

EVALUATING THE CONSUMER BUYING BEHAVIOR AND PREFERENCES TOWARDS COLD-PRESSED OIL IN THARUVAIKULAM AREA OF THOOTHUKUDI DISTRICT

N. Michael Ramya* and Dr.B.Mahesh Vanitha

PG Department of Economics, St. Mary's College (Autonomous), Thoothukudi.
Affiliated to Manonmaniam Sundaranar University, Tirunelveli, Tamilnadu, India.

ABSTRACT

The usage of the cold pressed oil has increased in recent days. Health-conscious consumers are adopting healthy eating practices. As a result, products that contain functional nutrients and are beneficial for health have gained wide acceptance all over the world. Cold-pressed oils do not contain added chemicals and preservatives. It provides health benefits to the consumers such as reduction in cholesterol levels, boosts brain health, and improves skin and hair, and others. The interest in natural and organic food, including oils and fats, has grown in the last few years. The cold-pressed extraction concept was uniquely used to extract oils from oilseeds, and these cold pressed oils have a great significance in cosmetics, medicinal purposes and are also used in cooking. A study was conducted in Tharuvaikulam area of Thoothukudi District to investigate the consumer awareness level, preferences, buying behavior and opinion on cold pressed oils and their willingness to buy.

Key words: Cold-Pressed Oil, Organic food, nutrient-rich oil, high-quality seeds, medium-chain triglycerides, omega-3 fatty acids, edible oil

Introduction

Cold-pressed oil is a pure, nutrient-rich oil extracted through a mechanical process that preserves its natural flavor, aroma, and nutritional value. Unlike refined oils, cold pressing uses controlled pressure without heat or chemicals, ensuring that essential fatty acids, antioxidants, and vitamins remain intact. This method, rooted in traditional techniques like the Kacchi-Ghani process, results in oils that are ideal for low to medium-heat cooking. While they have a shorter shelf life, cold-pressed oils offer superior health benefits, making them a popular choice for those seeking natural, minimally processed foods. Cold pressing focuses on preservation. Cold pressing keeps temperatures low throughout, unlike conventional methods that use high heat and chemicals. This helps the oil keep its natural flavours, colours, and nutrients.

Cold-pressed oil is made through a mechanical process that extracts oil from seeds, nuts, or

fruits without the use of heat or chemicals. After understanding cold-pressed oil meaning, let's understand the key steps involved in making cold-pressed oil:

1. **Selection of Raw Materials:** The process starts with selecting high-quality seeds, nuts, or fruits. Common sources include sunflower seeds, sesame seeds, coconut, mustard seeds, and more.
2. **Cleaning:** The raw materials are thoroughly cleaned to remove any dirt, dust, or impurities that might affect the quality of the oil.
3. **Crushing/Grinding:** The cleaned seeds or fruits are then ground into a paste or broken down into smaller particles. This process is done using mechanical crushers or cold-press machines.
4. **Cold-Pressing:** The paste is placed in a cold-press machine, which uses a hydraulic press to extract the oil. This is done without applying external heat, ensuring that the oil retains its natural nutrients, flavours, and antioxidants. The oil is extracted by applying pressure to the paste, allowing the oil to separate from the solid parts (called “cake” or “meal”).
5. **Filtering:** After extraction, the oil may undergo filtration to remove any remaining solid particles. This step is optional, depending on the desired final product.
6. **Storage:** The cold-pressed oil is stored in dark, airtight containers to preserve its freshness and prevent oxidation.

Popular Types of Cold-Pressed Oils and Their Uses

1. Coconut Oil

Coconut oil is extracted from the flesh of mature coconuts and is known for its rich, tropical aroma. It is solid at room temperature but melts when heated, offering a unique texture and consistency. This oil is rich in medium-chain triglycerides (MCTs), which are known to boost metabolism and provide quick energy. It also contains lauric acid, known for its antibacterial and antifungal properties, making it a popular choice for natural health remedies.

2. Sesame Oil

Sesame oil is derived from sesame seeds and has a rich, nutty flavour. It's a staple in many Asian cuisines and is high in antioxidants and healthy fats, which help fight inflammation and support cardiovascular health. Sesame oil is also rich in sesamol, a natural compound known for its potential anti-ageing benefits.

3. Groundnut Oil (Peanut Oil)

Groundnut oil is extracted from peanuts and is known for its mild flavour and high smoke point. It is rich in polyunsaturated fats and vitamin E, which support skin health and heart function. This oil is commonly used for frying and grilling, providing a light taste without overpowering the dish.

4. Mustard Oil

Mustard oil is extracted from mustard seeds and has a sharp, pungent flavour. It's rich in monounsaturated fats and omega-3 fatty acids and is often used in Indian and Southeast Asian cooking for its bold taste. Mustard oil contains erucic acid, which, when used in moderation, is known to benefit heart health.

To enhance your meals, use cold-pressed oils in smoothies, drizzle over finished dishes, or create homemade salad dressings. Replace butter in baking for a healthier alternative, and use oils like olive or sesame in marinades.

- Cold-pressed oils are packed with vitamins, antioxidants, and essential fatty acids that benefit the skin.
- Cold-pressed oils nourish the hair, providing essential nutrients for growth and shine.
- Cold-pressed oil is made by mechanically pressing the seeds or nuts without using heat, which helps preserve the natural nutrients and flavours. Refined oil, on the other hand, is processed using heat and chemicals, which can strip away nutrients and alter the oil's taste.

Objective of the study

1. To identify the factors that influence consumer buying behavior towards cold-pressed oil.
2. To analyze the level of satisfaction among consumers towards cold-pressed oil.
3. To determine the relationship between consumer buying behavior and satisfaction towards cold-pressed oil.
4. To analyze the role of product quality, price, packaging, and brand reputation in influencing consumer buying behavior towards cold-pressed oil.
5. To determine the effectiveness of marketing strategies used by cold-pressed oil manufacturers and retailers.

Review of Literature

- **Arya V., Vikash and Kiran, (2021)** conducted a study to understand the factors influencing purchase decision for edible oils, buying and consumption patterns of the

product, the preference of demographic clusters, the frequency of changing edible oil type, the effect of promotional activities on purchasing habits and found out the extent of brand loyalty among consumers.

- . **Dr. Rajni Pandey, (2022)** The author offers data on consumer awareness of edible oil through this study. The researcher looks at customer satisfaction with edible oil as well. According to the study's findings, most participants (70%) were unaware of the advantages of using healthy cooking oil. Thus, there is a pressing need to increase public awareness of the health risks associated with edible oil.

METHODOLOGY

The methodology adopted for the present investigation including selection of the household respondent and objectives of the study together with source of data, sample, selection, period of study, scope and significance of the study and statistical tools used for data analysis. The research work depends, mainly on primary data collected through survey, personal interviews and questionnaire. The use of secondary data to a limited extent is made wherever necessary. Primary data is collected through questionnaire, observation and discussion.

PRIMARY DATA

To collecting primary data, questionnaires have been distributed to the sample respondents to get information regarding the case study.

SECONDARY DATA

The secondary data also collected from various journals, books, newspaper, etc.

SAMPLE SIZE

For the present study from the consumer buying behavior and preferences towards cold-pressed oil at tharuvaikulam area Thoothukudi district. Totally 130 sample respondents selected by using simple random sampling method. The data was collected by personal interview using structured questionnaire.

TOOLS FOR ANALYSIS

Based on the nature of data and relevance of information required, linear – regression and statistical tools like percentage, bar diagram and averages were used for the analysis of data.

PERIOD OF THE STUDY

This study period is November 2024 to February 2025.

ANALYSIS OF DATA

TABLE-1

Awareness of cold - pressed oil

S. No	Awareness of cold pressed oil	No of the Respondents	Percentage
1	Yes	112	86
2	No	18	14
	Total	130	100

Source: Primary data

This table clear that the awareness of cold – pressed oil of the respondents. 86% of the sample respondents they know about it benefits of cold pressed oil and 14% of the sample respondents theydon't know about cold pressed oil respectively.

Figure -1.1

Awareness of cold -pressed oil

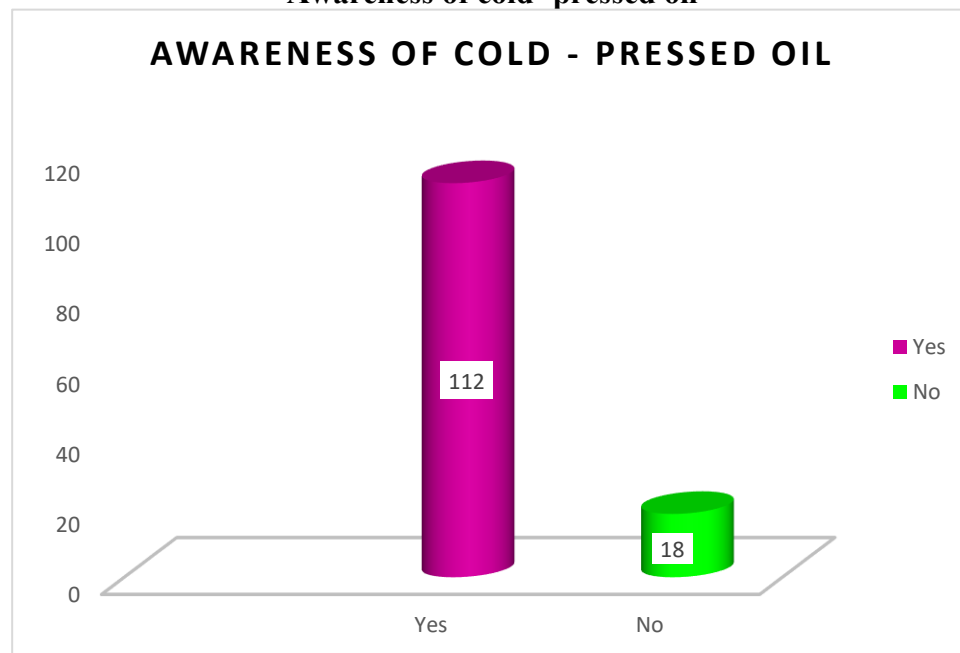


TABLE-2

Sources of Awareness About Cold – pressed oil

S. No	Sources of Awareness About Cold – pressed oil	No of Respondents	Percentage
1	Social media	18	14
2	Friends \ Family	68	52
3	Online Advertising	39	30
4	Medication	5	4
	Total	130	100

Source: Primary data

This table clear that Sources of Awareness About Cold – pressed oil about Cold- pressed oil of the respondents. 14% of the respondents to know the cold pressed oil through the social media, 52% of the respondents to know with the help of friends/family, 30% of the respondents to know the through online advertising, and 4% of the respondents know the

instructions from the medication respectively.

Figure -2.1

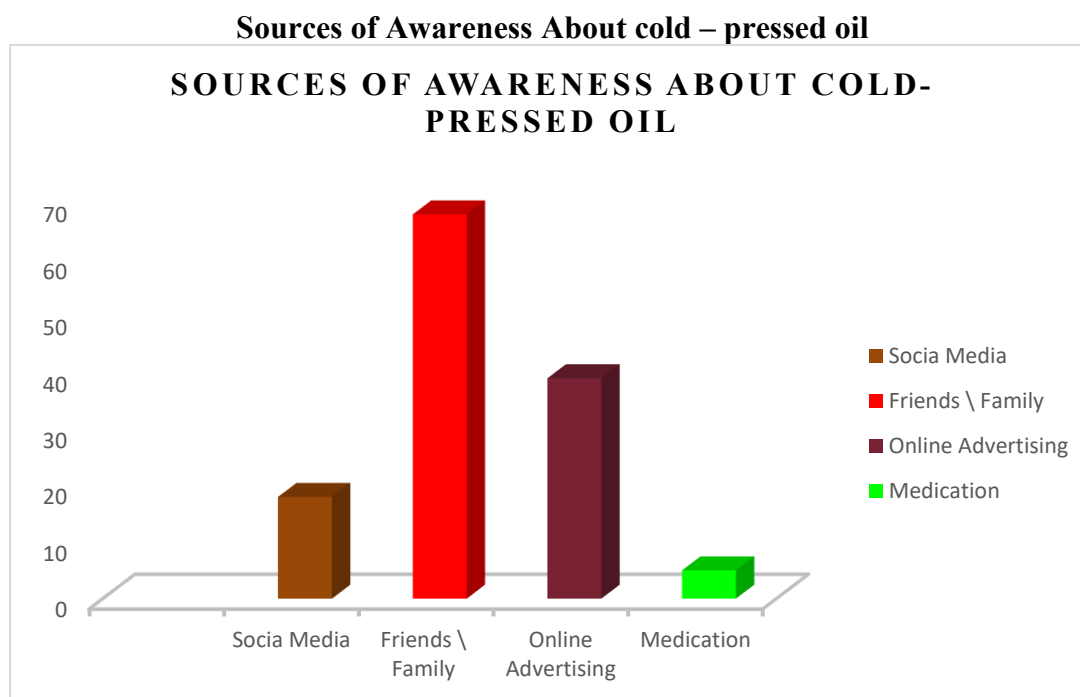


TABLE-3

Purposes of Cold - pressed oil

S. No	Purposes of Cold - pressed oil	No of the Respondents	Percentage
1	Cooking	42	32
2	Health Remedies	21	16
3	Skincare	7	6
4	Haircare	60	46
	Total	130	100

Source: primary data

This table shows that purposes of cold – pressed oil among the respondents. 32% of the respondents for buying the cold pressed oil for the purpose of cooking, 16% of the respondents buying the oil for the purpose of health remedies, 6% of the respondents to buying the oil for skincare and 46% of the respondents are hair care respectively.

Figure -3.1

Purposes of Cold - pressed oil

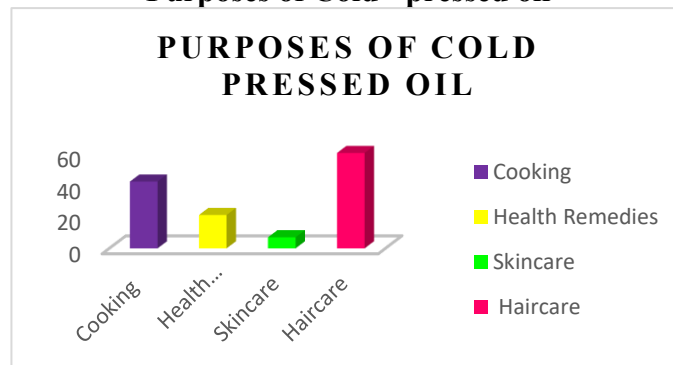


TABLE-4

Mode of Purchase Cold pressed Oil

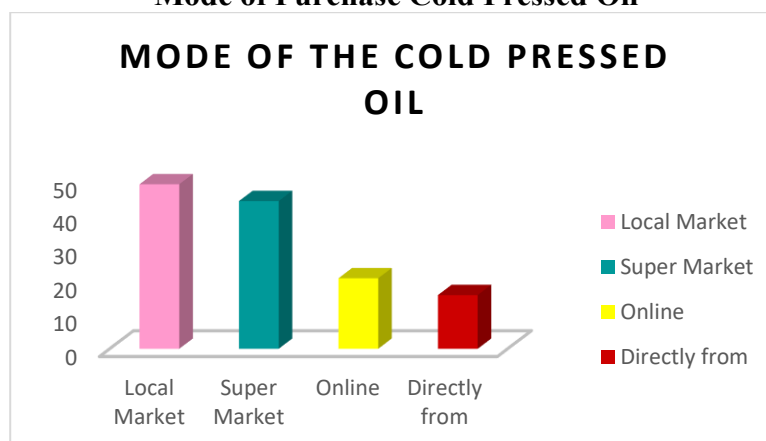
S. No	Purchase Mode	No of the Respondents	Percentage
1	Local Market	49	38
2	Super Market	44	34
3	Online	21	16
4	Directly from	16	12
	Total	130	100

Source: Primary data

According to this table clear that mode of purchase cold pressed oil of the respondents. 38% of the respondents purchase of local market, 34% of the respondents of purchase of super market, 16% of the respondents purchase of online, and 12% of the respondents purchase of directly from respectively.

Figure -4.1

Mode of Purchase Cold Pressed Oil



Linear - Regression:

Linear - regression formula used to analysis the relationship between two variables the quality and price of cold-pressed oil per month.

$$a = \frac{[(\sum y)(\sum x^2) - (\sum x)(\sum xy)]}{[n(\sum x^2) - (\sum x)^2]}$$
$$b = \frac{[n(\sum xy) - (\sum x)(\sum y)]}{[n(\sum x^2) - (\sum x)^2]}$$

Result:

$$Y = a + bx$$

$$Y = 2.51 + 0.94x$$

Linear - regression is a model that estimates. The linear - regression relationship between price & quality. It there is only one independent variable, or multiple linear regression if there are multiple factors affecting the price. In real life, price might depend on quality, brand & demand.

Findings:

- 86% of the respondents are aware of cold – pressed oil.
- Maximum of the respondents are belonging to the category of friends/family.
- The majority 64% of the respondents are hair care.
- 38% of the respondents of purchase cold – pressed oil in local market.

Suggestions:

- Expand availability in supermarkets, organic stores, and online platforms.
- Highlight pressing dates on labels and use clear packaging.
- Some consumers prefer oils used in traditional cooking. Promote cold-pressed oil as a return to heritage cooking practices.
- Consumers trust recommendations from friends and family. And encourage customer testimonials and referral programs.

Conclusion:

The growing consumer preference for cold-pressed oil is primarily driven by health consciousness and the demand for natural, chemical-free products. Consumers increasingly recognize the nutritional benefits of cold-pressed oils, such as their high antioxidant and vitamin content, making them a popular choice among health-conscious individuals. However, many buyers still lack awareness of the differences between refined and cold-pressed oils, highlighting the need for educational marketing campaigns. Price sensitivity also plays a significant role, as these oils are often perceived as premium products, leading to the need for affordable packaging options

and promotional discounts to attract a wider audience.

References:

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2. Dr. Rajni Pandey, Dr. Smita Kumari and Dr. Kavita Kumari (2022). Consumers' preference for edible oil in Patna city, Bihar, *International Journal of Home Science*, Vol. 8(1).