Functional food in Viet Nam: Trends consumer online shopping in Ho Chi Minh city

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Abstract: Functional food is an interface between food and drug, but the food law governs it because the nature, structure, production, and use of functional foods comply with the provisions of the food law. Therefore the first issue is to distinguish functional foods and medicines. In the elderly, with increasing longevity and quality of life, primary health care is paid more attention, promoting health risk management and preventing chronic non-communicable diseases. In Vietnam, about 100 adults have 27 people with high blood pressure. More than 10 million people with pre-diabetes patients and other chronic diseases such as arthritis, osteoarthritis, osteoporosis, impaired memory, metabolic disorders. Ho Chi Minh City has 43% of adults who use functional foods. The development of broadband Internet helps Vietnamese people efficiently use internet-connected computers and smart mobile devices. This development has led to many Vietnam acceptance of online shopping with the development trend of functional foods as diverse and abundant in the emerging markets such as Vietnam, and the big cities have e-commerce activities early development. This study’s objective was to evaluate the factors demographics such as age, gender, income, information channels understand the product and place of production-related product trends of customers buying functional foods. This study surveyed 500 people and collected samples from 374 people using functional foods, aged 18 to 65 in Ho Chi Minh City, one of the places with the most developed e-commerce activities in Vietnam. The overall results show that demographic variables such as age, gender, income, product discovery information channels, and production place are significant premises related to online shopping and Customer confidence in the quality of functional food products. Among 374 people using functional foods, 247 (66%) people buy functional foods online. In people buying functional foods online, men represent 23.9%, and women represent 76.1%. Research shows that consumers’ demand trends, and the potential of innovation and the health benefits of an emerging market, development trends e-commerce for food markets function in Ho Chi Minh City, Vietnam in the future.

1. Introduction
Functional foods has gained recent momentum in response to the changing health status of developed and developing countries. As healthcare costs and average life expectancy increase, people have sought...
ways to become healthier and create a higher quality of life [3]. Human eating habits and trends have an impact on health, the environment, and society. Developed countries also face problems with aging populations, high energy foods, and an unbalanced diet. Recent studies show that the focus of scientific investigations has shifted from the primary role of biologically active functional foods to human health[1]. There was a boom in consumers' interest in the favorable position of functional foods for happiness and prolonged life, and preventing the start, reducing the development of chronic disease [4]. The Ministry of Health of Vietnam also has a clear definition of functional foods and stipulates that, depending on the use of added micronutrients. Functional foods also have four other names: Real Micronutrient supplements, Food supplements, Health food, Nutritional products medicine [4]. In Vietnam, the explosion of Internet services and e-commerce businesses. Functional foods are advertised on the website and social networks. It has encouraged consumers to easily access information and buy and sell health care products related to functional foods. Still, there is a lot of information that is not transparent about quality, origin, and functional foods. The demand for these products is increasing rapidly in the market[5]. Functional foods play a prominent role, which meets the elderly's desire to improve life expectancy and life quality[6].

This study analyzed consumers' relevant information using functional foods to buy online and explaining the social impact study for customers using available food in Ho Chi Minh City, Vietnam. Research makes a meaningful contribution to companies that choose functional food production strategies to market based on digital technology in the relatively new and complex e-commerce market. In emerging markets, businesses also have non-transparent information that confuses the functionality of food, pharmaceuticals, cosmetics, pharmaceuticals and medicine, traditional medicine, authors, and their sources of origin, uncertain quality assurance, infringements of intellectual property rights.

Online stores have many advantages compared to direct retail stores. Being convenient, time-saving online stores don't need to travel and wait. They are open all the time, and they can be accessed anywhere. These online stores provide consumers with free information and an abundance of accompanying products and services. Interactivity is the key distinguishing feature between marketing communications on the Internet and mass media. Today, online consumers have more control and negotiation than consumers of stores outside practice. The Internet provides more interaction between customers and suppliers of products/services and available information about products and services. Online stores reduce transaction costs and have advantages for customers and suppliers[7].

The development of e-commerce and online shopping provides customers with product searches in a wide range and depth of product services. Besides, it also requires customers to escape the usual shopping habits in the retail store outside. Online shoppers need to learn new technology skills to identify, evaluate, and purchase products. Customers who prefer to shop directly at other retail channels do not consider online shopping as a convenience. Customers love the innovative new products tend to try new activities. The application of online shopping is to describe the characteristics of an individual creative. However, online stores also have drawbacks compared to real-world stores. In the online shop, the customer does not make sense of any product they find on the Internet (look, touch, taste, smell, and hearing) as they search for and buy products. In online stores, consumers may develop low trust and perceive increased risks due to the lack of face-to-face communication. However, this difficulty can be reduced using specific software tools such as the proposed online agents and agents' online negotiations[7].

Customers consider the various risks associated before deciding to buy a product. The different types of factors are called perceived or predicted risks. The higher the risk of cognitive experience, the consumers can not go to retail stores to return products directly. Meanwhile, the lower customers find perceived risk, the higher the trend of online shopping is. The most common risk associated with online shopping is financial risk, Product risk, Convenience, and delivery risks[8].

Health communications send a positive health message to consumers, highlighting products that should be used following their health and scientifically based health claims communicated to customers. Besides, it is essential to investigate the public's awareness of health requirements and how customers
plan to use it when making purchase decisions to take an active role in health care. Initially and reduce the risk of disease. Health requirements related to different products and attitudes towards and acceptability of these products depend on the type of complaint, the promised benefit, and how it is shipped to the customer[9].

The study can provide an insight into helping functional foods customers and business managers in Ho Chi Minh City, one of Vietnam’s largest and most potent markets, to minimize e-commerce risks. To trade in counterfeit goods, goods, and services that infringe intellectual property rights, fake interests, turns on the list of goods and services banned from business, which bring customers serious harm to health and life living, disturbing the market, damaging production and trade. Research Questions: (i) Customers use functional foods by purchasing them online. (ii) Trends of customers using functional foods in online shopping of the community in Ho Chi Minh City.

2. Methodology
The study carried out collecting opinions of about 500 people[10]. Volunteers share information about whether or not they take the supplement. They talk about the experience and feel of the products they use functional foods to buy online or directly at the store. The study is based primarily on observing and interpreting interviews with clients seeking the information of the participants. The data collected included age, education level, gender, conducting qualitative research to explain the trend of customers using functional foods in the form of online buying of the community at Ho Chi Minh City. This study was conducted to collect samples from 374 people using functional foods, aged 18 to 65 in Ho Chi Minh City[11]. Time to collect information and perform research in the period June to December 2019. A descriptive observational study includes systematic collection and presentation of data on one or more community characteristics. A group of final year students of Pharmacy, University Nguyen Thanh, met people who provided information for the study from randomly selected families living convenience in Ho Chi Minh City. A cross-sectional study has consulted 500 people from families living in Ho Chi Minh City and recorded 374 people volunteered to answer.

3. Result and Discussion
3.1. Customers use functional foods purchased online
The results showed that the proportion of people using functional foods buying online was 66.04%. Among the population buying supplements online, the ratio of men to women is 0.53. This result is consistent with the study of Nutrition communication: Consumer perceptions and predicting intentions[9].

The research results show the interest of young consumers aged 18-25 years for functional foods (40.48%) in table 1. This is the largest number of customers using functional foods, consistent with functional foods research and youth[12]. The young people interviewed were advocates of a healthy lifestyle using health care supplements. They buy functional foods online with most body care products and beauty. Young people taking functional foods have an income of 200 to 300 USD and their education level (High School, Vocational-college, and university). Young people know how to take advantage of the positive benefits of shopping online, and they do not bring trouble resolving unwanted issues when buying functional foods online. They have a higher level of trust in these products compared to other age groups in the study.

The result of table 1 implies a change in acceptability among age groups using functional foods in the form of online purchases, different from the results of the consumer acceptance of functional foods in Ho Chi Minh City[11]. The usage of functional foods decreases with age. People over the age of 55 in Ho Chi Minh City may lack access to and familiarity with new technologies to purchase functional foods online or buy a complicated activity online that can lead to risks. People older than 55 years old usually buy directly in retail stores. Therefore, conservative older people may be reluctant to accept a new definition of food bought online. They lack the knowledge of using the Internet, making them
having fewer online purchase options. However, older people who have online purchase experiences of functional foods (4.86%) have university-educated and postgraduate degrees (table 1). They change their behavior towards functional foods online purchasing favorable in finding suitable products, more diverse and active. The participants have a personal income of $ 500 a month, usually involving people with a university degree and postgraduate. They use functional foods when getting advice from a pharmacist or doctor about their health.

Table 1. Profile of user functional foods bought online (n=247)

| Variable                  | Frequency | Percentage |
|---------------------------|-----------|------------|
| **Age**                   |           |            |
| 18 -25                    | 100       | 40.48%     |
| 26 -39                    | 93        | 37.66%     |
| 40 -55                    | 42        | 17%        |
| Over 55                   | 12        | 4.86%      |
| **Education**             |           |            |
| High School               | 35        | 14.18%     |
| Vocational - college      | 62        | 25.1%      |
| University                | 102       | 41.29%     |
| Postgraduate degree       | 48        | 19.43%     |
| **Average personal income/month of the year** |   |            |
| Less than 200 USD         | 44        | 17.81%     |
| 200 to 300 USD            | 94        | 38.06%     |
| Over 300 to 500 USD       | 70        | 28.35%     |
| Over 500 USD              | 39        | 15.78%     |

3.2. Trends in attitudes and opinions towards functional foods bought online

The study results showed that customers who read the information spent on Facebook (55.06%) then go to the product sale page. Directly from the search from the sales page supplements (46.96%) with ‘figure 1’. These pages only present information on the product's technical standards, but no information on the effects and warning of functional foods products. Customers using functional foods looking for information to buy, use, and conduct transactions when purchasing online expect that they will receive the product exactly what they desire without happen unexpectedly annoying. Expectations of customers are set through the image of enterprises producing functional foods or online dealer sales, the promise of the brand, reputation, price, advertising, and media messages. Suppose the customer is not used to buying functional products sold online. Customers have prejudices; it is based on the lack of positive information that the customer received via other communication channels.

Customers share ideas about functional foods and purchase intent on the belief about health benefits and the importance of sensory quality products. Customers use functional foods to buy online and always want quality products that meet the expectations as did learn through information; the work's characteristics are precisely announced following technical requirements or standards. Customers via the Internet, easy to use, and get the right access to quality management for the quality assurance factors they want to use. Customers tend to choose products that originate from countries with sound quality management systems such as the U.S. and European countries (46%), Japan, and South Korea (35%) with figure 2 because customers trust the quality management's effectiveness activities in these countries. Relevant results when checking the search results for "functional foods" by Vietnamese in 2019 of customers with google trends (Top) with the highest marks are the U.S. and Japan. Domestic products (11%) and the effects of other countries in the ASIAN region that customers are also interested in using (7%) with ‘figure 2’. Customers share mostly functional foods. Energy is derived from nature, especially medicinal herbs.
Customers said functional food manufacturing businesses should pay attention to building a comprehensive quality management system for users combined with the application of information technology traceability of products, reducing companies. Intermediary distribution, together with the direct distribution company via online channels to solve product-related issues when customers encounter, help build trust with customers by online distribution partners. Consumers do not want to receive low-quality products, products of the same type of unknown quality, and easy to confuse with drugs when developing countries have limited e-commerce trade management. These comments align with Search results from google trend 2019 by the Vietnamese language "Functional foods" with increased related terms (functional foods are drugs or not, and What is an available food?)

3.3. Customers using functional foods purchased directly at retail stores
In the second segment, the group using functional foods did not buy online. They chose to buy directly at the store (39.96%). This group has a positive attitude towards the health aspects of functional foods. They do not trust the quality of the functional foods products because they cannot directly view products. They do not trust new products because they have a habit of seeking advice from professionals. Communicate health education directly to the community when purchasing supplements online (e.g., lectures, seminars, promotions in supermarkets and other retail stores) to help reduce suspicions about product origin, product quality, payment risk, and customer product problem-solving services.

4. Conclusions
For customers using functional foods purchased online in Ho Chi Minh City: First, interview results indicate channels where customers learn about functional foods before buying online. Manufacturers of functional foods products via online distribution channels need to provide more product information recipients and effectiveness, which helps customers know about the company's products, control, and avoid fake goods. Second, customers want to be provided trustable information; customers want to know that quality, characteristics, positioning factors, price, and services are verified. Third, customers need more certainty via direct advice from a qualified person, possibly through the guidance of potential long-term health benefits. This helps eliminate suspects when customers decide to buy the product and provide customers with necessary details on the health care's functional foods. Fourth, Customers need to know potential risks with advertisements for functional foods that affect patients and increase the need to use functional foods such as pharmaceutical products to treat diseases with their economic conditions.
Future perspectives and opportunities based on consumer trends and the potential of the innovation above and health benefits. The key to the development trend of e-commerce functional food market in Ho Chi Minh City, Vietnam. Function foods manufacturing businesses choose suppliers online need to pay attention to:

- A clear brand promise to the source of the product
- Transparent product information with published quality standards
- Consistency in delivering products and services to customers’ door-to-door
- Easy to access and convenient in all communication channels
- Plan to solve the problem immediately on the first contact
- Sincere sympathy when the incident occurred, ensuring the rights of users
- Knowledge, attitudes, the behavior of customers using functional foods for health.

In the future, functional foods depend on a clear demonstration of their effectiveness in promoting health. Therefore, functional foods of information on online distribution channels need to be evidenced by clinical studies. Such a tool provides scientific evidence on claims quality functional foods health care. The distribution company to see transparent traceability of products increases the attractiveness and confidence of customers taking functional foods when shopping online.

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