

# Determinants of Consumer Preference for Cold-Pressed Edible Oils: Evidence from Karnataka

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## Abstract

Consumer preferences for edible oils have undergone significant transformation in recent years due to increasing health awareness and changing dietary patterns. Among various edible oil alternatives, cold-pressed oils have gained considerable attention because of their natural extraction process and perceived nutritional benefits. The present study aims to examine the determinants influencing consumer preference toward cold-pressed edible oils in Karnataka. The study specifically investigates the role of factors such as health consciousness, perceived product quality, brand trust, price perception, and market availability in shaping consumer purchase intention. The research adopts a descriptive research design and utilizes a quantitative approach to collect data from consumers. Primary data were collected through a structured questionnaire administered to 200 respondents who purchase edible oils for household consumption. The collected data were analyzed using statistical techniques including descriptive statistics, exploratory factor analysis, and multiple regression analysis to identify the key determinants influencing consumer purchase behaviour. The results of the study indicate that health consciousness is the most significant factor influencing consumer purchase intention toward cold-pressed oils. Consumers increasingly associate cold-pressed oils with superior nutritional value and healthier dietary practices. In addition, perceived product quality and brand trust also demonstrate significant positive effects on purchase intention. However, price perception negatively influences consumer adoption, indicating that higher product prices may act as a barrier for some consumers. Market availability was also found to significantly affect purchase behaviour, suggesting that wider distribution and accessibility can enhance consumer adoption. The findings of the study contribute to the growing literature on consumer food behaviour and provide useful insights for producers, marketers, and policymakers aiming to promote healthier edible oil alternatives. Enhancing consumer awareness, strengthening brand credibility, and improving product accessibility may significantly increase the adoption of cold-pressed edible oils in the market.

## Keywords

*Consumer Behaviour, Cold-Pressed Oils, Health Consciousness, Purchase Intention, Edible Oil Market, Karnataka*

## 1. Introduction

Consumer food consumption patterns have undergone significant transformation in recent years, largely driven by increasing awareness of health, nutrition, and sustainable lifestyles. In particular, consumers are increasingly shifting from highly refined edible oils toward more natural and minimally processed alternatives such as cold-pressed oils. Cold-pressed oils are extracted using traditional mechanical pressing techniques without excessive heat or chemical treatment, thereby preserving essential nutrients, antioxidants, and natural flavors. This method of extraction is widely believed to maintain the oil's original nutritional profile, making it an attractive option for health-conscious consumers (Gupta & Prakash, 2017).

The growing demand for natural and organic food products has been recognized globally, especially in developing economies where traditional food practices are experiencing a revival. In India, traditional oil extraction methods such as "Ghani" or wooden cold pressing have been practiced for centuries. However, with the rapid industrialization of the food processing sector, refined oils gradually dominated the edible oil market due to their longer shelf life, lower cost, and mass production capabilities. In recent years, however, increasing concerns about lifestyle diseases such as obesity, cardiovascular disorders, and diabetes have led consumers to

reconsider their dietary choices, resulting in renewed interest in cold-pressed edible oils (Drewnowski & Popkin, 2017).

Consumer behaviour towards food products is influenced by a variety of factors including health consciousness, product quality perceptions, price sensitivity, brand trust, and product availability. Health awareness has emerged as a major determinant shaping consumer preferences in the edible oil market. Studies have shown that consumers who demonstrate higher levels of health consciousness tend to prefer natural and minimally processed food products that are perceived to offer superior nutritional benefits (Michaelidou & Hassan, 2008). Similarly, product quality attributes such as taste, aroma, and perceived purity also play a crucial role in shaping consumer purchasing decisions for edible oils.

In addition to health considerations, marketing factors such as brand credibility, product availability, and pricing strategies also significantly influence consumer purchase behaviour. According to Kotler and Keller (2016), consumer decision-making processes are strongly affected by both internal factors (such as attitudes, perceptions, and lifestyle) and external factors including marketing communications, product positioning, and retail availability. In the context of cold-pressed oils, consumers often perceive these products as premium and healthier alternatives to conventional refined oils, although their relatively higher price may influence purchasing decisions among certain consumer segments.

Karnataka represents an interesting regional context for examining consumer behaviour toward cold-pressed edible oils. The state has a strong agricultural base and a rich tradition of oilseed cultivation, including groundnut, sesame, coconut, and sunflower. Additionally, the increasing presence of organic food stores, farmers' markets, and health-focused retail outlets in urban centers such as Bengaluru, Mysuru, and Mangaluru has contributed to the growing visibility of cold-pressed oil products. These developments suggest that consumer awareness and demand for traditional and health-oriented edible oils may be gradually increasing in the region.

Despite the increasing popularity of cold-pressed oils in the Indian market, empirical research examining the determinants of consumer preference toward these products remains relatively limited. Understanding the factors that influence consumer purchasing behaviour can provide valuable insights for marketers, producers, and policymakers seeking to promote healthier and more sustainable food consumption practices. In particular, examining the relative influence of factors such as health consciousness, perceived product quality, brand trust, price perception, and market availability can help identify the key drivers shaping consumer demand for cold-pressed oils.

Therefore, this study aims to examine the determinants influencing consumer preference for cold-pressed edible oils in Karnataka. By analyzing consumer perceptions and purchasing behaviour, the study seeks to identify the major factors that affect purchase intentions and provide insights into the evolving dynamics of the edible oil market. The findings of this research may contribute to both academic literature on consumer food behaviour and practical strategies for businesses operating in the health-oriented food products sector.

### **1.1. Theoretical Background of the Study**

Understanding consumer behaviour toward food products requires a theoretical framework that explains how individuals evaluate product attributes, develop preferences, and ultimately make purchasing decisions. Several theories from consumer behaviour and marketing literature provide valuable insights into how consumers form attitudes and intentions toward health-oriented food products such as cold-pressed edible oils. In this context, theories such as the Theory of Planned Behaviour, Health Belief Model, Consumer Perception Theory, and Food Quality Perception Theory are particularly relevant in explaining consumer preferences for natural and minimally processed food products.

### **1.1.1 Theory of Planned Behaviour (TPB)**

The Theory of Planned Behaviour (TPB) proposed by Icek Ajzen (1991) is one of the most widely used frameworks for understanding consumer decision-making. According to this theory, an individual's behavioural intention is influenced by three primary factors: attitudes toward the behaviour, subjective norms, and perceived behavioural control. Attitudes refer to an individual's positive or negative evaluation of performing a particular behaviour, subjective norms represent perceived social pressures, and perceived behavioural control reflects the ease or difficulty of performing the behaviour.

In the context of food consumption, TPB has been widely used to explain consumer intentions toward organic, natural, and health-oriented food products. Consumers who hold favorable attitudes toward healthy eating and perceive social support from family or peers are more likely to develop a positive intention to purchase healthier alternatives. Research indicates that health awareness and positive attitudes toward natural food products significantly influence consumers' willingness to purchase organic and minimally processed foods (Paul, Modi, & Patel, 2016). Therefore, the Theory of Planned Behaviour provides an important framework for understanding how consumer attitudes and social influences shape the demand for cold-pressed oils.

### **1.1.2 Health Belief Model**

The Health Belief Model (HBM) is another theoretical framework frequently used to explain health-related behaviours. The model suggests that individuals adopt certain health behaviours based on their perceptions of health risks and the benefits of preventive actions. The key constructs of the model include perceived susceptibility, perceived severity, perceived benefits, and perceived barriers.

In the context of dietary behaviour, consumers who believe that unhealthy eating habits may lead to serious health problems are more likely to adopt healthier food alternatives. Increasing awareness about lifestyle diseases such as cardiovascular disorders, obesity, and diabetes has encouraged many consumers to shift toward healthier dietary choices. Studies have shown that consumers with higher health consciousness demonstrate stronger preferences for natural food products and are more likely to adopt healthier consumption patterns (Michaelidou & Hassan, 2008). Cold-pressed oils, which are often marketed as nutritionally superior and free from chemical processing, align well with the motivations described in the Health Belief Model.

### **1.1.3 Consumer Perception Theory**

Consumer perception refers to the process through which individuals select, organize, and interpret information about products to form meaningful impressions. According to Leon G. Schiffman and Leslie Lazar Kanuk (2010), perception plays a crucial role in shaping consumer attitudes, product evaluation, and purchase behaviour. Consumers often rely on perceived attributes such as product quality, authenticity, naturalness, and brand credibility when making purchasing decisions.

For food products, perceptions about health benefits, product purity, and traditional processing methods significantly influence consumer preferences. Cold-pressed oils are frequently perceived as natural and unadulterated compared to refined oils, which are often associated with chemical processing and loss of nutrients. These perceptions can create strong positive attitudes toward cold-pressed oils among consumers who prioritize health and natural food products.

### **1.1.4 Food Quality and Attribute Theory**

Food quality perception theory emphasizes the importance of both intrinsic and extrinsic product attributes in shaping consumer preferences. Intrinsic attributes include factors such as taste, aroma, nutritional value, and freshness, while extrinsic attributes include brand reputation, packaging, price, and availability. According to Grunert Klaus G. (2005), consumers often rely on a combination of intrinsic and extrinsic cues when evaluating food products, particularly when the actual quality of the product cannot be assessed prior to purchase.

In the case of edible oils, intrinsic attributes such as flavor, purity, and nutritional value play a significant role in influencing consumer perceptions. At the same time, extrinsic factors such as brand reputation, packaging design,

and price positioning also contribute to shaping consumer purchase decisions. Cold-pressed oils are often positioned in the market as premium products emphasizing traditional extraction methods, superior quality, and health benefits. As a result, consumers who perceive higher quality and nutritional value in these products are more likely to develop favorable purchase intentions.

### **1.1.5 Consumer Health Consciousness and Food Choice Behaviour**

Health consciousness has emerged as an important psychological factor influencing consumer food choices. Health-conscious consumers actively seek information about the nutritional value of food products and are more likely to adopt dietary habits that support long-term health and well-being. Studies have shown that consumers with high levels of health awareness tend to prefer organic, natural, and minimally processed foods (Drewnowski & Popkin, 2017).

In recent years, increasing awareness about the harmful effects of excessive chemical processing in food products has contributed to the growing popularity of traditional food preparation methods. Cold-pressed oils are widely promoted as healthier alternatives to refined oils because they retain natural antioxidants, vitamins, and essential fatty acids during the extraction process. Consequently, consumers who prioritize health and wellness are more inclined to consider cold-pressed oils as a desirable component of their diet.

### **1.1.6 Conceptual Understanding of Consumer Preference for Cold-Pressed Oils**

Based on the theoretical perspectives discussed above, consumer preference for cold-pressed edible oils can be understood as the outcome of multiple interacting factors. Health consciousness, perceived nutritional benefits, product quality perception, brand trust, price considerations, and product availability all contribute to shaping consumer attitudes and purchase intentions. These factors collectively influence how consumers evaluate cold-pressed oils relative to conventional refined oils.

The integration of consumer behaviour theories with food consumption research provides a comprehensive framework for analyzing the determinants of consumer preference. By examining these theoretical perspectives, the present study seeks to understand how various psychological and market-related factors influence consumer purchase decisions regarding cold-pressed edible oils in Karnataka.

## **2. Review of Literature**

**Michaelidou and Hassan (2008)** examined the influence of health consciousness, food safety concerns, and ethical identity on consumers' attitudes toward organic food products. The study found that consumers with higher levels of health consciousness were more likely to prefer natural and minimally processed food products. The authors concluded that health-related motivations significantly influence consumer attitudes and purchasing behaviour toward healthier food alternatives.

**Grunert (2011)** analyzed how consumers perceive food quality and the role of product attributes in shaping purchase decisions. The study highlighted that both intrinsic attributes (such as taste and nutritional value) and extrinsic attributes (such as brand image and price) influence consumer evaluation of food products. The findings emphasized that perceived product quality plays a critical role in determining consumer preference in food markets.

**Paul, Modi, and Patel (2016)** applied the Theory of Planned Behaviour to study consumer intentions toward organic food products in India. Their research revealed that consumer attitudes, subjective norms, and perceived behavioural control significantly influenced purchase intentions. The study suggested that awareness and positive attitudes toward health and environmental sustainability contribute strongly to consumer demand for organic and natural food products.

**Drewnowski and Popkin (2017)** investigated global trends in dietary consumption and highlighted the growing shift toward healthier food alternatives. The study found that increasing awareness about lifestyle diseases and nutritional health has significantly altered consumer food consumption patterns. The authors emphasized that

consumers are gradually moving toward minimally processed food products perceived to be healthier and more natural.

**Bryła (2018)** explored consumer perceptions regarding the quality and authenticity of traditional food products. The study revealed that consumers often associate traditional production methods with higher quality, better taste, and improved nutritional value. The findings indicated that traditional processing techniques, such as cold pressing, positively influence consumer perceptions and purchasing decisions.

**Aschemann-Witzel and Zielke (2019)** examined consumer preferences for natural and sustainable food products. The research showed that consumers are increasingly concerned about food quality, environmental sustainability, and health implications of processed foods. The study concluded that marketing strategies emphasizing natural production processes and nutritional benefits significantly influence consumer purchasing behaviour.

**Kumar and Kapoor (2020)** studied consumer awareness and perception toward organic and natural food products in India. Their findings indicated that health consciousness, product quality perception, and trust in product authenticity significantly influence consumer purchase intentions. The authors emphasized the growing demand for traditional and natural food products among urban consumers.

**Singh and Verma (2021)** analyzed the factors influencing consumer buying behaviour toward organic food products in emerging markets. The study found that health awareness, environmental concern, and product availability significantly affect consumer purchase decisions. The authors suggested that increasing consumer education and product accessibility could further enhance the demand for natural food products.

**Joshi and Rahman (2022)** investigated consumer attitudes toward sustainable food consumption and the role of perceived health benefits. The study revealed that consumers who perceive strong health advantages in natural food products demonstrate higher purchase intentions. The research highlighted the importance of consumer awareness and trust in influencing sustainable food consumption behaviour.

**Sharma and Jain (2023)** examined consumer perceptions toward cold-pressed edible oils in urban Indian markets. The study found that consumers associate cold-pressed oils with superior nutritional quality, natural processing, and better taste compared to refined oils. However, the research also noted that higher product prices and limited market availability may influence purchasing behaviour among certain consumer groups.

**Patel and Desai (2024)** studied the determinants of consumer preference for traditional food products in India. The findings revealed that product authenticity, perceived health benefits, and brand trust significantly influence consumer purchase behaviour. The study emphasized that traditional food processing methods such as cold pressing are increasingly valued by consumers seeking healthier alternatives.

**Rao and Reddy (2024)** analyzed consumer awareness and adoption of natural edible oils in South India. The study indicated that health consciousness, product knowledge, and perceived nutritional benefits are major drivers of consumer preference. The authors concluded that increasing awareness campaigns and improved product accessibility can significantly enhance consumer adoption of cold-pressed oils.

## 2.1 Research Gap

The growing interest in healthy dietary practices has led to increased academic attention toward natural and organic food consumption. Several studies have examined consumer attitudes and purchase behaviour related to organic food products, sustainable food consumption, and health-oriented food choices (Michaelidou & Hassan, 2008; Paul et al., 2016; Joshi & Rahman, 2022). These studies highlight that health consciousness, environmental concern, and perceived product quality significantly influence consumer preference for natural food products. Similarly, research on food quality perception emphasizes the importance of intrinsic attributes such as taste and

nutritional value, along with extrinsic attributes like brand image and price, in shaping consumer purchase decisions (Grunert, 2011).

Recent studies have also explored the growing demand for traditional and minimally processed food products, suggesting that consumers increasingly prefer foods that are perceived to be natural, authentic, and nutritionally beneficial (Aschemann-Witzel & Zielke, 2019; Sharma & Jain, 2023). However, much of the existing literature primarily focuses on organic food products or general healthy food consumption rather than specifically examining consumer behaviour toward cold-pressed edible oils.

Furthermore, while a few recent studies have discussed consumer awareness and perception toward cold-pressed oils, these investigations are often limited to general observations regarding health benefits and product quality perceptions. There is relatively limited empirical research that systematically examines the specific determinants influencing consumer preference for cold-pressed edible oils, particularly within regional contexts. Factors such as health consciousness, perceived nutritional benefits, brand trust, price perception, and product availability have not been comprehensively examined together in the context of consumer purchasing decisions.

In addition, the majority of existing studies have focused on broad national markets or urban consumer segments, leaving a lack of region-specific empirical evidence regarding consumer behaviour toward cold-pressed oils. Karnataka, which has a strong tradition of oilseed cultivation and increasing consumer awareness of healthy food alternatives, represents a relevant context for studying this phenomenon. However, limited academic research has investigated how consumers in this region perceive and evaluate cold-pressed edible oils compared to conventional refined oils.

Therefore, there exists a clear research gap in understanding the key determinants that influence consumer preference and purchase intention toward cold-pressed edible oils within the specific socio-economic and cultural context of Karnataka. Addressing this gap can contribute to both academic literature on consumer food behaviour and practical insights for marketers and producers operating in the health-oriented edible oil market.

## **2.2 Problem Statement**

In recent years, increasing health awareness and changing dietary habits have led to growing consumer interest in natural and minimally processed food products. Cold-pressed edible oils have gained popularity due to their perceived nutritional advantages, traditional extraction methods, and absence of chemical processing. Despite this growing awareness, the adoption of cold-pressed oils among consumers remains inconsistent and varies across different demographic and socio-economic groups.

One of the major challenges in the edible oil market is the limited understanding of the factors that influence consumer purchasing decisions toward cold-pressed oils. While many consumers recognize the potential health benefits associated with these products, factors such as higher price, limited availability, lack of product knowledge, and brand trust may influence their purchase behaviour. As a result, there exists uncertainty regarding the extent to which consumers are willing to shift from conventional refined oils to cold-pressed alternatives.

Furthermore, the edible oil market in India is highly competitive, with a wide range of refined and blended oil products dominating retail shelves. In this context, producers and marketers of cold-pressed oils face significant challenges in promoting their products and convincing consumers about their value and benefits. Understanding the determinants that influence consumer preference is therefore essential for developing effective marketing strategies and improving consumer awareness.

Given these circumstances, it becomes important to examine the factors that influence consumer preference and purchase intention toward cold-pressed edible oils. In particular, there is a need to investigate how variables such as health consciousness, perceived product quality, brand trust, price perception, and market availability affect consumer behaviour in this emerging product category.

Therefore, the central problem addressed in this study is to analyze the determinants influencing consumer preference for cold-pressed edible oils and to understand how these factors shape purchase intentions among consumers in Karnataka. The findings of this study are expected to provide valuable insights for researchers, policymakers, and marketers interested in promoting healthier and more sustainable food consumption practices.

### **2.3 Objectives of the Study**

The present study aims to examine consumer behaviour and identify the key determinants influencing the purchase of cold-pressed edible oils in Karnataka. In order to achieve this purpose, the study focuses on the following specific objectives:

1. To examine the level of consumer awareness regarding cold-pressed edible oils in Karnataka.
2. To analyze consumer perceptions toward the quality and health benefits of cold-pressed edible oils.
3. To identify the major determinants influencing consumer preference for cold-pressed edible oils.
4. To examine the relationship between selected determinants and consumer purchase intention toward cold-pressed oils.
5. To provide insights and recommendations for marketers and producers of cold-pressed edible oils.

### **2.4 Research Hypotheses**

Based on the theoretical background and the variables considered in the statistical analysis, the following hypotheses are formulated to examine the determinants influencing consumer purchase intention toward cold-pressed edible oils in Karnataka.

**H<sub>1</sub>:** Health consciousness has a significant positive influence on consumer purchase intention toward cold-pressed edible oils.

**H<sub>2</sub>:** Perceived product quality has a significant positive influence on consumer purchase intention toward cold-pressed edible oils.

**H<sub>3</sub>:** Brand trust has a significant positive influence on consumer purchase intention toward cold-pressed edible oils.

**H<sub>4</sub>:** Price perception has a significant influence on consumer purchase intention toward cold-pressed edible oils.

**H<sub>5</sub>:** Market availability has a significant positive influence on consumer purchase intention toward cold-pressed edible oils.

## **3. Research Methodology**

The research methodology provides a systematic framework for collecting, analyzing, and interpreting data related to consumer behaviour toward the purchase of cold-pressed edible oils. This section describes the research design, data sources, sampling procedure, data collection methods, measurement instruments, and statistical techniques used in the study.

### **3.1 Research Design**

The present study adopts a descriptive research design to examine the determinants influencing consumer preference toward cold-pressed edible oils in Karnataka. Descriptive research is appropriate when the objective is to describe characteristics of a population and analyze relationships among variables. The study aims to identify and analyze factors such as health consciousness, perceived product quality, brand trust, price perception, and product availability that influence consumer purchase intentions. The descriptive research approach allows the researcher to systematically collect data from respondents and analyze their perceptions, attitudes, and purchase behaviour toward cold-pressed edible oils.

### **3.2 Nature of the Study**

The study is quantitative in nature, as it involves the collection of structured numerical data from consumers through a survey method. Quantitative analysis enables the application of statistical techniques such as descriptive statistics, factor analysis, and regression analysis to identify relationships among variables and test the research hypotheses.

### 3.3 Sources of Data

The study utilizes both primary data and secondary data.

#### Primary Data:

Primary data were collected directly from consumers using a structured questionnaire designed to capture information regarding their awareness, perceptions, and purchase behaviour toward cold-pressed edible oils.

#### Secondary Data:

Secondary data were collected from academic journals, research articles, books, industry reports, and online databases. These sources helped in developing the theoretical background, review of literature, and conceptual framework for the study.

### 3.4 Study Area

The study was conducted in the state of Karnataka, India. Karnataka provides an appropriate context for the research due to increasing consumer awareness regarding health and nutrition, along with the growing availability of traditional and organic food products in urban markets. Major urban areas where cold-pressed oils are widely available have been considered while collecting the responses.

### 3.5 Sampling Design

Sampling design refers to the process of selecting a representative group of respondents from the target population.

#### Target Population:

The target population for this study consists of consumers who purchase edible oils for household consumption in Karnataka.

#### Sampling Technique:

A convenience sampling method was adopted to collect responses from consumers who are familiar with or have purchased cold-pressed edible oils. Convenience sampling was considered appropriate due to time and accessibility constraints.

#### Sample Size:

A total of 200 respondents were selected for the study. This sample size is considered adequate for applying statistical techniques such as factor analysis and regression analysis.

### 3.6 Data Collection Instrument

The primary data were collected using a structured questionnaire. The questionnaire consisted of two main sections:

#### Section A: Demographic Information

This section collected information related to the respondents' demographic characteristics, including gender, age, educational qualification, occupation, and monthly household income.

#### Section B: Consumer Perception and Behaviour Variables

This section included statements related to factors influencing consumer preference for cold-pressed oils, such as:

- ✓ Health consciousness
- ✓ Awareness of cold-pressed oils
- ✓ Perceived nutritional benefits
- ✓ Product quality perception
- ✓ Brand trust
- ✓ Price perception
- ✓ Market availability
- ✓ Purchase intention

The responses were measured using a five-point Likert scale, ranging from:

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

### 3.7 Reliability of the Instrument

To ensure the reliability of the questionnaire, internal consistency of the measurement scale was assessed using Cronbach's Alpha coefficient. A Cronbach's Alpha value greater than 0.70 is generally considered acceptable for social science research, indicating that the measurement items are reliable and consistent.

### 3.8 Variables of the Study

The study includes both **independent variables** and **dependent variables**.

#### Independent Variables

- ✓ Health consciousness
- ✓ Perceived product quality
- ✓ Brand trust
- ✓ Price perception
- ✓ Market availability

#### Dependent Variable

- Consumer purchase intention toward cold-pressed edible oils

These variables were selected based on insights obtained from the literature review and theoretical frameworks related to consumer behaviour and food consumption patterns.

### 3.9 Statistical Tools Used for Analysis

The collected data were analyzed using statistical techniques to examine the determinants influencing consumer preference for cold-pressed edible oils.

The following statistical tools were used in the study:

#### Descriptive Statistics:

Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to summarize demographic characteristics and consumer perceptions.

#### Factor Analysis:

Exploratory factor analysis was conducted to identify the underlying factors influencing consumer preference toward cold-pressed oils. The Kaiser-Meyer-Olkin (KMO) test and Bartlett's Test of Sphericity were used to determine the suitability of the data for factor analysis.

#### Multiple Regression Analysis:

Multiple regression analysis was used to examine the relationship between independent variables and consumer purchase intention. The analysis helped identify the most significant determinants influencing consumer purchase behaviour.

### 3.10 Data Analysis Procedure

After collecting the survey responses, the data were coded and entered into statistical software for analysis. Descriptive statistics were first calculated to understand the demographic profile and overall consumer perceptions. Factor analysis was then applied to identify the key determinants influencing consumer preferences. Finally, regression analysis was conducted to examine the impact of these determinants on consumer purchase intention.

### 3.11 Ethical Considerations

The study was conducted following basic ethical guidelines for academic research. Participation in the survey was voluntary, and respondents were informed about the purpose of the study. The information collected from respondents was used strictly for academic purposes, and confidentiality of the respondents' identity was maintained.

## 4. Data Analysis and Interpretation

### 4.1 Demographic Profile of Respondents

**Table 4.1: Demographic Profile of Respondents (n = 200)**

Demographic Variable	Category	Frequency	Percentage (%)
Gender	Male	112	56.0
	Female	88	44.0
Age Group	Below 25 years	32	16.0
	26 – 35 years	64	32.0
	36 – 45 years	58	29.0
	Above 45 years	46	23.0
Educational Qualification	PUC / Diploma	28	14.0
	Undergraduate	74	37.0
	Postgraduate	82	41.0
	Doctorate / Others	16	8.0
Occupation	Student	24	12.0
	Salaried Employee	86	43.0
	Business / Self-Employed	52	26.0
	Homemaker	38	19.0
Monthly Household Income	Below ₹25,000	36	18.0
	₹25,001 – ₹50,000	64	32.0
	₹50,001 – ₹75,000	54	27.0
	Above ₹75,000	46	23.0

Source: Primary Survey Data (2025)

### Analysis and Interpretation

Table 4.1 presents the demographic characteristics of the respondents included in the study. The gender distribution shows that 56% of respondents are male while 44% are female, indicating a relatively balanced representation of both genders in the survey. With respect to age distribution, the majority of respondents belong to the 26–35 years age group (32%), followed by 36–45 years (29%) and above 45 years (23%), while 16% of respondents are below 25 years. This indicates that middle-aged consumers form the dominant segment participating in the study, suggesting that purchasing decisions regarding edible oils are largely made by individuals within this age group. In terms of educational qualification, 41% of respondents possess postgraduate degrees, followed by 37% with undergraduate education, indicating that the majority of respondents are relatively well educated. Higher levels of education may contribute to increased awareness regarding nutritional aspects and health benefits of cold-pressed oils. The occupational distribution indicates that 43% of respondents are salaried employees, followed by 26% who are self-employed or engaged in business, 19% homemakers, and 12% students. Since salaried employees represent the largest group, it suggests that working professionals may demonstrate higher interest in healthier dietary choices. Regarding income levels, 32% of respondents belong to the ₹25,001–₹50,000 income category, followed by 27% in the ₹50,001–₹75,000 range, 23% above ₹75,000, and 18% below ₹25,000. This distribution indicates that a significant portion of respondents belong to middle-income households, which may influence purchasing decisions toward premium products such as cold-pressed oils.

### 4.2 Descriptive Statistics of Consumer Perceptions

**Table 4.2: Descriptive Statistics of Consumer Perception toward Cold-Pressed Oils**

Variables	Mean	Standard Deviation	Skewness	Kurtosis
Health Consciousness	4.21	0.71	-0.84	0.92
Awareness of Cold-Pressed Oils	3.89	0.83	-0.52	0.41
Perceived Nutritional Benefits	4.34	0.66	-0.91	1.08
Product Quality Perception	4.12	0.72	-0.68	0.63
Price Sensitivity	3.42	0.95	0.41	-0.28
Brand Trust	3.97	0.78	-0.59	0.55

Market Availability	3.56	0.89	-0.22	-0.16
Environmental Concern	3.88	0.74	-0.46	0.37

Source: Primary Survey Data (2025)

### Analysis and Interpretation

Table 4.2 presents the descriptive statistics for variables related to consumer perception toward cold-pressed edible oils. The results indicate that perceived nutritional benefits (Mean = 4.34) and health consciousness (Mean = 4.21) have the highest mean scores among the variables considered in the study. This suggests that consumers strongly associate cold-pressed oils with improved nutritional value and health advantages. Similarly, product quality perception (Mean = 4.12) and brand trust (Mean = 3.97) also demonstrate relatively high mean values, indicating that consumers generally perceive cold-pressed oils as high-quality products and show moderate trust in the brands offering these oils. On the other hand, price sensitivity (Mean = 3.42) and market availability (Mean = 3.56) have comparatively lower mean scores. This implies that although consumers recognize the benefits of cold-pressed oils, price considerations and product accessibility may still influence purchasing decisions. The skewness values are mostly negative, indicating that responses tend to be skewed toward agreement on the Likert scale. Kurtosis values fall within acceptable limits, suggesting that the distribution of responses is approximately normal and suitable for further statistical analysis.

### 4.3 Factor Analysis of Determinants

**Table 4.3: Factor Analysis of Determinants Influencing Consumer Preference**

*KMO = 0.812*

*Bartlett's Test  $\chi^2 = 612.34, p < 0.001$*

Variables	Health & Nutrition	Product Quality	Price & Affordability	Brand & Availability
Health Consciousness	0.812			
Nutritional Benefits	0.845			
Environmental Concern	0.734			
Product Quality		0.791		
Taste Preference		0.764		
Natural Processing		0.708		
Price Sensitivity			0.801	
Affordability			0.776	
Value for Money			0.693	
Brand Trust				0.784
Market Availability				0.741
Retailer Recommendation				0.688

Factor	Eigenvalue	Variance Explained (%)
Health & Nutrition	3.21	26.75
Product Quality	2.18	18.16
Price & Affordability	1.74	14.52
Brand & Availability	1.32	11.03

Total Variance Explained = **70.46%**

Source: Primary Survey Data (2025)

### Analysis and Interpretation

Table 4.3 presents the results of the exploratory factor analysis conducted to identify the key determinants influencing consumer preference toward cold-pressed oils. The Kaiser-Meyer-Olkin (KMO) value of 0.812 indicates that the sampling adequacy is acceptable for factor analysis. Additionally, the Bartlett's Test of Sphericity is statistically significant ( $p < 0.001$ ), confirming that the variables are sufficiently correlated to proceed with factor extraction. The factor analysis extracted four major factors, which together explain 70.46% of the total variance, indicating that these factors effectively represent the determinants influencing consumer preferences. The first factor, Health and Nutrition, explains 26.75% of the variance and includes variables such

as health consciousness, nutritional benefits, and environmental concern. This suggests that health-related considerations are the most influential determinants affecting consumer preference for cold-pressed oils. The second factor, Product Quality, explains 18.16% of the variance and includes variables related to taste preference, perceived product quality, and natural processing methods. Consumers appear to associate cold-pressed oils with superior quality attributes compared to refined oils. The third factor, Price and Affordability, explains 14.52% of the variance, highlighting the role of pricing considerations in influencing consumer purchasing behaviour. The fourth factor, Brand and Availability, explains 11.03% of the variance, indicating that brand reputation and market accessibility also influence consumer preference.

#### 4.4 Multiple Regression Analysis

**Table 4.4: Multiple Regression Analysis of Purchase Intention**

Dependent Variable: Purchase Intention toward Cold-Pressed Oils

Independent Variables	Beta ( $\beta$ )	Standard Error	t-value	p-value
Health Consciousness	0.342	0.061	5.61	0.000
Product Quality	0.284	0.058	4.89	0.000
Brand Trust	0.221	0.054	4.09	0.000
Price Perception	-0.156	0.049	-3.18	0.002
Market Availability	0.173	0.052	3.32	0.001

Model Summary

Statistic	Value
R	0.742
R <sup>2</sup>	0.551
Adjusted R <sup>2</sup>	0.538
F-value	47.63
Significance	p < 0.001

Source: Primary Survey Data (2025)

#### Analysis and Interpretation

Table 4.4 presents the results of the multiple regression analysis conducted to examine the relationship between selected determinants and consumer purchase intention toward cold-pressed edible oils. The model summary indicates that R<sup>2</sup> = 0.551, meaning that approximately 55.1% of the variation in consumer purchase intention is explained by the independent variables included in the model. The F-value of 47.63 with p < 0.001 indicates that the regression model is statistically significant. Among the independent variables, health consciousness ( $\beta$  = 0.342) has the strongest positive influence on purchase intention. This finding suggests that consumers who are more aware of health and nutritional benefits are more likely to prefer cold-pressed oils. Similarly, product quality perception ( $\beta$  = 0.284) and brand trust ( $\beta$  = 0.221) also demonstrate significant positive effects on purchase intention. Consumers who perceive cold-pressed oils as high-quality products and trust the brands offering them are more likely to purchase these products. Market availability ( $\beta$  = 0.173) also shows a positive and statistically significant influence on purchase intention, indicating that easier access to these products increases the likelihood of purchase. However, price perception ( $\beta$  = -0.156) shows a negative relationship with purchase intention, suggesting that higher prices may discourage some consumers from purchasing cold-pressed oils.

**Table 4.5 Hypothesis Testing**

Hypothesis	Statement	Result
H <sub>1</sub>	Health consciousness significantly influences purchase intention	Accepted
H <sub>2</sub>	Product quality perception significantly influences purchase intention	Accepted
H <sub>3</sub>	Brand trust significantly influences purchase intention	Accepted
H <sub>4</sub>	Price perception significantly influences purchase intention	Accepted
H <sub>5</sub>	Market availability significantly influences purchase intention	Accepted

The hypothesis testing results indicate that all five determinants included in the study significantly influence consumer purchase intention toward cold-pressed edible oils. Health consciousness emerges as the most influential factor, followed by product quality perception and brand trust. These findings highlight that consumers

increasingly prioritize health benefits and product authenticity when selecting edible oils. However, the negative relationship between price perception and purchase intention suggests that affordability remains an important consideration influencing consumer adoption of cold-pressed oils.

## 5. Major Findings of the Study

Based on the analysis and interpretation of the collected data, several important findings have emerged regarding consumer behaviour toward the purchase of cold-pressed edible oils in Karnataka. The major findings of the study are presented below.

**1. Middle-Aged Consumers Form the Largest Segment of Cold-Pressed Oil Buyers:** The demographic analysis reveals that the majority of respondents belong to the 26–45 years age group. This indicates that middle-aged consumers are more actively involved in purchasing decisions related to household food products. Individuals within this age category are generally more conscious about family health and nutritional intake, which increases their interest in healthier cooking alternatives such as cold-pressed oils.

**2. Higher Educational Levels Contribute to Greater Awareness of Cold-Pressed Oils:** The study shows that a significant proportion of respondents possess undergraduate and postgraduate qualifications. Educated consumers tend to be more aware of nutritional information and food processing methods. As a result, they are more likely to recognize the benefits of cold-pressed oils compared to refined oils, leading to increased acceptance and preference for such products.

**3. Health Consciousness is the Most Influential Determinant of Purchase Intention:** The regression analysis indicates that health consciousness has the strongest positive influence on consumer purchase intention toward cold-pressed oils. Consumers who prioritize healthy eating habits and are concerned about the long-term effects of dietary choices are more inclined to select natural and minimally processed edible oils.

**4. Consumers Strongly Associate Cold-Pressed Oils with Nutritional Benefits:** The descriptive statistical results demonstrate that perceived nutritional benefits received the highest mean score among the variables studied. This finding suggests that consumers widely believe that cold-pressed oils retain essential nutrients, antioxidants, and natural properties that may be lost during the refining process.

**5. Product Quality Perception Significantly Influences Consumer Preference:** The results indicate that consumers perceive cold-pressed oils as superior in terms of quality attributes such as taste, purity, and natural processing. These perceptions positively influence consumer attitudes and encourage them to consider cold-pressed oils as a premium and healthier alternative to conventional edible oils.

**6. Brand Trust Plays an Important Role in Consumer Purchase Decisions:** The study reveals that brand trust has a significant positive influence on consumer purchase intention. Consumers are more likely to purchase cold-pressed oils when they trust the brand offering the product. Brand reputation and credibility therefore play a crucial role in shaping consumer confidence and purchasing behaviour.

**7. Price Remains a Major Barrier to Consumer Adoption:** Despite recognizing the health and quality benefits of cold-pressed oils, the study finds that price perception negatively influences purchase intention. Since cold-pressed oils are generally priced higher than refined oils, some consumers may hesitate to purchase them regularly. This finding indicates that affordability remains an important factor affecting consumer decisions.

**8. Market Availability Influences Consumer Accessibility and Purchase Behaviour:** The regression results indicate that product availability significantly affects consumer purchase intention. Consumers are more likely to purchase cold-pressed oils when they are easily available in retail stores, supermarkets, or online platforms. Limited distribution or difficulty in accessing these products may reduce consumer adoption.

**9. Health and Nutrition Factors Explain the Largest Variance in Consumer Preference:** The factor analysis results show that health and nutrition-related variables account for the highest proportion of variance among the factors influencing consumer preference. This finding reinforces the importance of health awareness as the primary driver behind the growing demand for cold-pressed oils.

**10. Consumer Preference is Influenced by Multiple Interrelated Factors:** The overall findings of the study indicate that consumer preference toward cold-pressed oils is shaped by a combination of psychological, product-related, and market-related factors. Health consciousness, product quality perception, brand trust, price perception, and product availability collectively influence consumer purchase decisions.

## 6. Suggestions / Recommendations

Based on the findings of the study, several practical suggestions can be proposed to enhance consumer adoption and market growth of cold-pressed edible oils in Karnataka. These recommendations may be useful for producers, marketers, retailers, and policymakers involved in promoting healthier edible oil consumption.

**1. Increase Consumer Awareness about the Health Benefits of Cold-Pressed Oils:** The study indicates that health consciousness is the most significant factor influencing consumer purchase intention. Therefore, companies should focus on educating consumers about the nutritional advantages of cold-pressed oils, including their natural extraction process, higher antioxidant content, and absence of chemical processing. Awareness campaigns through digital platforms, advertisements, and health seminars can significantly improve consumer knowledge and acceptance.

**2. Strengthen Marketing Communication and Information Transparency:** Consumers often rely on product information and marketing communication when making purchasing decisions. Producers should provide clear information on product labels regarding the extraction process, nutritional benefits, and authenticity of cold-pressed oils. Transparent communication can enhance consumer trust and encourage more consumers to switch from refined oils to healthier alternatives.

**3. Develop Strong and Trustworthy Brand Identity:** Brand trust has emerged as an important determinant influencing consumer purchase behaviour. Companies should focus on building strong brand credibility through consistent product quality, certification, and reliable customer service. Establishing trust through recognized certifications and quality assurance mechanisms can help consumers feel confident about purchasing cold-pressed oils.

**4. Improve Product Availability through Wider Distribution Channels:** The findings indicate that product availability plays a significant role in influencing consumer purchase decisions. Producers and marketers should expand their distribution networks by making cold-pressed oils available in supermarkets, organic stores, local grocery outlets, and online marketplaces. Greater accessibility can encourage more consumers to adopt these products in their daily cooking practices.

**5. Introduce Competitive Pricing Strategies:** Although consumers recognize the benefits of cold-pressed oils, higher prices often discourage regular purchase. Companies should explore strategies such as offering smaller packaging sizes, promotional discounts, or bundled offers to make these products more affordable and accessible to a wider consumer base.

**6. Promote Cold-Pressed Oils through Health and Wellness Campaigns:** Since consumers associate cold-pressed oils with health benefits, promoting these products through health and wellness initiatives can be highly effective. Collaboration with nutritionists, healthcare professionals, and fitness experts can help educate consumers about the importance of healthy dietary choices and encourage the adoption of cold-pressed oils.

**7. Encourage Government Support and Policy Initiatives:** Government agencies and food regulatory authorities can play an important role in promoting traditional and natural food products. Initiatives such as awareness programs, quality certifications, and support for small-scale cold-pressed oil producers can help strengthen the market for these products and promote healthier food consumption practices.

**8. Focus on Product Innovation and Packaging Improvements:** Modern consumers are increasingly attracted to convenient and visually appealing packaging. Companies should invest in innovative packaging solutions that preserve product freshness and highlight the natural qualities of cold-pressed oils. Attractive packaging can also enhance product visibility and brand differentiation in retail markets.

**9. Conduct Consumer Education Programs on Healthy Cooking Practices:** Educational initiatives can be organized to inform consumers about the role of edible oils in maintaining balanced nutrition and preventing lifestyle-related diseases. Demonstrations, workshops, and community programs focusing on healthy cooking methods can help consumers better understand the value of cold-pressed oils in everyday diets.

**10. Strengthen Digital Marketing and E-commerce Presence:** With the increasing popularity of online shopping, companies should utilize digital platforms to promote cold-pressed oils. Social media campaigns, online advertisements, and e-commerce partnerships can help reach a larger audience, particularly younger and health-conscious consumers who actively search for healthy food alternatives online.

## 7. Conclusion

The present study examined the determinants influencing consumer preference for cold-pressed edible oils in Karnataka, with a particular focus on factors such as health consciousness, perceived product quality, brand trust, price perception, and market availability. The findings of the study reveal that consumer awareness regarding health and nutrition plays a crucial role in shaping purchasing decisions related to edible oils. The increasing prevalence of lifestyle-related health issues has encouraged consumers to become more conscious about the quality and nutritional value of the food products they consume. As a result, cold-pressed oils are increasingly perceived as healthier alternatives to conventional refined oils due to their natural extraction process and retention of essential nutrients. The demographic analysis also indicates that educated and middle-aged consumers form a significant segment of the market for cold-pressed oils, suggesting that awareness and knowledge significantly influence consumer behaviour.

The statistical analysis conducted in the study highlights several key determinants influencing consumer purchase intention. Among these factors, health consciousness emerged as the most influential determinant, indicating that consumers who prioritize healthy dietary habits are more likely to prefer cold-pressed oils. In addition, perceived product quality and brand trust were found to have significant positive effects on consumer purchase decisions. Consumers tend to associate cold-pressed oils with superior quality attributes such as purity, taste, and nutritional value, which strengthens their willingness to purchase these products. However, the findings also reveal that price perception has a negative influence on purchase intention, suggesting that the relatively higher cost of cold-pressed oils may discourage some consumers from adopting them regularly. Market availability was also identified as an important factor, as consumers are more likely to purchase these products when they are easily accessible in retail outlets and online platforms.

Overall, the study demonstrates that consumer preference toward cold-pressed edible oils is shaped by a combination of health-related motivations, product quality perceptions, brand credibility, pricing considerations, and accessibility. As awareness regarding healthy dietary practices continues to grow, the demand for natural and minimally processed food products is likely to increase. For producers and marketers, these findings highlight the importance of strengthening consumer education, improving product accessibility, and developing effective marketing strategies that emphasize the health benefits and authenticity of cold-pressed oils. By addressing these factors, businesses can enhance consumer acceptance and promote the adoption of healthier edible oil alternatives. The insights obtained from this study also contribute to the existing literature on consumer food behaviour and provide valuable implications for researchers, policymakers, and industry stakeholders interested in promoting sustainable and health-oriented food consumption practices.

## 8. Limitations and Future Directions of the Study

### 8.1 Limitations of the Study

Despite providing valuable insights into consumer behaviour toward cold-pressed edible oils, the present study has certain limitations that should be acknowledged.

**1. Limited Geographical Coverage:** The study was conducted within the state of Karnataka and primarily focused on consumers from selected urban areas. Consumer behaviour may vary across different regions due to cultural, economic, and lifestyle differences. Therefore, the findings of this study may not fully represent the preferences of consumers in other states or rural areas of India.

**2. Restricted Sample Size:** The study was based on responses collected from 200 respondents. Although this sample size is adequate for statistical analysis, a larger sample could provide more comprehensive insights into consumer behaviour. Increasing the number of respondents may improve the generalizability and reliability of the findings.

**3. Use of Convenience Sampling:** The research employed a convenience sampling technique due to accessibility and time constraints. While this method allows for efficient data collection, it may not always provide a perfectly representative sample of the entire population. As a result, the findings should be interpreted with some caution.

**4. Focus on Selected Determinants Only:** The study examined a limited set of determinants such as health consciousness, perceived product quality, brand trust, price perception, and market availability. However, other

factors such as lifestyle influences, advertising exposure, cultural preferences, and peer influence may also affect consumer purchasing behaviour toward cold-pressed oils.

**5. Reliance on Self-Reported Data:** The study relied on self-reported responses collected through questionnaires. Respondents' answers may sometimes be influenced by personal bias, social desirability, or misinterpretation of questions. Therefore, the accuracy of responses depends on the honesty and understanding of the participants.

## 8.2 Future Directions of the Study

Considering the limitations of the present research, several directions for future studies can be suggested.

**1. Expansion to Other Geographic Regions:** Future research can extend the study to other states in India or conduct comparative studies across different regions. Such research can help identify regional variations in consumer behaviour and provide a broader understanding of the edible oil market.

**2. Inclusion of Rural Consumer Segments:** Most existing studies, including the present one, focus largely on urban consumers. Future studies can examine rural consumer behaviour toward cold-pressed oils to understand their awareness levels, preferences, and purchasing patterns.

**3. Use of Larger and More Diverse Samples:** Future research can employ larger sample sizes and probability sampling techniques to obtain more representative results. A broader sample would help improve the reliability and generalizability of the findings.

**4. Examination of Additional Behavioural Factors:** Future studies can explore additional variables such as lifestyle orientation, environmental consciousness, influence of social media, and cultural food habits. Including these factors may provide a deeper understanding of the psychological and social drivers of consumer behaviour.

**5. Comparative Studies with Other Edible Oils:** Further research can compare consumer perceptions and preferences between cold-pressed oils and other types of edible oils such as refined oils, organic oils, and blended oils. Such comparisons could help identify the competitive positioning of cold-pressed oils in the market.

**6. Longitudinal Studies on Changing Consumer Behaviour:** Consumer preferences and dietary habits may evolve over time due to increasing health awareness and market developments. Longitudinal studies could examine how consumer attitudes toward cold-pressed oils change over a longer period.

**7. Integration of Advanced Analytical Techniques:** Future studies may employ more advanced statistical techniques such as structural equation modeling (SEM) or path analysis to better understand the relationships between multiple determinants influencing consumer behaviour.

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