, a good quality image is not seen from the perception of the service provider, but based on customer perceptions. Consumer interest towards quality of service can be known from the company's efforts to improve and maintain the quality of service (Princess, 2009).

If the quality of service received by consumers is better or the same as what I imagine, then consumers will tend to try again (Yoety, 2000). Furthermore, Suryani and Tatik, (2003) said that in addition to adequate service quality, the business must also consider the quality of goods, from the company's point of view, because the level of service quality is all forms of activities carried out by companies to meet consumer expectations so that consumers feel satisfied and come back to buy at the place. Therefore, the pure cow milk company located in Pamekasn Regency also wants the high level of sales of the milk it produces to be sold. Product quality is the main element that influences consumer purchasing behavior. Garvin (1994) has revealed that there are eight dimensions of product quality that can be played by sellers, including eight dimensions: performance, features, reliability, conformance, durability, serviceability, aesthetics, and perceived quality.

2. Methodology

2.1. Research Approach and Research Design

This study uses a qualitative approach because it offers high flexibility. Besides that, the qualitative method offers the freedom to get first-hand information (first hand informants). The research approach used qualitative and interview data collection techniques and literature study. The type of data to be obtained in this study is qualitative data in which the information data is in the form of verbal sentences not in the form of numeric symbols. Qualitative data can be obtained through a process using in-depth analysis techniques and cannot be obtained directly. In other words, obtaining qualitative data requires more time and is difficult to work on because you have to make observations.

3. Results and Discussion

3.1. Description of Research Objects

Pamekasan Regency is located around the equator with a tropical climate, namely 113019 ' - 113058' East Longitude | 6051 ' - 7031' LS. This district is located at an altitude of 350 meters above sea level, Pamekasan Regency is bordered by Sampang Regency in the west and Sumenep Regency in the east, while in the south it is bordered by the Madura Strait, the Java Sea Strait in the north. The area of Pamekasan Regency is 732.85 km² which is divided into thirteen districts with Pamekasan as the capital of Pamekasan Regency. The Animal Husbandry Sector of the Pamekasan community partly runs the Processing Industry business, trading in the business of pure cow milk from both cows and goats. However, the focus of the discussion is the pure cow milk business in Pamekasan Regency.

3.2. Respondent Characteristics

The characteristics of the respondents were grouped by age, education and occupation. Age levels are grouped based on the age of productive and non-productive housewives. Another group is based on education level and occupation. The results of the characteristics of the respondents can be seen in table 3.

Based on the education level, most of the respondents were undergraduate (40%) and senior high school (30%), only a small proportion of respondents graduated from Diploma and Masters. In terms of knowledge about food and nutrition, the education level of the respondents was sufficient. The level of education correlates with income and knowledge about food and nutrition. The higher the level of education, the income and knowledge about food and nutrition will also increase. Income is the main factor determining the purchasing power of pure cow's milk and packaged milk, so income is the main factor determining the combination of goods and services that a family can obtain. Likewise, the consumption of dairy products will increase in line with the increase in the income level of the milk entrepreneur. Based on the Profession, most of the respondents are civil servants (PNS), who already have a steady source of income and are oriented towards meeting their family's needs with a four-and-five-perfect diet. Based on the results of interviews with all respondents, it is known that most respondents consume milk, both milks. pure or processed milk, only 10% of respondents do not consume milk. This shows that public awareness is actually quite high on the importance of milk for growth and health.

Description	Percentage (%)
Age:	
17 - 35 years	60
35 - 50 years	40
Level of education:	
High school	30
Diploma	20
Bachelor	40
Master	10
Profession:	
Civil servants	80
THL	10
entrepreneur	10

Table 1: Characteristics of Respondents by Age, Level of Education, and Occupation
Source: Data Processed 2020

Respondents who do not consume milk because milk products are still expensive for them, and are not a basic necessity in life. This is in accordance with the opinion of Irdham and Hermiyati, (2008) that the low consumption of milk is caused by several factors, including a misunderstanding in some people who think milk is a luxurious and expensive food. In the slogan of four healthy five perfect, milk is also ranked fifth as a complementary food, so that people feel that drinking milk is not a priority. The increasing level of education and public awareness of the importance of health causes the majority of respondents (90%) to consume milk.

The reason they consume milk is mostly for the growth of children (child nutrition) (40%), 40% for health (family nutrition) and for special purposes, namely preventing osteoporosis, improving digestion (health) 10%, and for the needs of pregnant women (10 %). This shows that society still believes that milk only needs to be given to children for their growth. Though milk contains complete nutrients that are needed and can be absorbed by the human body at all ages. The nutrients contained in milk cannot be completely replaced by other foods.

Description	Percentage (%)
Consumption of milk:	
Consume milk	90
Don't consume milk	10
Reasons for consuming milk:	
Child Nutrition	40
Mother Nutrition	10
Family Nutrition	40
For special purposes	10

*Table 2: Milk Preferences and Goals for Consuming Milk
Source: Data Processed 2020*

3.3. Business Characteristics

Since the first time they have started their business as a dairy farmer, they have generally experienced and felt quite difficult competition in the environment where they live. This fact is mainly experienced and felt by the dairy cow entrepreneurs in Pamekasan or those who have been in the dairy business for decades. Since the existence of packaged milk sold in shops and supermarkets, the dairy business in Pamekasan has decreased dramatically because pure cow's milk is less competitive with packaged milk in terms of packaging promotion and taste, where the packaged milk has many kinds of flavors such as chocolate, melon and strawberry flavors. As Breeder 1 said:

We don't know what else to do here, because there are too many competitors for pure cow's milk. At the same time, there are already many packaged milk businesses in the shops that are sold. Moreover, there are many kinds of packaged milk flavors that are sold in stores that make consumers more interested in terms of taste and very practical packaging. Consumers prefer packaged milk because of the variety of packaging forms and tastes and can be carried anywhere.

Complaints from Breeder 2 which said:

In addition to in terms of packaging and kinds of flavored milk is also relatively cheap in terms of price and also can be brought anywhere. The Pamekasan community prefers packaged milk because it doesn't spoil quickly, especially packaged milk is more practical and hygienic in its health. Different from pure cow's milk, the packaging is normal and, in the process, it must be cooked and added with sugar so that the taste is not bland. For pure cow's milk, in terms of milking, it is milked by hand and after being milked it is immediately put in the refrigerator so that it is not damaged. In terms of health, it is still not very good due to the sterile space in terms of milking and storage. However, in terms of processing and milking, there is no human intervention for packaged milk.

An entrepreneur also needs the role (intervention) of the government in an effort to increase competitiveness. The role of the government here is not only in providing capital, but more on fostering entrepreneurs so that they have the ability to calculate optimum capital requirements, compile proposals to open access to bank institutional funding and facilitate licensing and assist in promoting marketing (especially for small and home businesses) (Chasanah, 2010) Based on field data, entrepreneurs are always in contact with each other, especially types of businesses that are almost of the same type or are related. Sometimes they form an association of pure cow milk entrepreneurs in Pamekasan Regency which is connected with business associations in Pamekasan Regency. From the association's information, they get new information regarding price changes, new products and so on. So that the pure cow milk business is not less competitive with packaged milk entrepreneurs in stores and supermarkets. According to Pak Rachman, he said:

That pure cow milk entrepreneurs are still lacking in terms of packaging and in terms of promotion, whether its promotion using brochures or using printed media, so that consumers know that pure cow's milk is healthier for the body and the health of the consumer's body.

3.4. Product Characteristics

Milk is more easily damaged compared to other livestock products so that milk handling must be precise, fast and hygienic. Dairy products consist of two types, namely fresh milk and processed milk. Fresh milk consists of cooperative packaged pure milk and factory packaged pure milk. Processed milk is pure milk produced by modifying the process of adding or reducing the composition of nutrients, adding flavor and aroma. The results of these modifications are generally

preferred by consumers compared to fresh milk. Milk consumed by respondents varied in type and shape, including pure milk and powdered milk (full cream, skim milk, calcium milk, low fat milk), liquid milk and sweetened condensed milk.

The most consumed milk is milk which has a relatively affordable price and is easy to obtain in the location where the respondent lives, so that the availability of processed milk on the market is one of the criteria for selecting the product. Processed milk contains mixed ingredients which generally consist of powdered skim milk, sugar, vegetable protein, vitamin premix and flavor. Powdered skim milk as a basic material for the manufacture of processed milk, both in the form of flour and sweetened condensed milk, comes from imported milk flour which has been taken for nutrients by the exporting country, such as fat for making cheese and butter, milk cream for making creamer. So that imported milk, which is generally in the form of milk flour, has reduced nutrition. The composition of processed milk is made to fulfill

The entire content of pure milk with the addition of nutrients such as vegetable protein derived from soy or coconut oil, vitamin premix, minerals, calcium and milk flavor. The nutritional value of fresh milk products is much better than processed milk, because fresh milk still contains pure animal nutrients without the addition of artificial substances. Consumers have not generally realized this. This can be seen from the survey results that show consumers only know about the nutrients contained in milk through advertisements and milk packaging. The composition contained in the milk packaging is added with nutrients (protein) derived from plants (soybeans, whey, palm oil) to meet the content of processed milk such as fresh milk.

Meanwhile, fresh milk contains protein, fat, lactose, vitamins and minerals of animal origin. From an economic point of view, the price of fresh (pure) milk is much more expensive (Table 1) but due to its hard-to-obtain market availability it causes consumers to prefer the easy and practical, in addition to the fairly intense advertising effect. When compared to the price per bottle or per liter of fresh milk it reaches IDR. 20,000 - 30,000 when compared to processed milk between local fresh milk and factory packaged fresh milk, the price of factory packaged fresh milk is much cheaper, 2,500 - 4,000, as shown in table 1. Another significant effect of milk consumption is the promotion by products. milk continuously both in electronic and print media, this greatly influences consumers in choosing milk products. With milk packaging that is attractive, practical and more hygienic so as to increase consumer confidence in the purchased milk products.

3.5. Packaged Milk Preferences

Processed milk is pure milk which is produced by modifying it by adding or reducing the composition of nutritional substances, adding flavor and aroma. Below is a list of prices for pure cow's milk and packaged milk (Basu and Irawan, 2005).

Dairy Products	Price / Bottle and Per Liter (Rp)	Description
Fresh milk (pure)	IDR 20,000 per bottle 30,000 per liter	In terms of ordinary packaging
UHT milk	IDR 2,500 - 4,000 / box IDR 8,900-9,400 / can	Chocolate, strawberry, vanilla flavors

Table 3: Comparison of Whole Milk and UHT Milk Prices

Source: Data Processed 2020

The results of these modifications are generally preferred by consumers compared to fresh milk. Based on the brand of milk commonly consumed by respondents, processed milk can be grouped into 2 types, namely sweetened condensed milk and powdered milk. The results of the interview showed that most respondents (70%) preferred packaged milk in the form of powdered or liquid milk, 25% sweetened condensed milk and 5% consumed factory packaged whole milk.

The reason the respondents consumed the UHT type was because the taste of the milk was according to their taste (45%), the quality was guaranteed, it was more practical and the packaging was hygienic so that it could be stored for a long time (25%). Another reason is that it is affordable and easily available in the market (30%). The source of the information they get so that they are interested in consuming this type of milk is mostly (80%) from advertisements in electronic and print media. This shows the magnitude of the influence of advertising on consumer preferences. Their preference is also influenced by the nutritional composition label on the milk label (15%) and the rest by doctor's recommendation (Syarif, et al. 2007)

3.6. Pure Milk Preference

Pure milk is fresh milk from the squeeze that is not reduced or added by any ingredients obtained from milking healthy cows. Milk is a beverage material that is suitable for the needs of animals and humans because it contains nutrients with an optimal ratio, is easy to digest and no residue is wasted (Fandy, 2002). The criteria for good cow's milk fulfill the following: 1) it is free from pathogenic bacteria. 2) free from harmful substances or toxins such as insecticides. 3) not contaminated by dust and dirt. 4) nutrients that do not deviate from the codex of milk, and 5) have a normal taste (Yoeti, 1992).

Pure milk in this study consists of two types, namely factory packaged whole milk and non-packaged whole milk. Factory packaged pure milk is pure milk that is packaged by the factory with a certain brand without adding nutrients. Meanwhile, non-packaged pure milk is pure milk which is normally packaged without giving a brand on the packaging. The results of the interview showed that some (70%) of the respondents did not consume pure milk, and most (80%) of the

respondents did not consume pure milk because it was difficult to get pure milk on the market, even if there was a price it was more expensive than processed milk.

Only a small proportion (20%) stated that they do not consume pure milk because they don't like the taste. The ease of obtaining pure milk supports respondents to consume pure milk, this can be seen from the majority (75%) of respondents who consume pure milk easily get milk because of the mobile traders who sell pure milk, while 25% of direct breeders, this is more because the location where they live is the center of the dairy cattle business.

4. Conclusion

In the need recognition stage, consumers consider that consuming milk is very important and milk is an obligation that must be fulfilled in society and is good for the growth of the community's body. The motivation of consumers to consume Pure cow's milk and packaged milk is just to try. In addition, the fulfillment of nutrition or maintaining health are the main benefits that consumers seek. However, consumers say it is normal if they do not consume milk because they do not consume it regularly.

At the information search stage, the source of information for consumers is the seller and the focus of attention, the consumer is information about prices. The price of pure cow's milk is more expensive than packaged milk sold in shops or supermarkets. Whereas pure milk in terms of packaging is less attractive to consumer interest, whereas packaged milk in terms of packaging has many variations and in terms of flavors too. The clarity of halal assurance is the attribute most considered by consumers at the alternative evaluation stage. At the purchase decision stage, consumers buy indeterminate pure cow's milk. Super markets / shops are places for consumers to buy packaged milk because they are close to schools or homes. Consumers buy after seeing the UHT milk advertisement or brochure.

The pure cow's milk entrepreneur did not influence consumers in purchasing decisions and did not comment. Although the seller does not influence consumers in purchasing, the seller suggests trying / buying. Consumers have influence on purchasing decisions even though they do not provide comments. In the post-purchase evaluation stage, consumers will buy packaged milk if pure cow's milk is not available. Consumers will switch to packaged milk when other similar products carry out sales promotions. If there is an increase in the price of pure cow's milk by 30 percent, consumers will not buy. The results of the analysis of pure cow's milk must show that there is one attribute that must be the top priority and its performance must be improved, namely the attribute of clarity in the absence of preservatives. Overall, consumers will be satisfied with the notification from the seller.

5. Suggestions

Based on the results of the research conducted, the things that are suggested are:

- Consumer beliefs about the feasibility of purchasing genuine dairy products. Based on this, it is necessary to carry out research on the comparative analysis of consumer interest in pure cow's milk and packaged milk in pamekasan district, pamekasan which is discussed in this study to provide detailed and comprehensive information about the consumer segment of all pure cow milk in pamekasan district, kec. Tlanakan kab. Pamekasan.
- If the entrepreneurs of pure cow's milk and packaged cow's milk decide to increase the price of milk, it is necessary to carry out further research on the price sensitivity of the youth segment, so that it can be seen that the increased price can be accepted or paid by consumers.

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