

CONSUMER BUYING BEHAVIOR TOWARDS IMMUNITY BOOSTER PRODUCTS DURING COVID- 19 PANDEMIC: A STUDY OF SYSTEMATIC LITERATURE REVIEW

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ABSTRACT

Rapid population growth has a negative impact on everyone's lifestyle, health, and well-being. Everybody has an immune system, a natural defensive mechanism that is essential in the battle against illnesses brought on by external microorganisms. India is endowed with a wide variety of herbal plants that are used medicinally and have the ability to strengthen immunity. The study focuses on consumer buying behaviour for products that increase immunity during the COVID-19 epidemic. Numerous books, articles, journals, and magazines were examined for the study's purposes. According to the study, most customers had a moderate familiarity with the term "immunity boosters" and occasionally purchased these goods, followed by once a month, seldom, often, and regularly. When purchasing immune booster items during the Covid-19 Pandemic, certain customers' health consciousness, brand perception of those products, and medical consultation have a substantial impact.

KEYWORDS: Consumer Buying Behavior; Consumer; Immunity Booster Products; Immunity; Covid-19; Pandemic.

1. INTRODUCTION

Uncertainty over what will occur in the near future and how people will purchase, preserve, and consume food are two factors that have contributed to the COVID-19 Pandemic's dramatic alterations. With COVID-19, the globe is experiencing a never-before-seen circumstance. Although there is no effective therapy for COVID-19, certain preventative steps may be taken, such as washing hands, using hand sanitizer, and donning masks, to slow the transmission of the disease. Poor immunity is the major cause of COVID-19 patients' deaths. Since they have natural characteristics, have no side effects, and are non-toxic, plant and herb substances are the greatest supplements with the ability to strengthen the immune system (Patil, 2020). Immunity describes the body's built-in defences against various illnesses and conditions (Sharma et. al., 2017). Herbs include immunomodulatory compounds and dietary supplements that promote and aid in the production of antibodies that defend against numerous bacterial, viral and other types of illnesses. Traditional ingredients include Tulsa, mint, ashwagandha, Gilroy, neem, and amla, as well as traditional spices like turmeric, ginger, garlic, cinnamon, and cloves, a variety of health benefits. Therefore, consuming or using them as culinary flavours will serve as a preventative strategy and boost immunity (Singh, 2020).

Additionally, consumers have been seen to change brands and products, replace purchases when supplies are low, and show increased concern for hygienic conditions and health. Market research on how COVID-19 would impact consumers revealed higher spending on food, health, and hygiene products (Rogers & Cosgrove, 2020). Major companies like Dabur, Himalaya, Patanjali, Emani, Hamdard, Marico, and others have launched a new line of products in response to the rising awareness of and demand for conventional herbal-based immunity boosters that are simple to obtain and simple to use because they come in a variety of forms like tablets, powder, syrups, and carry-friendly sizes.

1.1 Consumer Buying Behavior towards Immunity Booster Products

Environmental changes substantially influence the human immune system, despite its robustness and complexity. One can lessen harmful environmental effects by living a healthy lifestyle. This involves having great mental and emotional health, eating meals high in nutrients, practicing good hygiene, going on walks, working out often, and getting adequate sleep. Everyone, including those previously unaware of its existence, now packs hand sanitizer before leaving the house.

Supplemental immune systems and immunity-boosting products improve immune responses to fight potential illnesses. People are becoming increasingly aware of the advantages of utilizing items that boost immunity, even though there are other ways to build the human immune system, such as eating well and exercising. This list of products can also include ayurvedic treatments, home-cooked immunity meals like herbal tea, multigrain bread, citrus juices, chyawanprash, over-the-counter vitamins, protein powders, and multivitamin tablets. The term "superfood" is frequently used to describe dietary components with health benefits. Numerous dietary substances and ingredients have been shown to potentially have antibacterial, anti-inflammatory, and even antiviral properties (Watson & Preedy, 2016).

Vitamin-rich dietary selections strengthen the human immune system. These immune boosters help to maintain a strong and healthy immune system. White blood cell production is increased by immune boosters, which aid the body's defence against pathogen-causing microbes (Geetha et al., 2012). The demand for products that improve health and immunity has recently surged. The body's defence against external illnesses and diseases is aided by the immune system being in good condition, which is kept strong. When given enough water and minerals like magnesium and zinc, the human body can fend against alien diseases (Arshad et al., 2020).

Among the various immune boosters, natural source products are frequently used. According to a recent Business Today article, customers' online purchases have caused a rise in the sales of natural items in recent months. The price of turmeric, sometimes referred to as "Haldi," has increased by more than 40%. In addition, there is a rise in the demand for fruit liquids, honey, and chyawanprash (Shashidhar, 2021).

People have started to improve and enhance their immune systems in various ways. While others up their consumption of probiotics, green tea, antioxidants, and omega-3 fatty acids, many consumers seek to include fibres, protein, vitamin D, calcium, nuts/seeds, and whole grains in their diets. These days, products that boost immunity have been known to almost fly off the shelves. It had been assumed that many consumers had expressed a desire to purchase immunity products. To determine whether they regularly leave the house for work or daily household shopping or not, it is necessary to identify the types of clients who are noticeably more concerned about their health. As a result, the study tried to understand how consumers act while making purchases of goods that boost immunity (Arora et al., 2021).

1.2 The Effect of the COVID-19 Pandemic on Consumers' Consumption of Immunity Booster Products

Consumers have been more conscious of quality living and healthy eating during the last few decades. They even want to pay more for items that increase immunity (Shamal & Mohan, 2017). Heightened consumer consciousness of the negative health consequences of a busy lifestyle, poor dietary habits, and a sedentary lifestyle, scientific advances in nutrition research, improved understanding of the critical relationship between diet and health, and an extremely competitive, congested food market have all been linked to the increase of immunity booster products (Granato, Branco, Nazzaro, Cruz, & Faria, 2010). India is a burgeoning market for health food items and presents the processed food sector with a tremendous opportunity to concentrate on such health-beneficial meals (Shamal & Mohan, 2017). The behaviour of Indian customers toward immunity-boosting items would be of interest to food marketers, particularly in the wake of the COVID epidemic, when preserving one's body's immunity is urgently needed.

Numerous study results confirm that "Subjective Norms" affect how consumers choose to use immunityboosting products. The social pressure that prompts a consumer's indulgence or abstinence from behaviour is subjective norms (Ajzen, 1991). Indian customers' appetites for innovative food purchases are fuelled by subjective standards (Yun, Verma, Pysarchik, Yu, & Chowdhury, 2008). Additionally, subjective standards significantly impact how consumers use synthetic immune booster products (Rezai, Kit Teng, Mohamed, & Shamsudin, 2014). The study had also shown that experts in the medical field, educators, and media professionals are crucial in spreading knowledge about immunity-boosting foods and drinks (Kapsak, Rahavi, Childs, & White, 2011). Therefore, the study suggested that subjective norms impact how consumers choose to use immunity-boosting products.

The study's key flaws are that it did not consider factors affecting customer behaviour, such as danger, fear, mood, or experience. Therefore, the "Health Belief Model (HBM)" components of perceived advantages,

susceptibility, threat, and "health motivation" were used in the current study. Consumers' acceptability of tailored nutrition is heavily influenced by "perceived advantages" (Dowd & Burke, 2013). Consumers' decisions on immunity booster products are largely influenced by their healthiness, familiarity and security, taste and pleasure, price, and convenience (Urala & Lähteenmäki, 2003). Therefore, it was expected that perceived advantages had a beneficial impact on consumers' use of immunity-boosting products.

Consumers' perceptions of the health advantages associated with using immune booster goods are a crucial determinant of whether functional items are accepted by consumers (Verbeke, 2005). Immunity-boosting items appeal to health-conscious people and value their well-being (Goetzke, Nitzko, & Spiller, 2014). A person's willingness to be informed about health issues is called "health motivation." Consumers who care about their health workers to live a healthy lifestyle. Additionally, it was shown that "consumer health knowledge and defensive health behaviour operate as favorable determinants on immune booster goods adoption" (Rezai et al., 2014). So, it was suggested that Health Motivation greatly impacts how people use immunity booster products.



Fig. 1. Model for Immunity Booster Product's Consumption Behavior in the Post COVID19 Scenario

Source: Jayadevan, G. R., Thamaraiselvan, N., Jayapal, J., & Gangadharan, N. (2021). COVID-19 Pandemic and Its Impact on the Consumption Behavior of Functional Food Products in India. Co-Editors, 315.

According to the "Social Cognitive Theory (SCT)," a consumer's behaviour develops as a result of seeing how others behave in society (Bandura, 1998). SCT suggests that the descriptive norm influences a person's conduct. The term "descriptive norm" refers to traits that make us "social animals." A person will act in a way that will gain the approval of others in civilization or his or her socio-cultural surroundings (Ajzen, 1991). A descriptive norm refers to the societal forces that cause someone to engage in particular actions that they know their loved ones find appealing (Pedersen, Grønhøj, & Thøgersen, 2015; Yuan et al., 2008). Numerous studies demonstrate that the descriptive norm impacts how frequently people use immune boosters (Pedersen, Gronhoj, & Thogersen, 2015) (Barauskaite et al., 2018). The current study, therefore, proposed that, in the Post-COVID 19 scenario, the Descriptive norm significantly affects the intake of immunity-boosting goods.

Ajzen (1991) contended that a person's conduct is shaped by the information that makes up his or her ideas. The more frequently someone is exposed to favorable information about using immunity-boosting drugs, the more likely they would engage in such activity. It was suggested that consumption patterns of immunity-boosting items,



particularly in the post-COVID-19 era, were considerably influenced by the nutrition and body immunity-boosting information widely disseminated by all reliable media sources. Cognitive, emotional, conative, and psychomotor components contribute to behaviour. It describes a person's knowledge, attitude, and intentions, not only their behaviour or that of others (Petty, Barden, & Wheeler, 2009). Numerous factors affect how consumers use immunity-boosting products (Sumaedi & Sumardjo, 2020).

2. THE RATIONALE OF THE STUDY

A review of consumer buying behaviour is critically needed now, given the unpredictability of the times, the unstable environment created by the COVID-19 epidemic, health concerns, and other considerations. Doctors and health specialists strongly advise purchasing immunity-boosting items to combat COVID-19. Since the human body's immune system may be quickly and effectively strengthened, items that promote immunity are in great demand during pandemic crises. Health-related issues, the reputation of immunity-boosting goods, and the advice of doctors and other healthcare professionals all greatly influence consumer purchasing decisions.

3. LITERATURE REVIEW

Several studies have been conducted to comprehend the changes in dietary and food buying trends during the COVID19 epidemic. Additionally, several studies have been conducted to determine how the COVID-19 Pandemic may impact food supply chains and consumer panic buying behaviours (Hobbs, 2020). In the COVID-19 Pandemic, Grashuis et al. (2020) examined people's preferences for food buying. Their findings showed that "COVID-19" significantly altered people's choices for grocery shopping. Customers are often unwilling to buy at food stores when COVID-19 is growing rapidly. In 2020, Ben Hassen et al. looked at how COVID19 affected Qatari food intake and eating habits. Their findings suggested that consumers changed their diets to be healthier and consume domestic food due to food safety concerns. Chang and Meyerhoefer (2021) investigated how COVID-19 affected online food delivery businesses. Their findings showed that the COVID-19 outbreak significantly increased Taiwan's internet food purchases. Celik and Dane (2020) researched how the COVID-19 pandemic epidemic affected dietary choices. According to their poll, people are more likely to choose fruits and vegetables as their first food option than meat and pastries. During the COVID-19 pandemic in France, Marty et al. (2021) surveyed the nutritional value of diet and reasons for food selection. According to their findings, consumers are much more aware of the value of sustainable food options. As much as the author can tell, there is no information available about the actual food safeguarding practices of the populace throughout "COVID -19." To assist food authorities in taking the appropriate safeguards during pandemic conditions like COVID-19, the current study examined both changes in food purchase and preservation practices.

The most effective way to prevent viruses from making you sick is by strengthening your immune system. It is essential to modify present lifestyles to achieve this goal by adding more intelligent tasks to "to-do" lists. This will enable inner immune/defence systems to compete against viruses like COVID-19. Eradicating the diseases and infection's avidity would help the body's natural defences against viruses. The bulk of these characteristics is connected to reactivating immune system functions through promoting "anti-inflammatory" actions, improving "cell-mediated immune functions," modulating the activities of APCs (Antigen Presenting Cells), and squelching pro-inflammatory mediators. They also facilitate efficient cell-cell communication throughout innate and "adaptive immune responses" (Sarfraz et al., 2020)." Therefore, a precise investigation into enhancing immunity by getting enough sleep, wise exercise, stress-free surroundings, "proper nutritive foods, water intake," and eating of healthful and fresh vegetables and fruit would expect the populace to deal with coronavirus battle by naturally immunizing their structures (Jayawardena et al., 2020)

Identifying food items' active elements that support human health, such as vitamins, has received much scientific attention during the past 20 years. The labels "functional foods and superfoods" have become quite prevalent regarding foods and items that make health claims. Following this pattern, several dietary components and effective substances have been researched as "health-promoting" substances with potential antibacterial, "anti-inflammatory," and antiviral effects (Watson & Preedy 2016). "Bioactive peptides, polysaccharides, bioactive lipids, and natural polyphenols" are among the substances being studied, excluding vitamins (González, 2020). The market for nutraceuticals is rising despite deceptive effectiveness claims, worries regarding quality, a "lack of clinical proof," and the dangers of "self-medication" for serious illness (Williamson et. al., 2020). The name "nutraceutical" is still debatable because these items have been described as neither pharmaceuticals nor supplements. The phrases "functional food and nutraceuticals," utilized interchangeably, lack a legal meaning in many nations. In a wide sense, "nutraceutical" refers to a range of naturally occurring goods, including enriched "foods, functional foods,

and dietary supplements." The description of a "food supplement," on the other hand, is obvious, whereas that of a "nutraceutical" ("a syncretic neologism of the terms nutrient and pharmaceutical") falls into the murky territory between food, food supplements, and medicines (Santini, et. al., 2018). "Nutraceuticals are meant to promote health benefits in addition to their basic nutritional value" and frequently contain substances that are known as "generally recognized as safe (GRAS)" globally. One of the four areas of "food systems" (along with "food safety, food security, and sustainability") that were immediately impacted by this issue as the COVID-19 Pandemic spread over the world was the market for bioactive substances that strengthen the immune system (Galanakis, C. M. 2020; Rizou, et. al., 2020). "Customers worldwide stocked up on vitamin C and other botanical compounds in particular," which led to panic purchasing and shortages (Schyltz, 2020; Masterson, 2020).

As a consequence, scientific and research efforts to find bioactive substances that could strengthen "the immune system," defend against "viruses of the lower respiratory tract," and stop the spread of "SARS-CoV-2 (the novel coronavirus causing COVID-19 disease") increased. Because of this, various recent evaluations outlining the potential of natural compounds against "SARS-Cov-2 and coronaviruses" generally have been published (Xian et. al., 2020; Hensel et. al., 2020; da Silva Antonio et. al., 2020). Researchers have published publications in "torrents" because of the lack of understanding regarding "SARS-CoV-2" and the vital necessity for quick preventative and treatment solutions (The Economist 2020). The drawback of this quick method of learning new information is that the abundance of research that resulted from it has not yet been evaluated for its value or significance. The urgent need for novel health therapies to battle COVID-19 and a spike in interest in expediting "green deal innovations and climate change" are anticipated to impact incremental advances in maintaining agri-food and new goods (Rowan, 2019). The relevance of dietary and plant components and active compounds in the fight against COVID-19 illness, as shown by the plethora of recent studies, is thus thoroughly reviewed in this important study.

Additionally, it appropriately examined the crucial role that nutraceuticals and dietary supplements play in promoting a healthy society, considering "long COVID-19" for survivors (Butler, & Barrientos, 2020). For instance, peripheral inflammation brought on by "COVID-19" may have "long-term" effects in individuals who recover, possibly "through neuroinflammatory" pathways that an unhealthy diet might exacerbate, and result in chronic medical disorders including dementia and neurodegenerative disease (Butler, & Barrientos, 2020). Wider access to nutritious foods is thus urgently needed, and individuals should be made aware that good eating practices can lower the risk of contracting COVID-19 and minimize its long-term effects.

According to Gordon-Wilson (2022), external factors like COVID-19 impacted "consumers' sentiments for self-control" by altering their shopping habits, preferred store formats, and unhealthy food and alcohol intake. According to Kim et al. (2022), customers' dedication to sanitary behaviour, preference for neighbourhood eateries, and careful consumption may all be attributed to protective motives. Guthrie et al. (2021) utilized the react-copeadapt paradigm to understand how consumer behaviour has altered concerning adopting e-commerce due to traumatic situations like COVID-19. According to Eroglu et al. (2022), customer-employee relations mediate between congestion in retail outlets and shoppers' shopping pleasure during COVID-19. They went on to say that these associations considerably vary depending on how consumers perceive the necessity of merchant safeguards, the gravity of dangers, and their susceptibility to COVID-19. Milakovi (2021) demonstrated the moderating influence of customer adaptability to comprehend the effects of consumer vulnerability and resilience on buying a pleasure and, ultimately, on consumer repurchase intention. To help customers deal with the pandemic's stress and worry, Yap et al. (2021) created a novel concept termed "technology-mediated consumption." They also examined paradoxes that describe the connection between consumer susceptibility and technological usage. Nayal et al. (2022) outlined several coping mechanisms that businesses might use to protect the well-being of their customers and employees. Digitalization and innovation have become the two key strategies businesses must follow if they want to survive after COVID-19. The survey also showed that during the current Pandemic, consumers shifted their purchase habits in favour of hygiene, sustainability, and local products.

4. RESEARCH QUESTIONS

Based on the literature evaluation regarding consumer purchasing patterns for immunity-boosting products during the COVID-19 Pandemic, which was done as per the above recommendation. Parameters like age, career, family size and money have a significant impact on how consumers choose to purchase immunity-boosting products.

In light of the nature of the study, the following are the research questions:

> Does the brand image of the immunity booster products influence the buying behaviour of the consumer?



- Do the doctors or health consultants influence the consumer's buying behaviour towards buying immunity boosters products?
- > Does health consciousness influence consumer's buying behaviour toward immunity boosters products?
- How the covid-19 Pandemic influence consumer dose's buying behaviour toward immunity boosters' products?

5. SIGNIFICANCE OF THE STUDY

In the wake of the COVID-19 pandemic, the healthcare industry underwent a significant transformation in 2020. People's attitudes about health consciousness have changed due to witnessing how the coronavirus has affected the entire planet. In light of the pandemic, the necessity for a healthy and active lifestyle was realized with more emphasis. People from all demographic groups tended to guard against disease to keep healthy and fit. They turned to buy health items of various kinds, such as immune booster products, to take excellent care of themselves and their family. The study chose evaluations primarily from the years 2020 and 2021 to depict customer purchasing behaviour toward immunity boosters products during the COVID-19 pandemic.

6. DATA EXTRACTION

To commence, the author conducted a literature search using the phrases "consumer buying behaviour" and "immunity booster items." Depending on their traits, how they were chosen, and the size of the sample they were a part of, the author acquired data from the literature. The author also considered the study's publication year and its place of origin.

The literature search found 125 publications or 101 abstracts, and the citations showed 24 studies. 39 papers did not match the inclusion criteria for the study's subject, while the abstract review rejected 47 abstracts, 24 of which were from non-English sources. 15 relevant peer-reviewed papers were chosen in accordance with the inclusion criteria, and their acceptability was then determined.



Fig. 2. Flow Diagram of Data Extraction

7. RESEARCH DESIGN

The document's design is descriptive, suggesting that all important details are communicated clearly and succinctly. The case study method, earlier research papers, and articles were used as research tools. The evaluation of goods that increase immunity, as well as useful meals for boosting the body's immune system to combat the covid-19 illness, was considered throughout the study. Utilizing all the research methods used in the reviewed



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studies, it was possible to examine consumer purchasing patterns for immunity-boosting goods and determine the significant influence of medical professionals' advice, product brand perception, and consumer health concerns.

8. DISCUSSION

People have changed where and how they should spend their money due to COVID-19's economic, social, and psychological effects (Rogers & Cosgrove, 2020). Consumers respond, deal with, and adapt to environmental restrictions like the COVID-19 Pandemic, according to Kirk and Rifkin's (2020) argument. Throughout the Pandemic, consumers have participated in various novel activities (Laato et al., 2020; Pantano et al., 2020), increasing their spending on needs while decreasing their discretionary spending. Additionally, consumers have been seen to change brands and products, replace purchases when supplies are low, and show increased concern for hygienic conditions and health. Market research on how COVID-19 might impact consumers found increasing spending on food, health, and hygiene products (Rogers & Cosgrove, 2020). Researchers are investigating consumer behaviour during the Pandemic and the causes of it in light of the aforementioned changes.

People make decisions on how to use their resources, including money, time, and desire, through consuming related goods and services. Additionally, people decide how to get and utilize commodities and services (Sathyaprasad & Siddiq, 2017). Consumers have prioritized health products due to the Pandemic, particularly immunity boosters, as long as personal hygiene and health are key considerations. Consumers paid close attention to brands that made claims about their immune-boosting ingredients. Vikrant Arya et al. (2012) investigated how inhabitants in the Joginder Nagar city of Himachal Pradesh behaved while purchasing ayurvedic products. Compared to allopathic, homeopathic, and Unani medicines, Ayurveda over the counter (OTC) goods was shown to cause most consumers' concerns. Consumers are convinced to buy items and get treated for common ills without contacting a doctor through marketing for big enterprises.

Changing preventative healthcare and self-health knowledge influenced supplement intake. According to a study by Chincholkar (2016), consumer purchasing behaviour for nutritional and health supplements in Mumbai. The way that doctors and other health professionals consumed was changed. Most buyers indicated an interest in herbal products instead of chemical supplements. Suganya and Hamsalakshmi (2017) investigated consumer brand awareness and preferences for products free of chemicals. Customers aged 36 to 45 expressed interests in purchasing ayurvedic drugs. For common ailments, 74% of customers in Mysore city used ayurvedic pharmaceuticals, and 72% of consumers chose Ayurveda medications over allopathic and homeopathic medicines, according to research by Deepa and Nalina (2018). Advertisements for well-known companies greatly influence consumers. Le Chong and Teh (2020) investigated Malaysian consumers' probiotic nutraceutical product purchase habits. According to the outcomes of multiple regression analysis, self-motivation and health promotion were the primary factors influencing purchase behaviour.

Probiotics were not well-known to consumers. After COVID-19, trends in consumer purchases of over-thecounter medicinal products were studied by Tomar and Krishnamoorthy (2021). The positive impact of COVID-19 from the perspective of self-health awareness was demonstrated using descriptive analysis, which revealed that consumers' self-health awareness grew after COVID-19, and they started utilizing immunity booster products. Most consumers choose well-known brands over lesser-known ones that are promoted with ayurvedic ingredients for particular diseases. During the COVID-19 Pandemic, Landge and Petare (2021) performed research; a survey on consumer buying habits for over the counter (OTC) goods revealed that consumers were using the items for the most common ailments, such as colds, coughs, fevers, and were older than 20. Comparatively, fewer over-the-counter products were ayurvedic than allopathic medicines.

Additionally, it was discovered that people's spontaneous purchases of fitness items are favourably influenced by fear. Previous empirical investigations have found a favorable relationship between fear and impulsive purchasing (Lin & Chen, 2012; Liu et al., 2019; Silvera et al., 2008; Verplanken et al., 2005). The material that is now available has mostly focused on the importance of positive emotions (such as excitement, pleasure, and joy) in setting off "impulsive consumption" (Kalla & Arora, 2010). Although, two meta-analyses of impulsivity found that impulsivity is positively correlated with people's bad emotions (Amos et al., 2014; Iyer et al., 2020). According to Verplanken et al. (2005), negative emotions are "darker incentives" that support customers' desire to make hasty purchases.

Additionally, when a person is in a bad mood, impulsive buying serves as a self-control method to find interruptions and lessen the bad sentiments (Atalay & Meloy, 2011; Gardner, 1985; Verplanken et al., 2005). According to the study, customers' irrational exercise gear purchases alleviate their anxiety about the COVID-19



epidemic. To put it another way, the level of dread that "COVID-19 pandemic" victims experience may encourage their impulsive use of fitness items, which gives them a way to deal with their worry because of the benefits they expect from utilizing fitness products.

9. CONCLUSION

Increasing immunity is essential right now, and people have realized this. In recent months, this has led to increased demand for goods and components with an immunity-based foundation. Knowing and acknowledging a healthy immune system is essential for defending against diseases and viruses. As a result, there is a strong tendency among customers to purchase immunity-based goods. Due to the current new normal, many consumer decisions have been impacted by the acquisition of dietary components that strengthen the immune system.

Additionally, there is an increase in demand for health supplements, such as Ayurvedic medications and goods, as more individuals seek ways to strengthen their immune systems. The study highlights that consumers' purchasing behaviour has changed dramatically due to numerous viruses and diseases, and they are now eager to maintain their health by eating various supplements. After doing the analytical investigation, it was shown that while age does not affect this, a person's employment situation affects their level of immunity consciousness. Additionally, it has been revealed that customers prefer over-the-counter supplements over the other types of immune booster goods, while they have the least preference for natural sources. Consumers with the lowest monthly spending are more likely to choose over-the-counter supplements than any other items, according to an analysis of per-person, per-month spending on immune products. Therefore, the Authors conclude that consumers know the important role immunology-based goods play in regulating and enhancing their immunity.

The study determines how frequently consumers purchase and the respondents' socioeconomic characteristics interact. The findings indicated that most had a fair understanding of "immunity boosters products" and occasionally bought them. By highlighting the advantages of their products, firms need to launch various marketing campaigns across various media to raise consumer awareness and frequency of purchase. To determine the relationship between frequency of purchase and socioeconomic characteristics, including age, gender, educational attainment, career, family size, and monthly household income, The study found that while gender and educational status were not substantially correlated with the frequency of purchase, socioeconomic characteristics including age, career, family size, and monthly household income were. Therefore, it is clear that parameters like age, career, family size and wealth significantly impact how consumers purchase herbal immune boosters. Businesses and organizations may concentrate on customers who fall into the 21 to 40-year-old age bracket, are working professionals and students, have families with three to five members, and make more than Rs 50,000 monthly.

Brands must offer appealing pricing that is within reach of people in the low to middle-income brackets, as well as a variety of package sizes that are cost-effective and include enough products for a single person. Brands may also inform different groups of educated people about the advantages of immunity boosters without gender prejudice, encouraging them to include them in their everyday lives. To help the population defend against various diseases and disorders and to strengthen the nation's immune system, central and state health ministries may run educational campaigns on the health advantages of certain herbs.

10. RECOMMENDATION FOR FUTURE RESEARCH

Finding alternate corrective actions is urgently needed in light of the ongoing COVID-19 catastrophe. Several different products have been utilized to increase immunity during the COVID-19 crisis. They have been regarded as effective therapeutic medicines against various viral infections, such as corona, because of their antiviral characteristics. The study, however, looks at how consumers buy immunity-boosting drugs; several other areas may use more research.

Additionally, immune booster products and their all-natural components have emerged as the most promising alternatives for treating or preventing infection and disease transmission since the illness's emergence. To gain the clearest possible proof of the COVID-19 patients' good health, they are currently being evaluated in vitro. The possible use of immunity-boosting products to treat COVID-19 has been described in detail by the authors of the current review. However, there are not enough studies to determine if various immunity-boosting products are effective against SARS-CoV-2. However, several researchers are still working on these projects to provide a reliable antidote for this virus. Prospects support that one can establish participation in preventing this virus's life cycle by fusing the research with efficient technologies and testing.



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