MEKELLE UNIVERSITY

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TITLE: FACTORS AFFECTING CONSUMERS' CHOICE OF DAIRY PRODUCTS TYPE IN SENDAAFA TOWN

By

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DECLARATION

I declare that this thesis entitled: Factors Affecting Consumers' Choice of Dairy Products Type in Sendaafa Town is my original work. I have undertaken the research work independently with the guidance and support of the research advisors. This study has not been submitted for any degree or diploma program in this or any other institutions and that all sources of materials used for the thesis has been duly acknowledged.

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LIST OF ABBREVIATIONS

ANOVA: ANALYSIS OF VARIANCE

CSA: CENTRAL STATISTICAL AUTHORITY

DV: DEPENDENT VARIABLE

FAO: FOOD AND AGRICULTURAL ORGANIZATION OF THE UNITED NATIONS

GDP: GROSS DOMESTIC PRODUCT

IV: INDEPENDENT VARIABLE

OUPI: OROMIA URBAN PLANING INISTITUTE

SOM: SHARE OF MARKET

SOV: SHARE OF VOICE

SPSS: STATISTICAL PACKAGES FOR SOCIAL SCIENCE

WHO: WORLD HEALTH ORGANIZATION

ABSTRACT

All consumers' of dairy products has his/her own products type choice. Dairy product type reflect confident factor affecting beforehand buying products. The objective of this study was to analyze the factors affecting consumers 'choice of dairy product type in Sendafa town. The predicted variables involved in this research are dairy product type price, quality safety, promotion, nutritional value and product type availability; whereas product type choice is the dependent variable. So the aim of this work was to test consumers' consume perception for several dairy products type (Raw milk, Pasteurized milk, yoghurt, Cottage cheese and butter) to evaluate the factors affecting consumers' choice for dairy product type in study area. Relevant literatures have been reviewed in considering the idea and to find major factors that affect consumer dairy product type. Open questionnaires were distributed to nominated sample respondents by means of structured questionnaire and talk administered by the student to 350 consumers' the Committee housing units using dairy products. The respondent be located sampled based on simple random sampling and consumer were sampled using Committee housing units as this research, single housing unit symbolized single person technique. For Data analyzing through SPSS, Descriptive and multiple regression used. The results show that consumers' using buying of dairy products increasing significantly for Raw milk and butter strongly and moderately for cheese and yoghurt and very low for pasteurized milk. So, raw milk and butter were found to be the furthermost chosen product type among encouraged dairy product type in study area. Respondents gender, age, marital status, income level and occupation status are found to be the demographic variables affecting consumers dairy product type considerably. Independent variable found as most factor affecting consumers choice of dairy product type significantly is price. Recommendations founding on the results from the research, for dairy products processor so as to make well and knowledgeable decisions that can be used to factor affect the approach of consumers make product type choice judgment. Dairy products pricing system, standards and regulation have to be regulated. Therefore, it is recommended that the administration of town has to inspire investors both manufacturers and sellers in the dairy sector to satisfy the increasing needs of society.

Key Words: Dairy products, product price, product type choice

CHAPTER I

1. INTRODUCTION

Ethiopia's agriculture sector accounts for 40% of the country's gross domestic product (GDP), 80 % of exports and estimated employs 75% of the country's work force. Livestock is a key component in this sector, contributes 45% to the agriculture GDP and 19%) to the overall GDP, also plays a significant role in foreign exchange earnings, accounting for 16-19%, provides employment to over 30% of the agricultural labor force. Livestock serve for Ethiopia economy as source of purchase, cash income, insurance, foreign exchange earnings and social cultural identity. Despite, its largest livestock population, the contribution of livestock production to agricultural and overall economy of the country is still low due to poor productivity constrained by several factors including poor genetics, extensive farming system, upmarket oriented and several factors (CSA, 2021).

Ethiopia holds the largest cattle population From Africa which has estimated to be 70 million heads of cattle population, out of total cattle population, the female cattle constitute about 56% and the remains 44% are male. About 97.4% of the total cattle in the country are local breeds. The remains are hybrid and exotic breeds that accounted for about 2.3% and 0.31%, respectively and there are milking cows are about 15.04 million heads in 2020/21 (CSA,2021). Dairy production is a critical issue in Ethiopia-a livestock-based society-where livestock and its products are important sources of food and income, and dairying has not been fully exploited and promoted. Ethiopia expects increased demand for milk and milk products as its economy continues to grow (averaging 9.5% annually over last 15 years) along with its population (reaching an estimated 190 million people by 2050). Domestic milk production has increased gradually over the last years from 3billiion liters in 2016 to 4.96 billion liters in 2021. Out of total domestic milk produced, Indigenous stock produce 97% of the milk produced by cattle and the remaining 3% comes from improved exotic crosses and pure grade exotic cattle (CSA, 2021).

In Ethiopia, around 95% of the vast majority of milk nationally produced in rural area are processed at house hold level into milk products such as Ergo(Ethiopian fermented milk),Butter ,Ghee, and Ayib(Ethiopian cottage cheese) using traditional technologies and are marketed through informal channel (Muriuki and Thorpe,2008). From total nationally milk produced in Ethiopia about 5% Only sold in through formal channel markets for commercial milk processors to processed in to the main value added dairy products such as pasteurized milk, UHT milk, cheese, butter, cream and natural or flavored yoghurt (Yilma *et al.,* 2011).

There are over 40 dairy processing companies in Ethiopia, with a total production capacity of 1.2 million liters per day. These processor are currently operating at only 28% of their maximum production capacity. They process mere 2.6% of annual milk production of 6.69 billion liters this small proportion can mainly be attributed to the poor quality of supplied milk and low milk supply of milk within formal system (Gebreselassie, 2020). Per capita consumption of milk is very low ,estimated at about 20 liters ,though rising in Addis Ababa (capital city of the country) have brought it to about 40litres.this is extremely less than 200litres of per capita consumption recommended by world health organization(WHO) (Nakiganda *et al*.,2017).

Dairy has been identified as a priority area for the Government, which aims to increase Ethiopian milk production, the government has developed a strategy aimed at increasing the development of dairy production in order to satisfy the increasing demand for milk and milk products in urban areas, such as secondary cities, and small towns to alleviate poverty among small holder dairy producers. As a result, the number of urban and per-urban dairy processing was increasing in the recent decades and gaining importance to benefit from dairy products processing industries developments as a source of family food. Consumer buying behavior of different dairy products is becoming an attractive topic for researchers (Samoggia, 2016; Haa*s et al.,* 2016). In the literature, consumers' choice of dairy products types buying behavior is considered to be closely linked to individual choice. However, in some studies, also demographic characteristics are shown to affect consumer choice for dairy products types. Urban consumers spend more on high value food items than rural consumers and seek different types of dairy products

which ensure reduction or avoidance of safety and health problems related with the food items they want to use (Shokrvash *et al.*, 2015).

Powerful dairy products provide long-term security and growth, higher sustainable profits, and increased asset value because they achieve competitive differentiation, premium prices, higher sales volumes, economies of scale and reduced costs, and greater security of demand(Santarossa *et al*.,2004)

Successful dairy products are those products which adapt well to the environment and thus survive and flourish in the long term in spite of the competition they face. Some studies on quality and safety preferences of consumers in other developing countries show that nutritive value and taste of the product, price of the product and health risk are the most important attributes in buying decisions (Boniface & Umberger, 2012; Ortega, Wang, Wu, & Olynk, 2011). However, there is little empirical research on the indicators of quality and safety that consumers use in their buying decisions or that supplier's use in differentiating products to promote sales and the extent to which consumers are willing to pay for such attributes under Ethiopian context.

The rising demand for dairy products in the country is expected to induce rapid growth in the dairy sector. Particularly, the dynamic change in the demographic, economic and socio economic situation of in Sendafa town will a significant implication on the current and plan consumption of dairy products. Sendafa town is the total population of the town is 25,502; growth rate of 4.2% urban (CSA, 2007) and high demand for milk and milk products with low supply from per-urban areas that do not meet the observed demand in the area. (Sendafa town department of agriculture annual report, 2018) which is an opportunity for smallholder and householder milk producers of Sendafa and Addis Ababa to exploit the milk market access. Given such opportunity, several milk producers and processor and marketers could not get better income from their products sale mainly due to either their inability to increase their market supply or failure to minimize loss from perishable nature of fresh milk. In this study outlet shops are the stores of the same scale (primary cooperative association and small scale enterprise) selling dairy products in Sendafa town and surrounding area.

1.1 Statement of the Problem

Sendafa is one of the potential milk production and marketing areas in central part of Ethiopia. In the area, it is common to see household choices among dairy product market outlets. It is very well understood that information on consumer behavior various dairy products choice are key factors which create efficiency in business management. Having more information on customer's needs, wants and behavior will help business to choose their target market and tailored marketing programs. Interest in consumer product type choice has grown among marketing practitioners' in the process of understanding consumer product selection (Oke *et al*., 2016).

It is very critical for cooperative association and small scale enterprise to understand the customer's requirement and provide the products that satisfy their needs. Consumer's product preference represents a fundamental step in understanding consumer choice. Whether cooperative association and small scale enterprise is selling products or services, a strong product is the most important and sustainable asset that the cooperative will have. A cooperative's product type's strategy should always be the guiding principle behind every decision and every action (Pfoertsch, 2007).

Though, these studies have considered in limited way in their work issue related to identifying factor influencing consumer choice of different dairy products type that guide Milk producing and processing companies need to design better pricing, quality and safety ,promotion strategies for different milk products consumption to attract consumers, improve their products based on consumers' centered and increased availability at affordable prices respected to society socio- economic characteristics and helps the administration to get basic information helps to improve dairy products processing technology. As to the researcher's believed, in order to provide basic information for dairy producer, processor, marketers and also administration, conducting study specifically on the factor affecting consumer's choice of dairy product type in study area is necessary. The aim of this research will be to identify the factors that influence consumers' choice of dominant named dairy products type in the Sendafa town, as well as the impact of socio-demographic features on consumers when they buy and consume these products.

1.2 Research Questions

It is being understood from literature search and other secondary information sources that there are information and knowledge gaps in the area of customers' dairy product types choice in Ethiopia to support marketers of dairy products to address the dynamic changes with consumers' buying behavior. In order to address the identified gaps the following research questions have been developed to undertake the study.

1. To what extent does price influence consumer's choice for dairy products types in Sendafa town?
2. To what extent does product quality safety affect consumer's choice of dairy products type in Sendafa town?
3. To what extent does promotion affect consumer's choice of dairy products type in Sendafa town?
4. To what amount does Nutritional value awareness affect consumer's choice of dairy product type?
5. To what amount does availability affect consumer's choice of dairy product type in Sendafa town?

1.3 Objectives of the Study

General Objective

The general objective of this study will be Factors Affecting Consumers' choice of dairy product type in Sendafa town.

Specific Objectives

1. To study the influence of price on consumer's dairy products type choice in Sendafa.
2. To determine the influence of quality safety on customer's dairy products type choice in Sendafa.
3. To study the effect of promotion on consumers dairy products type choice in Sendafa.
4. To determine the effect of nutritive value on consumers dairy products type choice in Sendafa.
5. To examine the effect of availability on consumers dairy product type choice in Sendafa.

1.4 Significance of the Study

Barone *et al*., (2000) Indicated that one of the most important issue for marketers is effective and efficient management of relationship with customers. The marketing strategy help to identify and meet consumer choice, which drive consumer purchasing decisions. Product choice and preference complement the characteristics and needs of consumers in explaining their behavior. Understanding consumer habit and choice towards differentiated and high-quality products can increase the competitiveness of Manufacturer Company and guarantee their long-term survival (Hanaysha, 2018; Canavari *et al*., 2010).

Therefore**,** this study was attempt identify Factors Affecting Consumers' choice of dairy product types which has been an important input for designing appropriate intervention and strategies in order to satisfy the demand for dairy products. The study tries to generate valuable information on dairy processing and marketing that would assist policymakers in designing appropriate plans for intervention. Administration and nongovernmental organizations that are engaged in the development of new dairy products would benefit from the results of this study. The findings of this study was also believed to been useful to dairy producers, consumer and marketing agents to make informed decisions. The effort also serves as a reference document for researchers to board on studies of the same or related kinds in other parts of the country. Legislators may refer the result of this study as basic information to adjust the policy dimension with regard to dairy products quality and safety control. Therefore, it is hop that, outcomes from this study May helpful to different milk processing companies and seller to consider the consumer's choice factors to produce specific targeted dairy product and grab more market share.

1.5 Scope of the Study

The study was been conducted between the months of June 2023 - February, 2024 in Sendafa town, and is focusing on the potential milk production, processing, marketing and consumption areas of the town. The study tries to consider the consumer choice with their socio-economic and demographic characteristics like Gender, Age, income level,

educational level, marital status, and Family size. Also the attempted to analyze the different marketing factors and their strength on determining several dairy products choice. It is obvious that there are a lot of variables that affect dairy product type's choice, however this study covers only five marketing factors which are price, product quality safety, nutritional value, promotion, and availability. In addition the research also encompasses five dairy products type that are potentially found in Sendafa town market and shops such as raw milk, Pasteurized milk, and fermented milk/Ergo, Cottage cheese/Ayib and Butter during this study.

During the collection of data collection for this study purpose the researcher faced different limitation, like involuntariness of the concerned people to complete the questionnaires' without motivation and to give the information and financially shortage of budget limited to extend the survey beyond the 350 respondent among the consumers of two kebele of town and (Block) selected out let selling dairy products. Time will be another limitation for the study.

1.7 Organization of the Study

This study was composed of five chapter. The first chapter contains introduction that describes background of the study, statement of problem, research questions, objective of the study that include general objective and specific objective, significance of the study, scope of the study, limitation of the study literature review, Conceptual frame work of study and hypothesis of study. Chapter two contains research Method and methodology such as description of the study area, Study population, sampling techniques, Sample Size, study design, Data collection, and Data analysis and Ethical consideration. Chapter three was provided result and finding while Chapter four was present a discussion the finding of the research objectives and finally conclusions and recommendation for future of the study for future proposal was been provided

2. Literature Review

This part contains ideas applicable to the topic of the content of the study from once exploration works findings and abstract Framework. Consequently, literature regard to dairy products, factors impacting consumer's dairy products type's choices are reviewed.

2.1 Factors Impacting Customers' Choice of Dairy Products Types

Even though, many studies have been conducted in general dairy food categories, literature on factors that influence customer's preference of dairy product type are relatively insignificant. Thus, the above studies conducted in different dairy product types are considered for the selection of relevant variables/factors for this research. Therefore, in this study, five variables are considered which are price, product quality and safety, Nutritional value, promotion, and availability.

2.1.1 Price

Dodds and Monroe (1985) found that price is an important indication to quality when other indications available are limited. The price resistance of demand for a particular product type from a consumer's perspective is one of the main determinants of the purchase decision as it is an easy way to compare alternative product and services. Higher prices may not discourage purchase because consumers believe that the products or services are of high quality or more respected. Consumers are willing to pay higher prices for product type that they perceive to have high value as the type reflects the product/service quality. Another investigators concluded that the price of the product type represents a source of information about the product/service; hence, it affects and simplifies the consumer's product type selection process (Saleki *et al*., 2012).

Price can be used as a reason for product choice in two ways; either by going for the lowest price in order to discharge fiscal threat or the maximum price in order to realize product quality. It is the most likely the greatest important attention for the typical consumer and Still numerous of moment's quality conscious consumers may buy products grounded on price than other attributes. (Foster and Cadogan, 2000). Therefore, a better understanding of how customers use price information in choosing among alternative product type helps to evaluate it and know the intensity as compared to other factors or reasons.

2.1.2 Quality Safety

Kotler& Armstrong (2010) point out that Product quality safety have an important impact to the product performance and related to a customer's satisfaction. (Kotler *et al*., 2006) describe quality and safety as the set of aspects and characteristics of a product that keep

an association with their capacity to satisfy consumer's expressed or latent needs. It can also be determined by the technique customers perceive product quality and safety in the market. Quality safety is important for impacting product choice because it is the portion of personal risk that a consumer takes on the decision-making process in evaluating the purchase of a product (Hoyer and Maclnnis, 2010).

Moreover (Boor, 2001) found out that real quality safety help consumers to reduce the risk; the consumers trust the product and believe what they will get. Consumers' choice of dairy product quality safety are multipart and differ across countries (Francesconi *et al*., 2010 and Boniface and Umberger, 2012). In Australia, consumers perceive whole milk to be of lower quality and safety than other types of dairy products (Bus and Worsley, 2003).

Hatirli *et al*., (2004) stated that in Turkey, households' choice of fluid milk sources is influenced by the number of children living in the household and education levels of the respondent. A comparable study of Taiwanese consumers who purchased more amounts of fluid milk had higher levels of household incomes than consumers who purchased mostly yoghurt drinks (Hsu and Lin, 2006). A study in U.S.A presented that low fat milk consumption is positively related to age, education level and income (Robb and Abdel-Ghany, 2007). Therefore, Consumers ultimately pick a particular product type if they identify that product to be quality safety.

2.1.3 Promotion

Usually, promotion seems to be one of the honest tools of marketing communications employed by firms to connect perfectly with its various target consumers. The use of promotion to create perhaps positive product type relationship may be gaining increased attention due to decreasing levels of product type differentiation, proliferation, consumer education and the need to enhance customer movement towards a product type (Kotler& Keller, 2006).

As said by Shimp (2000), there is a positive relationship between a product type's share of voice (SOV) and share of market (SOM). A share of voice may be defined as a firms promotion spending stated as a percentage of the total spending in a product type over a given period of time in a given locality. Maybe, product type that dominate or have

higher SOV may most likely control higher SOM. In market-based economies, consumers have educated to rely on promotion and other forms of promoting for information they can use in making purchase decisions (Belch, 2004).Promoting typically provides a reason to buy. Promotion helps in projecting product superiority and value before the consumers (Ayanwale et al., 2005). Therefore, it has a most important influence on customer's product type choice.

2.1.4 Nutritional Value

According to (McGill *et al*., 2008; Boniface and Umberger, 2012) consumption of dairy products is growing globally which driven by the adding evidences and awareness that dairy products can give essential nutrients and other health benefits. Nutritious value was the key factor for choosing whole milk followed by the taste for selecting dairy products for instance ghee, butter and cheese (Bhavya *et al.*, 2017).

Therefore, according to different articles revised, it was very strong that nutritional value play a main role and powerfully influence the consumers' choices in dairy products type. Because nowadays, people are more health aware and encourage dairy products in their diet for top a healthy life, and it has considered as one of the most major factors influence customer's choice of dairy product type.

2.1.5 Availability

On the word of Lin and Chang (2003) Stability of supply and availability at suitable places are vital for choosing a product type, suitability of a product type has an important impact on customer's product choice, and In other words, easy access to product is energetic when buying any product. Any out of stock situations would probably result in consumers switching to a substitute product available. Inside the context of consumer decision-making, especially when evaluating potential substitute product during the pre-purchase stages, the suggested set refers to the specific product a consumer considers when making a purchase within a specific product type. Definitely, delivery channels and place are important to product type availability. Products that are suitable to buy in a variety of stores rise the chance of consumer's judgment and buying them (Conlon and Mortimer, 2010).

2.2 Conceptual Framework

Deal with the associated literature assessment the conceptual framework was established which comprises products price, quality and safety, Promotion, Nutritional value and availability as the independent variables that affect sellers' Dairy products type choice (dependent variable). Consumer's dairy products type choice for dairy food based items involves a great attention and believed from the on the side of the consumer and so it has to be so by the manufacturers, suppliers and shopkeepers. Dairy products type especially due to their perishable nature need double thinking by all involved to it before promising properties.

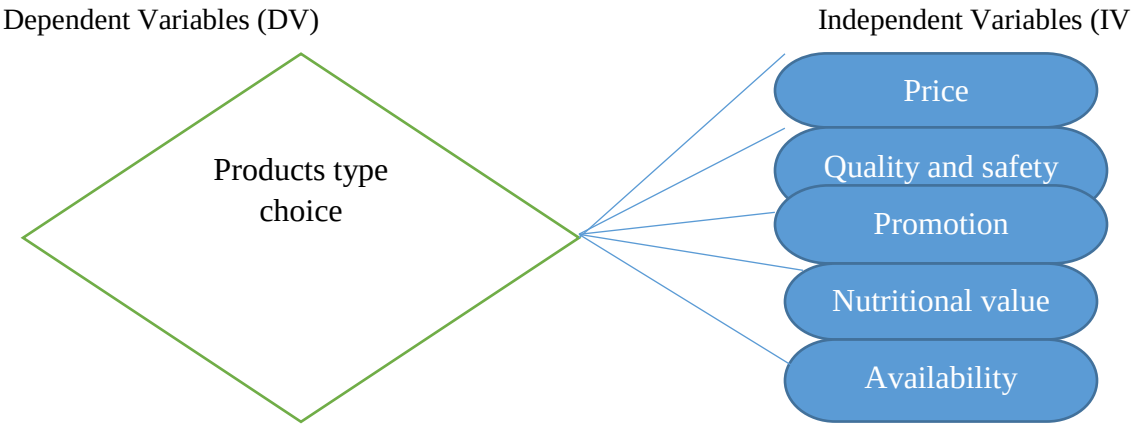

Figure 1.Conceptual framework for the current study (Source: own)

2.3 Consumer Choice and Socio-Demographic Characteristics of Consumers

Based on Several studies were reviewed to find the differences of consumer choice with their socio-economic and demographic characteristics like Gender, Age, income level, educational level, marital status, and Family size was developed. Since, they significantly influenced the choices while choosing dairy products type.

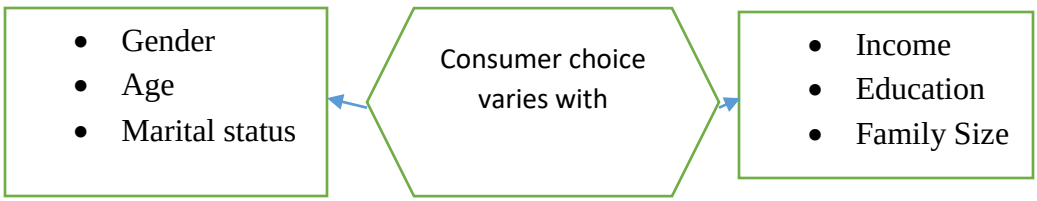

Figure 2. Socio-Demographic characteristics considered during the current study. (Source: own).

2. 4 Study Hypothesis

Founded on the collected works examined, and the hypothesized associates presented in the conceptual framework the next hypotheses were verified in the study area: Ho: Null hypothesis, states that there is no relationship between two variable of study while Ha: Alternative hypothesis, state that there is a relationship between the two variable of study.

Ho: Price does not have a positive and significant influence on consumers' choice of dairy product type.

Ha: Price does have a positive and significant influence on consumer's choice of dairy product type.

Ho: Quality safety does not have a positive and significant influence on consumers' choice of dairy product type.

Ha: Quality safety does have a positive and significant influence on consumers' choice of dairy product type.

Ho: Promotion does not have a positive and significant influence on consumers' choice of dairy product type.

Ha: Promotion does have a positive and significant influence on consumers' choice of dairy product type.

Ho: Nutritional value does not have a positive and significant influence on consumers' choice of dairy product type.

Ha: Nutritional value has a significant influence on consumers' choice of dairy product type.

Ho: Availability does not have a positive and significant influence on consumers' choice of dairy product type.

Ha: Availability does have a positive and significant influence on consumers' choice of dairy product type.

CHAPTER II

3. METHODOLOGY AND METHODS

This chapter presents a view of the Method and methodology proposed to be used for this research to know the factors affecting consumer choice of dairy products type. Related to research, approach and method, research design, population and sampling/sample size and sampling techniques/, type of data source used, data collection method, data analysis techniques and ethical consideration are also part of this chapter.

3.1 Description of Study Area

The study was conducted at pioneer for the modern dairy development in purposefully dairy product marketing potential area of Sendafa town located in Oromia region, Ethiopia. Its name is taken from the Oromo name for a kind of thick, jointed grass or reed which grow in swampy area. Located in the Oromia special zone surrounding Finfinne of Oromia region, the town lies on the paved Addis Ababa to Adigrat highway, some 33 kilometers north of capital of Ethiopia.

Sendafa has a latitude and longitude of 9°09'N, 39°02'E with elevation of 2514 meters above sea level. Concerning weather, it has a moderate temperature, June, July, and August are principal rainy season. Sendafa enjoys relatively moderate technological facilities compared to other town of the same size in the region. Major public institutions here include the Ethiopian police university and the Sendafa military comp. The 2007 national census reported a total population for Sendafa of 25,502 of whom 13086 were men and 12416 were women. The majority of the inhabitants practiced Ethiopian orthodox Christianity, with 84.15% of population while 11.38 were Muslim and 4.52 others (CSA, 2007).

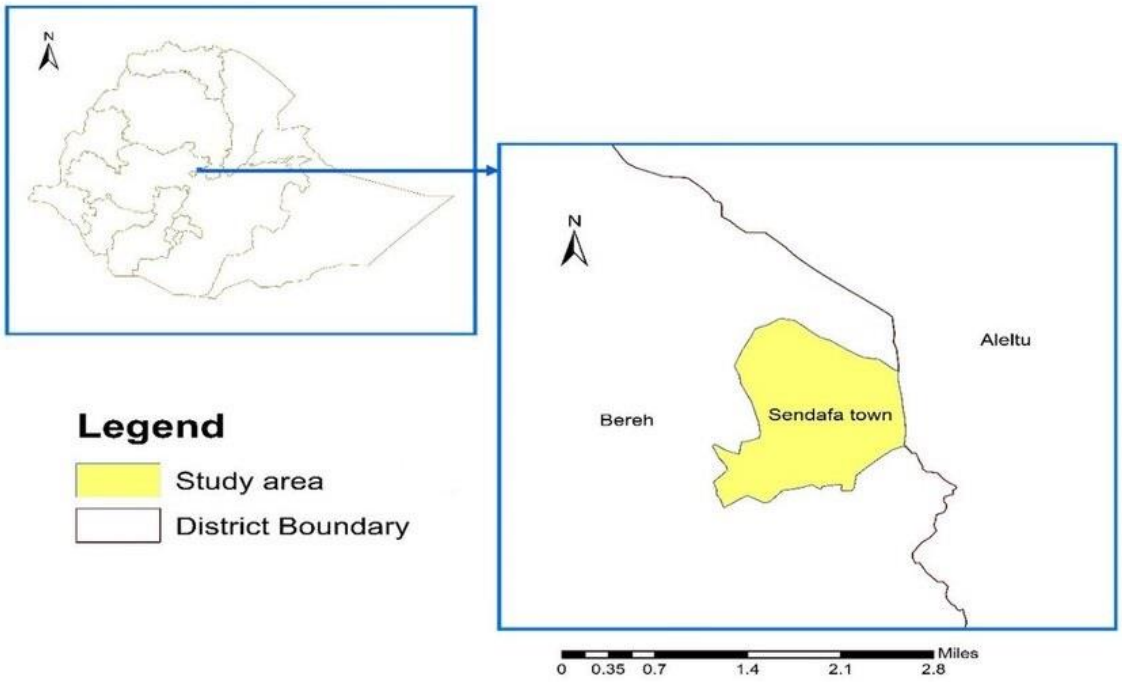

Figure 3. Map of the study area show (source: OUPI, 2014)

3.2 Target Population Study

The study population was consisted of people of households nominate to undertake survey on dairy products consumers where dairy Products is widely sold through informal and formal. The study was targeted households of dairy production, dairy products processing, Marketers, buyers and consumers on marketing area in the Sendafa town are the number of 4200 Committee housing units was nominated.

3.2.1 Population Sampling Technique

The factors Affecting Consumers' choice of dairy products type was used simple random sampling methods technique, the cross sectional survey used. Since, Cross-sectional surveys was study target at defining the frequency. Key informant interviews of town and kebeles administrative bureaus were also used to assess-consumers' habit of dairy product consumption and associated factors in purchasing and consumption of the several dairy products (Yamane, 1967:886)

3.2.2 Sample Size

The 2021 list of town within Sendafa administration as Council was used. This gives a total of 4200 Council housing units. For this study, one housing unit symbolized one person, hence the frame comprised of 4200 individuals. The nominated in Sendafa town council house number was guides the investigator sample size of 350 was used in this study. n=N/ (1+N (e2)) n= 4200/1+4200x (0.05)2 = 4200/1+4200x0.0025 = 4200/12 = 350 the sample have been drawn from maximum variability of the population (P=0.5) with 95% level of confidence with 5% precision level. Where: n = Sample size, N = Population size, e = Level of precision or acceptable sampling error (0.05) (Yamane, 1967:886).

3.2.3 Study Design

In this work, the dependent variable is dairy product type choice and the independent variable are Product Price, quality and safety, Promotion, Nutritional value and Availability. In case of that, the present research has descriptive and explanatory futures. Explanatory for the reason that it tries to explain and predict the interrelationship between dependent variable and independent variable scale dimensions. Explanatory research often conducted, where the aim of the research are to scope out the degree or extent of a specific phenomenon, problem, or behavior, to create some initial ideas and to check the feasibility of undertaking a more extensive study concerning that phenomenon, while Descriptive research sets out to describe and to interpret what is. It guises at individuals, groups, institutions, methods and materials in order to describe, compare, contrast, classify, analyze and interpret the entities and the events that constitute the several fields of inquiry. It aims to describe the state of affairs as it exists (Bhattacherjee, 2012). As a result this study has both descriptive and explanatory

3.3 Method of Data Collection

This study was used primary data collection method. Primary data was collected through questionnaire and interview that was distributed directly to selected consumers.

3.4 Method of Data Analysis

The data was collected analyze with quantitative and qualitative method and was used to analyze the primary data through survey questionnaire. The primary data was edited,

code and enter into Statistical Package for Social Scientists (SPSS). Descriptive statistics was employed for statistics such as mean, standard deviation, percentages, frequency and also descriptive analysis used to analyze and for the demographic factors such as gender, age, education, occupation, and monthly income cross tabulation was use, and they present in the form of tables. Inferential statics used in drawing of inferences or conclusion based on a set of observations. These observations had been described by the descriptive statics, an inference is made subject to a predefined limit or error or confidence interval. From Inferential statics, Correlation to determine the relationship between to variable and Regression analysis were conducted to know by how much the independent variable explains the dependent variable (Sutanapong and Loungrath, 2015).

3.6. Reliability Measurement

The measure of the model used were verified and establish to be acceptable. That is reliable scale was found for cronbach alpha of concepts greater than 0.70 see-through satisfactory as all things are settled based on theories and literatures (Elsayed, 2012).

3.7 Ethical Consideration.

Ethics in business research refers to the set of behavioral principles and norms beginning from the first phase of the study. The ethical code of conduct should reflect the behavior of everyone participating in the research project; researcher, participants or moderator (Sekaran, 2003).

In this research, in order to keep the confidentiality of the data given by respondents, the respondents was required to write their name and their responses was been treated in strict confidentiality. The purpose of the study was also bared in the introductory part of the questionnaire. Likewise, the investigator tried to avoid confusing or misleading statements in the questionnaires.

CHAPTER III

4. RESULTS

In this chapter, the collected data are précised and examined with the aim of appreciate the final objective of the study. The purpose of this study is to Factors Affecting Consumers' Choice of dairy product type in Sendafa town. Therefore, the general

information of respondents, their choice of Dairy Products type presented. Data collected was edited, cleaned for completeness and prepared for coding, presents the analysis and presentation of questionnaires. To measure the degree of relationship between two variable, Correlation analyses, more specifically Pearson correlation was used. Descriptive statistics were used to analyze data. For example:-frequency, mean and standard deviation. Also, Regression analysis was used to test the association between the variables in the study in relative to the objectives of the study. In addition, Analysis of variance was used to approve the results of regression.

4.1. Data Preparation

With the purpose of make totally collected data appropriate for the analysis, all questionnaires are separated to be complete. With ten extra questionnaires the three hundred sixty (360) organized questionnaires were distributed openly to choice consumers of Committee housing units; out of which 350 were fully filled and returned, representative 97.2% answer rate. Due to the total questionnaires disseminated, seven were completely unreturned and three were not inappropriately filled, representing 2.8% were rejected as a consequence. As a result, from the 360 collected questionnaires, 350 were established to be useable for the end analysis were accessible resulting the descriptive analysis and regression.

4.2. Reliability Test

The Reliability Measurements indicate that the scale displays a great degree of reliability. A Cronbach's Alpha coefficient of more than 0.70 is a generally recommended starting point of reliability test. Reliability is the degree to which the amount of a concept is reliable (Elsayed, 2012).

The reliability in this research considered by coefficient alpha, was establish to be 0.761 table:1, as indication of satisfactoriness of the scale for additional analysis

Table 1. Reliability Test for all variable

Reliability Statistics

Cronbah's Alpha		Cronbach's Alpha Based on standardized items	N of Items (Question)
	.752	.761	17

(Source: SPSS output of current study)

Completely variables organized provided a value of 0.752 Cronbach's Alpha coefficients. Therefore, overall items of the five variables are consistent.

4.3. Descriptive Analysis

Descriptive investigation studies are those studies which are alarmed with telling the demographic appearances of a specific individual, or of a group. So, to describe and demonstrate the proper data that was collected from questionnaire. Descriptive analysis was employed for data sets by using Statistical Package for Social Sciences (SPSS) software, version 21 (SPSS, 2011). SPSS version 21. The result of frequency and percentage by using quantitative analysis methods whereas inferential analysis has been used to explore the association between variables by using inferential statistics mainly spearman correlation, and regression coefficient.

4.3.1 Demographic Summary of Respondents

The Socio-economic and demographics factors used in this study are Gender, age, marital status, Educational status, Occupational status, monthly income, and Number of members in the household dairy product of the respondents has been factors effect of consumer's choice of dairy product type.

Table 2. Socio-Demographic Profile of Respondents

Demographics factors	Specific Demographics factors	Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	168	48.0	48.0	48.0
	Female	182	52.0	52.0	100.0
	Total	350	100.0	100.0	
Age	18-25	52	14.9	14.9	14.9

	26-35	95	27.1	27.1	42.0
	36-45	121	34.6	34.6	76.6
	45 above	82	23.4	23.4	100.0
	Total	350	100.0	100.0	
Marital status	Married	266	76.4	76.0	76.3
					97.4
	Unmarried	74	21.1	21.1	100.0
	Divorce	9	2.6	2.6	
	Total	350	100.0	100.0	
Educational level	Illiterate	64	18.3	18.3	18.3
	Primary School	103	29.4	29.4	47.7
	2nd School	77	22.0	22.0	69.7
	Diploma	49	14.0	14.0	83.7
	First Degree	45	12.9	12.9	96.6
	Masters & above	11	3.1	3.1	99.7
	Total	350	100.0	100.0	100.0
Occupational status	Government	58	16.6	16.6	16.6
	Private	106	30.3	30.3	46.9
	Own business	186	53.1	53.1	100.0
	Total	350	100.0	100.0	
Income level(etb)	<2000	20	5.7	5.7	5.7
	2001-3500	44	12.6	12.6	18.3
	3501-7500	184	52.6	52.6	70.9
	>7500	101	28.9	28.9	99.7
	Total	350	100.0	100.0	
Number of members in the	2	14	4.0	4.0	4.0
	3-5	210	60.0	60.0	64.0

family	Above 5	126	36.0	36.0	100.0
	Total	350	100.0	100.0	

(Source: SPSS output of current study)

Table: 2 pictures the Socio- demographic profile of 350 respondents. In case of gender, 48% of respondents were Male and 52% were Female. The numbers of Female respondents are much higher, but lower when compared with the average female respondent which was 59.6 % reported by (Bilatu *et al*., 2013).

The prearrangement of the sample depend on age seems to be properly correct, since the test and consumption behavior of in family of different age groups different from moderately to significant from one another. The respondents are categorized in to four main group of different age. The household heads that had access to individual consumer the most choice of dairy product type by the age group of 36-45 (34.6%) tailed by the group encompassing the age group of 18-25 (14.9%). The rest of the respondents comprise of the age group of 26-35 (27.1%) and the group of above 45 is (23.4%) of the sample population. The majority levels of the marital status of respondents was different among three category which is married (76%), unmarried (21.1%) and 2.6 % Divorce. Education which is has great role in influencing social act, the desire and motivations that tolerate and control all emotional activity and behavior of individual (Bytyqi *et al*.,2020).

Based on the educational arrangement of respondents 3.1% have master's degree and above , 12.9% hold a bachelor degree, 27.2% diploma holders, 26.7% are high school graduates, 29.4% primary education and 18.3% of total respondents represent illiterate. The outcomes of respondents' occupation are demonstrates in table that 16.6% working in government sector, 30.3% are working in private sector and 53.3% are having their own business. From this results 53.3% are working their own business is higher. Concerning monthly income of the respondents, 5.7% earn less than 2000etb, 12.6% earn between 2001- 3500 etb, 52.6% earn between 3501-7500 etb and the rest 28.9 % earn greater than7 500etb. As regards family size of respondents 4% have two (2) family members, 60 % have 3 to 5 family members, and the rest 36% have above 5 family members. From this results, 60% replied they have 3 to 5 family members is higher.

4.5 Consumption Pattern of Dairy Products Type

The consumers were asked to rank their choice of dairy product type in the main survey of this study. Accordingly the result obtained shown in the table: 3 below.

Table 3. Frequency distribution of Respondents Rank from most choice to the least choice

Dairy product type	Order of choice	Frequency	Percent	Valid Percent	Cumulative Percent
Raw milk	Very high chosen	91	26.0	26.0	26.0
	high chosen	146	41.7	41.7	67.7
	intermediate chosen	88	25.1	25.1	92.9
	Low chosen	18	5.1	5.1	98.0
	Very Low chosen	7	2.0	2.0	100.0
	Total	350	100.0	100.0	
Pasteurized milk	intermediate chosen	35	10.0	10.0	10.0
	Low chosen	105	30.0	30.0	40.0
	Very Low	210	60.0	60.0	100.0
	Total	350	100.0	100.0	
Fermented Milk/Ergo	high chosen	106	30.3	30.3	30.3
	intermediate chosen	70	20.0	20.0	50.3
	Low chosen	104	29.7	29.7	80.0
	Very Low	70	20.0	20.0	100.0
	Total	350	100.0	100.0	
Cottage Cheese/Ayib	high chosen	35	10.0	10.0	10.0
	intermediate chosen	139	39.7	39.7	49.7
	Low chosen	106	30.3	30.3	80.0
	Very Low	70	20.0	20.0	100.0
	Total	350	100.0	100.0	

Butter	high chosen	209	59.7	59.7	59.7
	intermediate chosen	106	30.3	30.3	90.0
	Low chosen	35	10.0	10.0	100.0
	Total	350	100.0	100.0	

(Source: SPSS Frequency distribution of Respondents output of current study)

From table :3 presented the total respondents of Raw milk very high chosen to very low chosen, then 26% very high chosen, 41.7% high chosen, 25.1% intermediate chosen, 5.1%, low chosen and 2% of respondents represents very low chosen. In case of Pasteurized milk none of the respondent chose in very high and high order of choice, 10% intermediate chose, 30% very low chose and 60% of the respondent very low chose. Fermented Milk/Ergo also asked to rank their choice, 30.3% high chosen, 20% intermediate chosen, 29.7% low chosen and 20% very low chosen. Cottage cheese/Ayib from very high to very least choice, 10% high chosen,39.7 intermediate chosen,30.3% low chosen and 20% represent very low chosen. From the last raw of table shown the total respondents of Butter from very high to very low chosen, then 59.7% high chosen, 30.3% intermediate chosen, and 10% low chosen.

4.5.1 Descriptive Analysis Dairy Products Type Choice

Table 4. Descriptive of dairy product type choice

Product type	N	Sum	Mean	Std. Deviation
Raw milk	350	754	2.15	.936
Pasteurized milk	350	1575	4.50	.672
Fermented milk /ergo	350	1188	3.39	1.117
Cottage cheese /Ayib	350	1261	3.60	.918
Butter	350	876	2.50	.672
Total average	350	1130.80	3.2309	.18717

(Source: SPSS Descriptive Analysis output of current study)

As of dairy products type that raw milk, Pasteurized milk, Fermented milk/Ergo, Cottage Cheese /Ayib/, and Butter (Raw milk) was high chosen when understood by mean 2.15 and 0.936 standard Deviation score as shown in above table:4. The mean score values of consumers based product type chosen determinants in the case of dairy products in Sendafa town, Butter and Fermented milk/ergo were moderately chosen mean 2.50,3.39 and 0.672,1.117 standard Deviation scored respectively. Cottage cheese /Ayib low chosen mean 3.60 and 0.18 standard deviation scored while pasteurized milk very low chosen mean 4.50 and 0.672 standard deviation scored. The general mean score for all dairy product type 3.2309 and standard Deviation 0.18717 which show that the respondents are moderately concerning the above report. The standard deviation of the respondents is less than 1. This shows lower in variation in response among respondents of the point.

4.6 Replies on Factors Affecting Consumers Choice of Dairy Product Type

With the purpose of analyze the respondents general Dairy products type choice, a total of 17 questions were grouped into six sections which are: Product price, product quality safety, Product Promotion, Product Nutritive value, Product availability and Product type choice. So that to associate the respondents dairy product type choice descriptive statistics of mean and standard deviation were used. The mean shows to what range the sample group averagely agrees or disagrees with the different statements. The highest mean indicates the most of respondents agreed with that statement while the lowest mean indicate that the most of respondents not agree with that statement. Additionally, standard deviation indicates the variability of detected response. Below under table 3:4 the outcomes were tried to discuss one after another.

4.6.1 Descriptive Analysis of Factors Affecting Consumers' Dairy Products Type Choice

Table 5.Descriptive Precipitate of factors affecting consumers' dairy products type choice

Variables	Questions of variable	N	Sum	Mean	Std. Deviation
Price	Our choice Dairy product type is reasonably priced	350	1308.6	3.738	.58386

	Our choice dairy product type is value for money			9	
	Our choice Dairy product type is a good product for the high price				
	Our choice Dairy product type is a good product for the medium price				
	We buy dairy products type that is affordable for me.				
Quality Safety	our choice dairy product type is well manufactured	350	961.33	2.7467	.56363
	Our choice dairy product type has an acceptable standard for quality safety				
	Our choice dairy product type has consistent quality Safety.				
Promotion	Our choice dairy product type with creative and original Promotion.	350	869.00	2.4829	.65427
	We are loyal to a dairy product type which has attractive and recognizable promotion				
Nutritional value	We know the nutritive value of our choice product type	350	974.67	2.7848	.54591
	We know the nutritive value of our choice product type				
	We can recognize our product choice nutritious and health benefit quickly among other competing type.				
Availability	We choice a type of Dairy product, which is widely available.	350	1174.67	3.3562	.42538
	We buy the first type of Dairy product we recognize in a market				
	If our choice type of dairy product is not available in the market, We will buy any kind of type				

	available				
Dairy product type choice	The above mentioned type is always our first products type choice	350	1309.50	3.7414	.68519
	We choice the above mentioned type to other competing dairy product type				

(Source: SPSS Descriptive Analysis output of current study).

According to the respondents were requested 17 questions associated to price, quality safety, promotion, nutritive value and availability that shows in Table: 5 above, the respondents result with mean and standard deviation of values for every single variable. Hence, the highest overall mean score for dairy product type is 3.7414 and standard Deviation .68519 which show that the respondents are agree concerning the above report. The standard deviation of the respondents is less than 1. This shows lower in variation in response among respondents of the point. Following to price, higher overall mean score of availability and show that the respondents are neutral for the points and lower variation in response among respondents. Quality Safety and nutritive value score somewhat similar mean that show the respondent are neutral for those point. Lowest over all mean score for promotion is 2.4829 and 0.65427 standard deviation which shows that the respondents are disagree concerning the point. In General the summary of dairy product type choice, Product type Price, Availability reports have higher mean scores compared to, quality Safety, Nutritive value and Products type promotion.

4.6.2 Correlation Analysis

This study correlation analysis, which examines the strength of the associations among the studied variables. Pearson correlation coefficients tell magnitude and direction of associations (either one positive or negative) and the strength of the association (-1.0 + 1.0). Correlations are maybe the furthermost basic and most useful degree of relationship among two or more variables (Gogtay and Thatte, 2017).

The correlation coefficient is a statistical concept which helps in establishing a relation between two variables. It is a measure of linear relationship and as a result a value of r= 0 does not imply there is no relationship between the variables. For instance in the next

scatter plot r =0 does imply there is no relationship between the variables. Which implies no linear correlation however there is a perfect quadratic relationship: Correlation is an effect size and so we can verbally describe the strength of the correlation using the guide that (Evans, 1996) suggests for the absolute value of r: correlation value of coefficient as 1. 0.00 - 0.19 = very weak 2. 0.20 - 0.39 = weak 3. 0.40-0.59 = moderate 4. 0 .60 - 0.79= strong 0.80-1.0 = very strong.

According in Table: 6 below shows positive relationship between the five factors measuring ‟dairy product type choice within the range of 0.090 to 0.162**, all are significant at p <0.05 level

Table 6.Correlation among variables

Correlations							
		Price	Quality safety	Promotion	Nutritional Value	Availability	Product type choice
Price	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	350					
Quality safety	Pearson Correlation	.192**	1				
	Sig. (2-tailed)	.000					
	N	350	350				
Promotion	Pearson Correlation	.151	.175	1			
	Sig. (2-tailed)	.339	.162				
	N	350	350	350			
Nutritional Value	Pearson Correlation	.071	.103	.758**	1		
	Sig. (2-tailed)	.187	.055	.000			
	N	350	350	350	350		
Availability	Pearson Correlation	.150**	.144**	.011	.486**	1	

	Sig. (2-tailed)	.005	.007	.843	.000		
	N	350	350	350	350	350	
Product type choice	Pearson Correlation	.162**	.133*	.010	.012	.091	1
	Sig. (2-tailed)	.002	.013	.853	.828	.090	
	N	350	350	350	350	350	350

**. Correlation is significant at the 0.05 level (2-tailed).

(Source: SPSS Correlation Analysis output of current study)

Price Versus product type choice

Regarding price, literature reviews suggest that it is the basic variable in determination of product type choice. Similarly there is very weak a significant positive relationship between price and product type choice in this study to shows relationship, (r=0.162**).

Product quality safety versus price

There is a significant positive relationship between independent variable Product quality safety and independent variable of price (r=0.192**). This implies that a very weak of consumers' to use Product quality would have used a weak of price for dairy product type quality.

Promotion versus Nutritional Value

There is a significant positive relationship between independent variable promotion and independent variable of product nutritive value (r=0.758**) this implies that strong of consumers' to use. Promotion would have used strong of for dairy product type nutritive value.

Product availability versus Nutritional Value

There is a significant positive relationship between independent variable products type availability and independent variable of product nutritive value (r=0.486**) this implies that moderate of consumers' to use. Product availability would have moderate of for dairy product type nutritive value. Generally Table 3:5 shows that the correlation of the all

independent variables with each other and also each of them within dependent variable can be seen that positively correlated.

4. 7 Regression Analysis

So as to appreciate involvement of factors that consumers consider in choosing a dairy product type, linear and multiple regression analysis. Dairy product type choice was used as the dependent variable whereas the primary issues of factors Affecting Consumers' were used as the independent variables.

4.7.1 Assumption Testing for Regression Analysis

Consultation the assumptions of regression analysis is essential to approve that the achieved data accurately represented the sample and that investigator has found the best outcomes (Williams *et al*., 2019). In the next sections, each one assumption is described.

4.7.2 Normality Assumption

The population normality is the foundation for constructing statistical conclusions about the sample strained from the population (Schmidt and Finan, 2018). The variables in the multiple linear regression models need normal distribution. There are numerous pieces of evidence that are suitable to the investigator in testing this assumption: visual check of data plots, skew, kurtosis, and P-P plots provide investigators evidence about normality. Outliers be able to be recognized moreover thorough visual checkup of histograms. The variables in the multiple linear regression model tailed normal scattering.

Table 7. Normality test Descriptive

Descriptive

		Statistic	Std. Error
	Mean	3.7414	.03662
	95% Confidence Interval for Mean — Lower Bound	3.6694	
	95% Confidence Interval for Mean — Upper Bound	3.8135	
	5% Trimmed Mean	3.7405	

Product type choice	Median	3.5000	
	Variance	.469	
	Std. Deviation	.68519	
	Minimum	2.50	
	Maximum	5.00	
	Range	2.50	
	Interquartile Range	.50	
	Skewness	-.011	.130
	Kurtosis	-.427	.260

(Source: SPSS Normality test output of current study)

Table 8. Normality test

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Product type choice	.157	350	.000	.928	350	.000

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Product type choice	.157	350	.000	.928	350	.000

Lilliefors Significance Correction

(Source: SPSS Normality test output of current study)

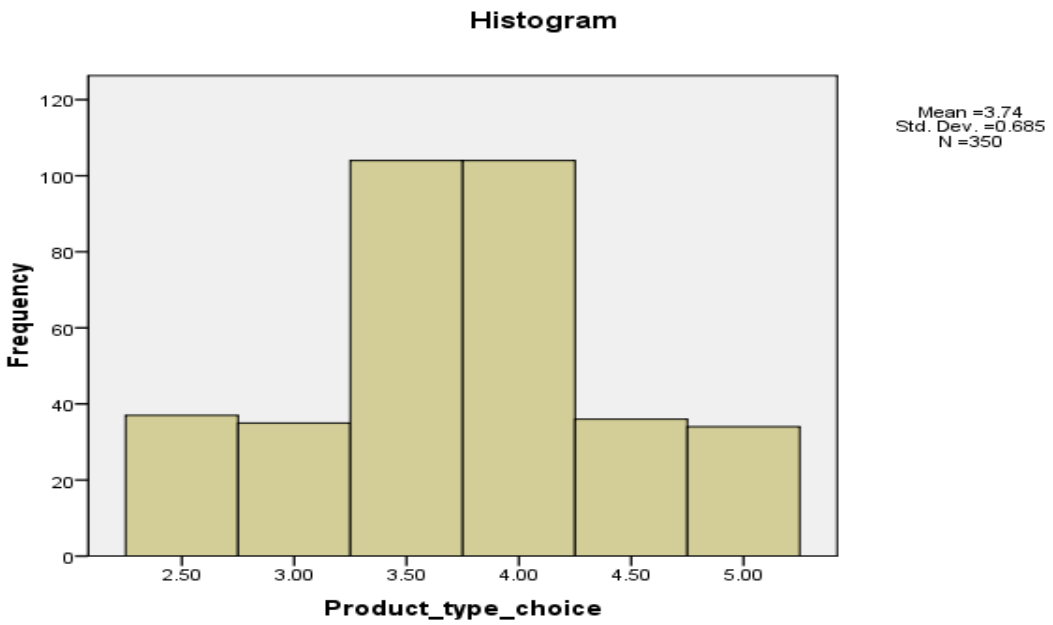

Figure 4.Normality test graph (Source: SPSS Histogram output of current study)

4.7.3 Linearity

Linearity test aims to control the relationship between predictor (independent variable) and the dependent variable is linear or not. The linearity test is a necessity in the correlation and linear regression analysis. The linearity of the association among the dependent and independent variable symbolized the degree to which the variation in the

dependent variable is associated with the independent variable (Osborne and Waters, 2019) there was no linearity difficulties between the dependent and independent variables.

4.7.4 Multicollinearity

Multicollinearity states to the hypothesis that the independent variables are uncorrelated (Arceneaux and Huber, 2007). Multicollinearity is correlations or multiple correlation of sufficient magnitude to have the possible to undesirably regression estimate. Then presenting and interpreting the regression analysis, it is important to evaluate the model in terms of the issue of multicollinearity. According to (Hill and Adkins, 2003), multicollinearity is not a violation of the expectations of regression but it might cause serious difficulties.

Table 9.Multicollinearity test

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	2.154	.440		4.900	.000	1.289	3.019		
	Price	.185	.064	.158	2.888	.004	.059	.312	.925	1.081
	Quality safety	.106	.066	.087	1.596	.111	-.025	.237	.927	1.079
	Promotion	.054	.114	.052	.475	.635	-.170	.279	.233	4.292
	Nutritional Value	-.124	.156	-.098	-.793	.429	-.430	.183	.209	5.586
	Availability	.242	.131	.150	1.843	.066	-.016	.501	.415	2.409

a. Dependent Variable: product type choice

(Source: SPSS Multicollinearity test output of current study)

In this study multicollinearity was verified using the Tolerance as well as VIF value. For example it is indicated in the table: 9 total independent variables have a Tolerance value more than 0.1 and a VIF value below 10. The VIF, which stands for variance inflation factor, is computed as "1/tolerance," and it is recommended that predictor variables (independent variable) whose VIF values are more than 10 can need additional study (Marill, 2004) Herein research, these values both tolerance level as well as VIF designate that for this analysis, present is no serious collinearity difficult in this study. Therefore, the assumption was satisfied.

4.7.5 Homoscedasticity

Homoscedasticity, or homogeneity of variances is an assumption of equal or similar variances in different groups being compared. This is an important assumption of parametric statistical test because they are sensitive to any dissimilarities. In other way, Homoscedasticity means that the variance of errors is the equal across all levels of the independent variable. When the variance of errors varies at different values of the independent variable, heteroscedasticity was showed. (Yang and Mathew, 2018) recognized homoscedasticity by way of homogeneity of variance. Scatter plots between dependent variable and each of the independent variables and/or scatter plots of the residuals (ZRESID) and predicted values (ZPRED) were tested and the outcome indicated that the variances along the line of best fit remain related as moved along the line.

4.8 Multiple Linear Regression Analysis

This regression analysis was conducted to know by how much the independent variable explains the dependent variable. It is also used to understand by how much each independent variable (price, product quality, Advertisement, Brand name awareness and Brand availability) explains the dependent variable that is brand preference.

Correlation R and R^2 of Dairy product

The "R" column symbolizes the value of R, the multiple correlation coefficients. R can be reflected to be one degree of the quality of the prediction (independent variable) of the dependent variable; products type choice.

Table 10. Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.222[a]	.049	.035	.67299	1.969

(Source: SPSS Model Summary output of current study)

a. Predictors: (Constant), Availability, Promotion, price, Quality safety, Nutritional Value

b. Dependent Variable: Products type choice

According to seen in the table: 10 the regression model presents how much of the variance in the measure of products type choice of consumers is described by the factors affecting of product type choice. Established on this, model coefficient of determination or R achieved shows that 22.2 % of the variation in the dimension (Consumer dairy products type choice with significance (p-value 0.004) the residual 16.4% of variations on dairy product type choice are described by extra variables out of this model and based on this, model coefficient of determination or R 2 achieved shows that 4.9% of the variation in the dimension function be able to described by price, product quality safety, promotion, nutrition value, availability, and product type choice of a particular dairy product type. The remaining 95.1% of variations on dairy product type choice are described by means of other variables beyond this model or variables which are not incorporated in this study for instance standard of living, behavior, attitude and economy…etc. The independent variables take accounted for 3.5% having an adjusted R-square value of .035. The residual 96.5 % are described by extra variables further than this model. In below table :11 the r-ratio in the ANOVA table checks whether the total

regression model is good fit for the data. The table displays that the predicted variables statistically significantly guess the dependent variable

Table 11. ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.045	5	1.609	3.553	.004[a]
	Residual	155.804	344	.453		
	Total	163.849	349			

(Source: SPSS ANOVA output of current study)

a. Predictors: (Constant), Availability, Promotion, price, Quality safety, Nutritional Value

b. Dependent Variable: Product type choice

In order to check the hypothesis of linear relationship between the independent variable and dependent variables, i.e., R-square = 0, the Investigation of Variance (ANOVA) is used (Sawyer, 2009). As shown in above Table: 10 the F statistics to checks in what way the regression model fits the data. If the F-statistics is lesser and the significance level below 0.05 at that point the hypothesis of linear relationship between the predicted variable and dependent variable is accepted. Therefore in this research F-statistics with 3.553 which is significant at $p<0.05$ (because the value in the column labeled Sig. is less than 0.05). This outcome states that the null hypothesis planned approximately the F-ratio were true. Consequently, it can conclude that the regression model result is significantly well estimate of product type choice of dairy product and that the regression model total expect product type significantly acceptable

Table 12.Coefficient of variable of Dairy product / Collinearity statistics/

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	**(Constant)**	2.154	.440		4.900	.000			
	Price	.185	.064	.158	2.888	.004	.162	.154	.152
	Quality safety	.106	.066	.087	1.596	.111	.133	.086	.084
	Promotion	.054	.114	.052	.475	.635	-.010	.026	.025
	Nutritional Value	-.124	.156	-.098	-.793	.429	.012	-.043	-.042
	Availability	.242	.131	.150	1.843	.066	.091	.099	.097

Dependent variable: Product type choice (Source: SPSS Model Summary output of current study)

As of the table :12 be able to say that α is 2.154, and this can be interpreted as importance that if all the predict variables, price, product quality safety, promotion, Nutritive value and product type availability measure were to be zero, the model guesses that dairy product type can only have 215.4% of product type choice . The value of β can also red off from the table above which is 0.158 and this value is the slope of the regression line. It is used for price and though this value is slope of the regression related with a unit change in the result related with a unit change in the predictor. As a result, if an independent variable is increased by single unit (if respondent's price for dairy product is

amplified by 1), then the model expects that 18.5% additional consumer will be product type choice to dairy product. The similar manner are true for product quality safety which is (10.6%), promotion (5.4%), product nutritive value(-12.4%), and availability (24.2%) for which an increase in single unit of these particular variables can end result in an increase in product type choice of dairy product by means of the percentage displayed in the table above.

To specify how well a set of predicted variables are capable to guess the dependent variable and to evaluate the conceptual framework, in this work five independent variables were entered to the multiple regression equation and single dependent variable. The five factors were the independent variables and dependent variable of the product type choice. Linear regression guesses the coefficient of the linear equation, including single or extra dependent variables that finest guess the value of the independent variable (Marill, 2004).

The multiple of linear regression equation is as follows:

$Y' = \alpha + \beta 1X1 + \beta 2X2 + \ldots \beta nXn$

Y = the predicted or expected value of dependent variable that means, product type choice

α= Constant that means, 2.154

β= slop

X= independent that means, price, Product quality safety, promotion, product nutritive value and product availability.

The expected model at this point is:

• Product type choice = 2.154+0.185 xprice+0.106x product quality safety +0.054x Promotion + -0.124x nutritive value+0.242 x product availability. As shown in Table :12, the regression standardized coefficients designed for the five independent variable; Product type price (β=.158, p = 0.004), Product type availability (β= 0.150, p=0.066), Product type quality safety (β=.087, p=0.111), Product type nutritive value (β= -0.98 p=0.429) and product type promotion (β=0.052, p=0.635), then in their descendant order

mentioning product type price as the supreme factor affecting of dairy product type choice. Promotion was set up to be the list factor that impacts on the product type choice of consumers. This specifies significant association between factors and the dependent variable (consumers' product type choice). Then, coefficients of the dependent variables are statistically significant at below five percent; alternative hypotheses associated with product type price was accepted while the remaining four alternative hypotheses (which are associated with product type quality safety, promotion, nutritive value and availability) were rejected.

4.9 Hypotheses Testing

Hypothesis 1: Price has a positive and significant effect on consumers' choice of dairy products type. To investigation this hypothesis, a multiple regression was carry on SPSS which provided the total appropriateness of the model and which was offered in the previous sections with respects of the significances of each predicted variable in causing the dependent variable. As presented on the tables 3:9 and explanations providing in the preceding sections, price has a positive and significant association with the dependent variable product type choice, while the t-statistic value was designed to be 2.888 at p value $p < 0.05$. The value of the coefficient of price was as well set up to be 0.185 which one unit change in price have 0.158 times change in the product type choice positively. For that reason, $\beta = 0.158$, $p = .004$, $p < 0.05$, Ha is accepted while Ho**:** rejected.

Hypothesis 2: Product type quality safety has a positive and significant effect on consumers' choice of dairy products type. To investigation this hypothesis, a multiple regression was carry on SPSS which provided the total appropriateness of the model and which was offered in the previous sections with respects of the significances of each predicted variable in causing the dependent variable. As presented on the tables :12 and explanations providing in the preceding sections, quality safety has a positive and significant association with the dependent variable product type choice, while the t-statistic value was designed to be 1.596 at p value $p > 0.05$. The value of the coefficient of quality safety was as well set up to be .106 which one unit change in price have .087 times change in the product type choice positively. For that reason, $\beta = .106$, $p = .111$, $p > 0.05$, Ho: accepted.

Hypothesis 3: Product type promotion has a positive and significant effect on consumers' choice of dairy products type. To investigation this hypothesis, a multiple regression was carry on SPSS which provided the total appropriateness of the model and which was offered in the previous sections with respects of the significances of each predicted variable in causing the dependent variable. As presented on the tables :12 and explanations providing in the preceding sections, promotion has a positive and significant association with the dependent variable product type choice, while the t-statistic value was designed to be.475 at p value $p > 0.05$. The value of the coefficient of quality safety was as well set up to be .054 which one unit change in price have .052 times change in the product type choice positively. For that reason, $\beta = .054$, $p = .635$, $p > 0.05$, Ho: accepted.

Hypothesis 4: Product type nutritive value has a negative and significant effect on consumers' choice of dairy products type. To investigation this hypothesis, a multiple regression was carry on SPSS which provided the total appropriateness of the model and which was offered in the previous sections with respects of the significances of each predicted variable in causing the dependent variable. As presented on the tables :12 and explanations providing in the preceding sections, nutritive value has a positive and significant association with the dependent variable product type choice, while the t-statistic value was designed to be -.793 at p value $p > 0.05$. The value of the coefficient of quality safety was as well set up to be -.124 which one unit change in price have -.098 times change in the product type choice negatively. For that reason, $\beta = .054$, $p = .429$, $p > 0.05$, Ho: accepted.

Hypothesis 5: Product type availability positive value has a negative and significant effect on consumers' choice of dairy products type. To investigation this hypothesis, a multiple regression was carry on SPSS which provided the total appropriateness of the model and which was offered in the previous sections with respects of the significances of each predicted variable in causing the dependent variable. As presented on the tables :12 and explanations providing in the preceding sections, nutritive value has a positive and significant association with the dependent variable product type choice, while the t-statistic value was designed to be 1.843 at p value $p > 0.05$. The value of the coefficient

of quality safety was as well set up to be .242 which one unit change in price have .150 times change in the product type choice positively. For that reason, β= .054, p= .066, p > 0.05, Ho: accepted.

CHAPTER IV

5. DISCUSSION

Dairy product is common food item for consumption consumed both at house hold and Community levels socially using potentially important for the wish aids Price has been exposed to have consequence excessive effect on consumer's products type choice of dairy product (Parasuman *at el.*,2021). This study is considered and carried out with the purpose of discover factor affecting consumers' choice of dairy products type amongst consumers of dairy product in Sendafa town. In line with the study results, five (5) factors: product type price, quality safety, promotion, nutritive value, and product type availability were recognized as major to product type choice. The first consideration asked to respondents was socio-demographic profile. As the result of data collection analysis 52% of the respondents were female and 48% of the respondents were male. This indicates that female is the supreme factor affect consumer choice of dairy products type. As detected by this study ended on dairy product type choice, male are close outcome to the female however these outcome demonstrate as dairy products type consumers in family. The second consideration in socio-demographic profile of respondents indicated that maximum dairy products type consumers are 36-45 years of age with 34.6% of the over-all respondents while 26-35, above 45 and18-25 age group the percentage with 27.1 %, 23.4% and 14.9% respectively. This shows that the marital zone not only the age of 36-45 however the others marital zone consumed in family dairy product also. The third consideration was marital status of respondents, where the maximum 76.3% of the respondents were married, 21.1% were unmarried, and the lowest 2.6% were divorce. Once seeing educational status the maximum 29.4% of the respondents were primary education , and followed by 27.2%, 26.7% somewhat similar percentage diploma holders, high school education respectively, and the least 3.1% those have master's degree and above respondents. The additional consideration asked to respondents was socio-demographic profile through occupation status, monthly income

and Number of family members of the respondents where the highest 53.3% their own business, lowest 16.6% in government sector , highest 52.6% earn 3501-7500, lowest 5.7% earn <2000 and highest 60 % 3 to 5 family members, lowest 4% two family members respectively.

The fourth Consideration tried to evaluate selected dairy products type consumption design percentage of respondents. The outcome to present that, the rank their choice of dairy product type. As of total respondents most choice to the least choice., that specified higher chosen, intermediate chosen, and very low chosen where from total 59.7% butter 41.7% raw milk, 30.3% fermented 39.7% cottage cheese/ayib ,Pasteurized milk 60% very low chosen.

Based on the data analysis in this study found as the price is factor affecting reflected by consumers' site their choice of dairy product type. The descriptive analysis display that price has the highest mean value paralleled to the other of product type choice factors that is 3.7389. It confirm significant level of importance. The correlation value also shows that the variable is correlated with product type choice (dependent variable) by 0.162 correlation value and the regression coefficient table reveals that the variable shows higher Beta value of 0.158 values with a significance level of 0.004.

The mean value of the predicted variable availability is 2.4829 that demonstrate significant level of importance. The correlation value shows that the variable is correlated with product type choice (dependent variable) by 0.091 correlation value and the regression coefficient table tells that the variable indicate Beta value of 0.150 values with a significance level of .066.

The statistical multiple regression check on product type quality safety as well indicated that quality safety is a significant (β=.087, p=.111) dependent of dairy product type choice. The descriptive value of the predicted variable product nutritive value also displays the mean value of 2.7848. It also express significant level of importance. The correlation value evidences that the variable is intermediately correlated with the dependent variable by .012 values and the Coefficient table from the regression analysis shows that -.098 Beta value with significance of p= .429. Consumers are regularly competent to assess each of the products types and promotion aspects. So, the mean value

of the factor variable promotion is 2.4829 which illustrate significant level of impact. The correlation value shows that the variable is strongly correlated with product type choice by .010 correlation value and the regression coefficient table tells that the variable displays Beta value of 0.052 with a significance level of p= 0.635. Even though five type's dairy products subjected to study in Sendafa town exhibits similar source Brand availability most respondents set their preference on price.

Matched with furthermost academic studies for instance (Bilatu *et al.,* 2013) the present study has confirmed the importance of product price in factors affecting consumer's choice of dairy product type with .162, 3.7389, .158 and 0.004 correlation value, mean value, beta value and significance level or p value respectively. Furthermore, (Peter and Donnelly, 2007) give details that products that are appropriate to buy in a diversity of stores rise the possibility of consumer's judgment and purchase them. While consumers are looking for low-contribution products, they are suspect to involve in wide search. For that reason, organized accessibility of product type is key for choice decision-making. To summarize the discussion, it can be decided that dairy product type price, quality safety, promotion, nutritional value and availability were recognized as serious to consumer's choice of dairy products type decision and are main qualifications of product type choice for dairy product processing sector. Product type price was best factors affecting that right influence of dairy product type choice.

6. CONCLUSION AND RECOMMENDATIONS

This section targets to appraisal the problem of the research and conclude the results in respect of the objectives of the study. Recommendation that emphases on how the difficulty known could be addressed was incorporated in the current section. A consumers' used up to normally choose unique product over one other depends on several factors. This research studied the conclusion of selected selling factors as product type price, quality safety, promotion, nutritional value and brand availability on dairy products type choice.

The main objective of the present research was to find out to what extent consuming factors affecting Consumers' choice of dairy products type in Sendafa town. The factors

known and verified to appreciate factors that affect consumer product type choice. These measurements had represent rudiments that are provided in a likert scale and distributed to the nominated respondents that are engaged using simple sampling technique. In order to response this research question ,the study practice descriptive analysis of each one of selected product type component alternative compute the frequency , percentage and cumulative percentage of each as per of strongly agree, agree, neutral, disagree, and strongly disagree for each alternative variables. In general from this survey data analyzed, dairy product type components are evaluated. Therefore, from the data found from data finding, each one component listed in the above. Descriptive statistics, correlation analysis and multiple regressions was used for analyzing the collected data.

The outcomes of the examined questionnaires shown that price was the important variables affecting the consumers' choice of dairy products type. While the four remaining variables have insignificant impact on consumers' choice of product type. The study acknowledged that the most popular dairy product type was butter and raw milk among five product type involved.

At the introductory of the study it was assumed that all identified five consuming factors affecting have a significance effect on the consumer's choice of dairy products type. Later the analysis was completed, the results shown that only one of the variable has a significant impact. For that reason the one alternative hypothesis drawn (H1) was accepted while the remaining four alternative hypothesis (H2, H3, H4 and H5) were rejected. In general according to this study product type price was the key performers in affecting and deciding consumer's product type choice.

In Recommendations Founding on the results from the research, the discussion that followed and the conclusion drawn coordinated with the study objectives, the next ideas are mentioned for dairy product processor so as to make well and knowledgeable decisions that can be used to factor affect the approach consumers make product type choice judgment. As described in the body of the study part different dairy product type processing and marketing in Sendafa town as potential area is growing (there are new more products type development coming in to the market) however, still at an infant period with respect to customer basic wishes and increasing demand for processed dairy

source foods. Industry in this sector in cooperation of manufacturers and marketers had better to consider consumers' perspectives and the initiative of their factors affecting price.

It is found that price is the major factor effects of dairy product type choice. The result is in line with manufacturer and consumers how to maintain dairy products having of confidence in marketing and price strategy used is very essential. Hence, producer, processor and marketers of dairy products should consider consumers product type choice as the customer idea during planning and implementation of their product development and marketing strategy. The respondent reflect the reason for that case dairy product in Sendafa town high price dairy products near to capital city. The recommendation of this factors require integrated dairy producer and processing technologies or industry.

Commitment, of executive committee of in Sendafa town and on dairy processing industry play a vital role for the success of Sendafa to use opportunity from locational and dairy producers potential area for creating job opportunity , food security and economy growth of the area. Therefore, there must be committed management and training dairy product processing technologist must be willing to use modern value added technologies such as diversification of processed products by focusing on factor affect consumers' product type choice.

Procedure recommendation, Dairy products pricing system and standards and regulation have to be maintained with the purpose of meeting the approval of customers of changing practices. Administration and other dairy processing industry development associates should stress on capacity building of the dairy processing technology practical based training .Therefore, it is recommended that the administration of Sendafa town has to inspire investors both manufacturers and sellers in the dairy sector by providing encouragements so that efficiency and production are make better to satisfy the increasing needs

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8. APPENDIX I: QUESTIONNAIRE

MEKELLE UNIVERSITY

COLLEGE OF VETERINARY SCIENCES

Dear Respondents! I would like to express my deep gratitude for your cooperation to express your real feeling in this questionnaire. This questionnaire is prepared and availed to you to examine your sensitivity, familiarity, feelings and attitudes towards Dairy products type choice b. I'm Masters of Science candidate at Mekelle University College

of veterinary science conducting a research entitled study of the Factors Affecting Consumers' choice of dairy products type as a partial fulfillment for my MSc degree. I assure you that responses will be kept confidential and the data will be used for intended purpose only. For more information you can contact me by phone: 0960126307 or email; chalaregasa7@gmail.com. Part I General Information, Part II Basic research question, and part III factors Effect of consumer choice of dairy product type. Please insert a tick mark in the boxes next to your answer for question 1-7.

Thank you for your greatest cooperation.

Part I. General Profile. Kindly tick mark (√) the option that best describes you.

1. Gender: 1. Male ☐ 2. Female ☐

2. Age (Years): 1.18-25 ☐ 2.26-35 ☐ 3. 36-45 ☐ 4. 45 above ☐

3. Marital status: A) Married B) Unmarried C) Divorce

4. Education: 1. Illiterate☐ 2. Primary School ☐ 3. 2nd School ☐ 4. Diploma ☐ 5. First Degree ☐ 6. Masters & above ☐

5. Occupational status: A. Government ☐ B. Private ☐ C. Own business ☐

6. Income (ETB): A. <2000 ☐ B. 2001-3500 ☐ C. 3501-7500 ☐ D. >7500 ☐

7. No. of members in the family

A. 2 ☐ **B**. 3 to 5 ☐ C. Above 5 ☐

Part II Basic research question

1. List of 5 dairy products type in the order of your choice. Rank from 1 to 5: 5-Most Choose (1-Least choose)

1. Very high choose, 2. High choose, 3. Intermediate choose, 4.Low choose, 5. Very Low choose

Dairy products type	**Product type name in order of choice 1=very high choose; 5= very low choose**					**Remark**
	1	2	3	4	5	
Raw milk						

Pasteurized milk						
Fermented milk/ergo						
Cottage cheese/ayib						
Butter						

Part III: Major factors affecting of consumers choice of dairy products type

.Based on your order of choice, dairy products type listed In part **II question number 1.**

Please tick the number that best describe your opinion and awareness with the following points associated with the determinants of your dairy product type loyalty. Or why you choose accordingly?

1. List of 5 major factors affecting consumer choice of dairy products type. In the order of your criteria and awareness to buy these products. Rank from 1 to 5: 1=strongly disagree -5= strongly agree. 1=strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree.

- Please reply to the following statements by showing your level of agreement/disagreement on each by putting a "√" mark

Items	**Dimensions**	**Rating Scale**				
	A)Type Price	SD (1)	D(2)	N(3)	A (4)	SA (5)
P1	Our choice Dairy product type is reasonably priced					
P2	Our choice dairy product type is value for money					
P3	Our choice Dairy product type is a good product for the high price					
P4	Our choice Dairy product type is a good product for the medium price					
P5	We buy dairy products type that is affordable for me.					
	B) Type quality Safety					

QS1	our choice dairy product type is well manufactured					
QS2	Our choice dairy product type has an acceptable standard for quality and safety.					
QS3	Our choice dairy product type has consistent quality and Safety.					
	C)Type Promotion					
Pm1	Our choice dairy product type with creative and original Promotion.					
Pm2	We are loyal to a dairy product type which has attractive and recognizable promotion					
	D) **Type nutritive value**					
Nv1	We know the nutritive value of our choice product type.					
Nv2	We can recognize our product choice nutritious and health benefit quickly among other competing type.					
	E) Type availability					
Av1	We choice a type of Dairy product, which is widely available.					
Av2	We buy the first type of Dairy product we recognize in a market					
Av3	If our choice type of dairy product is not available in the market, We will buy any kind of type available					
Ptc1	The above mentioned type is always our first products type choice					
Ptc2	We choice the above mentioned type to other competing dairy product type					

Statutory Declaration

I declare that this thesis presents the work carried out by myself and does not incorporate without the acknowledgement of any material previously submitted for a degree or diploma in any university; and to the best of my understanding, it does not contain any materials previously published or written by another person except where due reference is made in the text; all substantive contributions by others to the work presented including jointly authored publications, is clearly acknowledged.

Name of the Candidate: _____ Signature: _____