CONSUMERS PREFERENCE TOWARDS ORGANIC FOOD PRODUCTS: A STUDY IN PUNE CITY WITH REFERENCE TO JAGGERY BY

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ABSTRACT
Customers' preferences for jaggery are influenced by a variety of factors, including nutrition, higher price, flavor, health consciousness, alternatives to sugar, color, and organic reliability, according to this study. Nutrition and taste are two additional aspects. As a sugar substitute, jaggery has gained popularity in recent years. Natural Because natural sugarcane is used to make it, jaggery contains regular nutrients and minerals like potassium, magnesium, phosphorus, iron, and calcium that aren't found in table sugar. Jaggery is made by concentrating sugarcane juice, a naturally occurring sweetener. Jaggery can be used as a base for a variety of sweet recipes all over the world due to its sweet, wintry aroma and excellent flavor that falls somewhere between brown sugar and molasses. Vitamins, minerals like iron and copper, and nutrients like protein are all included. Because it is utilized as an energy meal with therapeutic benefits, it can be utilized for blood purification, normal liver function, and blood health. Jaggery of high grade has a brilliant yellow tone, a hard, glasslike surface, a better flavor, and a low dampness level. There are three types of jaggery: granular, solid, and liquid Present-day makers give natural jaggery liberated from synthetics like sodium bicarbonate, sulfur dioxide, citrus extract, alum, and so on. Pharmaceutical formulations contain jaggery, also known as "medicinal sugar." Improved digestion, liver cleansing, constipation relief, increased energy, blood purification, tension relief, and the treatment of bronchial or lung infections are just a few of the many health benefits of jaggery.
Keywords: Organic Products, Jaggery, Nutrition

Introduction

Jaggery is a traditionally concentrated sugarcane squeeze that has valuable restorative qualities and is a decent wellspring of minerals like calcium, phosphorus, and iron. In addition to other sweet food preparations, jaggery is a common Indian sweetener used in a variety of regular meal preparations. Jaggery is a substance that is produced by heating or processing the juice that is extracted from crushed sugar cane in accordance with regulations that are intended to prevent food adulteration. In addition to being known as Gur in India, Desi in Pakistan, Panela in Mexico, Rapadura in Brazil, Chancaca in Chile and Peru, Hakuru in Sri Lanka, and Naam Taan Oi in Thailand, jaggery also goes by the names Desi and Rapadura. Although products made from both sugarcane and date palm trees are referred to as "jaggery," in actuality, the term only applies to an unrefined form of sugar made from sugarcane juice. Traditional Indian foods like chakkarai pongal, milk pongal, paayasa obbattu, tilgul, kakvi, laddus, and puran poli have all been made by use of jaggery,without the use of pesticides or synthetic fertilizers, an organic jaggery is made from sugarcane grown in organic farms in India with cow manure and urine added. In contrast to chemically processed refined sugar, jaggery retains trace minerals and vitamins, making it a nutritious sweetener that is also healthy.

The development of sugarcane occurs at natural homesteads in India with the utilization of cow manure and cow pee and without the use of compound composts or pesticides brings about the creation of natural jaggery. When it comes to the production of jaggery, the primary difference between the organic and inorganic processes is that the organic process uses a small amount of lime to lower the acidity of the juice. Organic jaggery is therefore darker in color than inorganic jaggery. Jaggery keeps a person's body temperature regular and keeps their stomach cool . Compared to sugar, jaggery is more nourishing. Consuming newly prepared jaggery may result in diarrhea.

Consuming freshly prepared jaggery has been associated with constipation in some persons. Consuming jaggery has a very similar effect our blood sugar as eating sugar. People without diabetes can use jaggery instead of sugar. We believe that eating some jaggery as a detox after a meal is a good idea because it helps to cleanse the liver by removing harmful toxins from the body. This can aid women in coping with PMS symptoms like mood swings, cramping, and stomach pain. Gur is a sugarcane-based natural medicine. Compared to sugar, it is less refined. It is a brown raw saccharose material that is coloured as a result of concentration factors like bagasse and wood ash. Organic jaggery stimulates the body's digestive enzymes, improves bowel motions, and helps prevent and treat constipation. Constipation is a condition in which it is difficult to evacuate the bowels, usually accompanied by hardened feces. After lunch, a tiny piece of jaggery may improve digestion, which is important for general health. Jaggery is a great meal for treating colds and the flu because of its calming effects. One of jaggery's most well-known benefits is that it can purify the blood. When used frequently and in little amounts, it purifies the blood, ensuring that the body is safe and free from sickness.

Review of Literature

Santiago (2008), Using a socioeconomic and anthropological approach, the study examined the motivation for and spending patterns of agroecological products in the metropolitan region of Campinas, Sao Paulo State, Brazil. The objective was to assess the current ecological culture's cultural and economic values as well as consumer behavior. The current state of local relations and global exchanges can be meaningfully analyzed if the cultural dynamics of each expenditure process are understood.

Aertsens (2009), The purpose of this paper is to provide an overview within a framework that connects the theory of Schwartz values and the theory of planned behavior (TPB). The intention is to emphasize the significance of an affective attitude, feelings, personal custom, involvement, and ambiguity in relation to the consumption of organic food. To better comprehend why consumers choose organic food, related theories like the values theory and the theory of planned behavior have been utilized.

Costance and Choi (2010), In contrast to organic and conventional producers, their study looks at the predictors of interest and perceived barriers to organic acceptance among pragmatic conventional producers in Texas. According to the findings, at least some conventional producers are interested in organic production. The paper argues that more institutional support is needed for natural reception to work best.

Voon (2011), Using a survey, the study looked at the factors that motivated consumers in a Malaysian city to buy organic food. This suggests that consumer attitudes should be the primary focus of efforts to encourage consumption.

Paul and Rana (2012), This study aims to learn about the habits and intentions of consumers regarding organic food purchases. The study also aims to find out what influences consumers' preferences for organic food. The result demonstrates that health, accessibility, and segment-specific training have a significant impact on consumer attitudes toward natural food purchases. Overall, consumers are happier with organic food than with non-organic food, but the level of happiness varies based on a number of factors. Businesses can use marketing programs and strategies to positively influence customers, according to the findings of this study.

Attanasio (2013), In his study, they looked at people's plans to buy organic food in Italy's Pontina Province. Semi-structured questionnaires were used to survey 280 people. The results showed that consumers' perceptions of the value of organic food products and their belief in the health and safety of the product influenced their decision.
Nandi (2014), The purpose of this study is to learn more about the organic product preferences of customers based in Bangalore, India. According to the findings, supermarkets and specialty organic stores were the most popular places to purchase organic products.

Leong and Paim (2015), The intention of Chinese college students to eat organic food is examined in this study. 500 samples were evaluated using a mail-in online survey. Therefore, the findings would be beneficial to the local availability of organic food products in Malaysia.

Abusuniva (2016), The study's objective is to raise consumers' awareness of organic foods in Australia. A sample size of 1011 was chosen for the study via an online survey; based on a demographic profile that supports the research hypotheses by revealing positive and significant effects of health, hedonism, and trust on consumer purchase intention.

Chen and Sayed (2017), The study says that in California, a retail format choice may be influenced by customers' preference for organic food. Because of this, the households of regular organic consumers, who are more likely to

support specialty and discount organic stores, formed the basis for the study's findings. Conversely, they shop less at convenience stores and warehouse clubs. For retailers, this has significant managerial implications.

Research Methodology

The area of research for this research paper is Organic Jaggery in various portions of Pune region with the support of Descriptive research method, the research methodology used for writing this paper is quantitative research, apart from that here we have formed 5 hypothesis for the testing these hypothesis we have applied chi square and reliability test for data collection we have collected from 294 people who were randomly selected respondent from various parts of Pune city through questionnaire method , so far the tool which we have used for data analysis is SPSS.

Data Collection

The primary data were gathered through in-person interviews and a carefully planned interview schedule. The sample respondents' characteristics, perspectives, attitudes, convictions, and intentions regarding organic food products were detailed in the survey.
The primary data were compared to the interview timeline from 2021 to 2022.

Optional information on the area, populace, and different qualities of the examination district were accumulated from the sites APEDA, FIBL, IFOAM, Guides of India, and other authority distributions, diaries, and yearly reports.

The primary data were gathered through in-person interviews and a carefully planned interview schedule. The sample respondents' opinions, attitudes, beliefs, and intentions regarding organic food, as well as their demographic characteristics, were all included in the interview schedule. The reference year for the essential information was 2021-2022.
The websites APEDA, FIBL, IFOAM, and Maps of India, in addition to other official publications, journals, and annual reports, served as sources for secondary data on the location, population, and other characteristics of the research region.

Data Analysis

Hypothesis 1
H0 – Consumer preference for organic jaggery and nutrition do not have significant relation.

Ha- Nutrition and consumer preference for organic jaggery have a significant relation.

	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	134.658[a]	16	.000
Likelihood Ratio	94.463	16	.000
Linear-by-Linear Association	43.319	1	.000
N of Valid Cases	294		

Table No.:1 Chi Square Test

a. The expected count of 15 cells is less than 5, or 60%. The expected minimum count is.00.

Interpretation- It shows significant relation among Nutrition and Consumer Preference towards Organic Jaggery(p=0.000). Hence, the null hypothesis is rejected by us.

Hypothesis 2
H0 – There is no significant relation between the price of organic jaggery and consumer preference for it.

Ha- There is a significant relation between consumers' preference for organic jaggery and price.

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	61.280[a]	16	.000
Likelihood Ratio	47.084	16	.000
Linear-by-Linear Association	24.493	1	.000
N of Valid Cases	294		

Table No :2 Chi Square Test

a. The expected count of 14 cells is less than 5 (56.0%). The expected minimum count is.00.

Interpretation -It shows significant relation among Price and Consumer Preference towards Organic Jaggery(p=0.000). Hence, the null hypothesis is rejected by us.

Hypothesis 3
H0 – Taste and consumer preference for organic jaggery have no significant relation.

Ha- There is a significant relation between taste and preference for organic jaggery among consumers.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	65.698[a]	12	.000
Likelihood Ratio	46.761	12	.000
Linear-by-Linear Association	26.975	1	.000
N of Valid Cases	294		

Table No:3 Chi Square Tests

a. 11 cells (55.0%) are expected to have a count below 5. The expected minimum count is.03.

Interpretation- It shows significant relation among Taste and Consumer Preference towards Organic Jaggery(p=0.000). Hence, the null hypothesis is rejected by us.

Hypothesis 4
H0 – There is no significant relation between consumers' preference for organic jaggery and their health requirements.

Ha-There is a significant relation between consumers' preference for organic jaggery and health requirements.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	74.996[a]	12	.000
Likelihood Ratio	54.463	12	.000
Linear-by-Linear Association	23.030	1	.000
N of Valid Cases	294		

Table No:4 Chi Square Test

a. 11 cells (55.0%) are expected to have a count below 5. The expected minimum count is.01.
Interpretation-It shows significant relation among Health Requirement and Consumer Preference towards Organic Jaggery(p=0.000). Hence, the null hypothesis is rejected by us.

Hypothesis 5
H0 – There is no significant relation between the preference of consumers for organic jaggery and the sugar substitute.

Ha-There is a significant relation between consumers' preference for organic jaggery and the sugar substitute.

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	76.907[a]	16	.000
Likelihood Ratio	71.782	16	.000
Linear-by-Linear Association	17.348	1	.000
N of Valid Cases	294		

Table No:5 Chi Square Test

a. 13 cells (52.0%) are expected to have a count below 5. The expected minimum count is.01.
Interpretation- it shows significant relation among Sugar substitute and Consumer Preference towards Organic Jaggery(p=0.000). Hence, the null hypothesis is rejected by us.

Hypothesis 6
H0 – Color and consumer preference for organic jaggery are not significantly related.

Ha- Color and the preference of consumers for organic jaggery are significantly related.

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	401.504[a]	16	.000
Likelihood Ratio	91.621	16	.000
Linear-by-Linear Association	36.887	1	.000
N of Valid Cases	294		

Table No:6 Chi Square Test

a. The expected count of 16 cells is less than 5 (64.0%). The expected minimum count is.00.

Interpretation- It shows significant relation in Colour and Consumer Preference towards Organic Jaggery(p=0.000). Hence, the null hypothesis is rejected by us.
Results

- 44% of Respondents are from Pune City. Females make up 48% of the respondents.
- Organic jaggery has been tried by the majority of respondents. The majority of respondents include jaggery in their diet. 35 percent of people regularly use jaggery.
- According to the majority of respondents, organic jaggery is distinct from regular jaggery. Every respondent purchases jaggery from a store or factory because it is convenient for them.
- Half of respondents buy at least 1 kilogram of jaggery each month, and another half buy more. Tea and coffee were made with jaggery cubes and powder by half of respondents.
- Most Respondents feel that Natural jaggery is Great for Wellbeing. Organic jaggery is liked by half of respondents.
- The majority of respondents believe that Organic Jaggery is extremely expensive. A big part of the Respondents use Jaggery as a Substitute for Sugar.
- Most respondents believe that organic jaggery is healthier than sugar.
- Most respondents believe that Organic Jaggery has a different color than Regular Jaggery.
- Certified organic jaggery was preferred by 75 percent of respondents.
- 82% of respondents are ready to spend more money for organic sugar.

Suggestions

• Organic jaggery is not widely available or used outside of Maharashtra. Individuals are by and large uninformed about natural jaggery.

• Since diabetic patients could also use those products, it would be great if a major brand like Tata, Ashirvad, or another FMCG company took the initiative to start producing and conducting research with jaggery in place of sugar.

• Albeit natural jaggery is more costly than ordinary jaggery, it is more supplement thick. Since organic jaggery is cheaper or on par with regular jaggery when produced in large quantities, there has been an increase in demand for it.

Conclusion

We can simply conclude that majority of consumers are ready to spend more for organic jaggery than regular jaggery because organic jaggery contains more nutrients. Jaggery produced using natural sugarcane contains normal nutrients and minerals like calcium, magnesium, potassium, and phosphorus that are absent in table sugar. The results of the survey can be used to draw several inferences, such as how people perceive organic jaggery in terms of price, color, health consciousness, color, taste, and nutrition. Organic jaggery, according to most respondents, is more expensive than regular jaggery. In addition, we can deduct from the reactions that organic jaggery has a distinct flavor and color.

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