Consumption Preferences of Fishery Products among the Young People of the Iran (Case Study: Gorgan City)

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ABSTRACT

Fish and seafood, as a balanced, healthy, low-fat, and high-protein diet contains vitamins and minerals which is known as an important part of the human diet in the long time. In the present study, the behavior of 15-29 years old consumers and their preferences of fishery products of the Gorgan City were examined based on a questionnaire filled with 314 young people as a sample. The frequency was used to describe demographic characteristics. Also, the Friedman test was done to study the questionnaire main questions. Based on Results, the young people preferred traditional food relative to the fast food and seafood of the restaurants. With respect to the availability of fresh fish, 80.3% preferred fresh fish and 15.9% preferred packaged products due to their healthier nature relative to raw fish. Moreover, the aquatic species packaged was the main reason of buying non-canned fishery products packaged. Consumers preferred the Caspian Sea packaged species among which the commercial brand Tohfeh was the brand of fishery products which was the most known one among consumers. The most popular packaged fishery product was the fried shrimp. 63.1% of consumers were consuming fish during the last two week before collecting the filled questionnaires.

Keywords: Young people; Fishery products; Consumer preferences; Marketing; Iran

INTRODUCTION

A demand for aquatics consumption is increasing by developing aquaculture around the world due to their nutritive value. Fish, as one of the most important animal resources of a healthy diet, is rich in minerals, vitamin, unsaturated fatty acids, and amino acid. Additionally, it has no hard connective tissue and is digested easily. Some studies show that consuming fish prevents from cardiovascular diseases, high blood pressure, cholesterol, Alzheimer, and different kinds of cancer. Thus, increasing the people awareness makes them interested in the fish consumption which leads to the production increase [1]. Today, consumers tend to buy seafood more than previous regarding their quality. The buying behavior is not simple, but a comprehensive understanding is required to manage marketing [2]. In the other word, understanding the consumer behavior helps to produce and prepare products, and meet the consumer needs [3]. Knowing the behavior and preferences of consumers is necessary for distributors and companies to produce and provide their needs to the market [4]. The growth of people income and economy has considerably changed the patterns of food consumption. Also, urbanization and industrial growth has led to a

great increase in the city population over the last three decades [5]. It is found that the countries of the south of the Europe buy the complete fish while the countries of the north of the Europe prefer consuming processed products such as the frozen and fried fish [6]. Brunso et al., reported that the fish consumption varied between different groups of people and the reasons is mainly related to the health value and taste of seafood [7].

Marketing studies improve the management of fishery products production and distribution which enables manufacturers to provide products corresponding to the consumers' needs and requirements. As a result, marketing studies are aimed to collect information helpful for marketing managers to identify marketing opportunities [3]. As the young adults have a considerable share of the country population and their nutrition habits are very important, their priorities of food consumption should be studied. People of 15-29 years old are considered as young adults in Iran [8]. Although one needs to consume 65-70 gr protein daily in addition to other nutrients a third of which should supply with animal sources [9], fish per capita consumption in Iran (12.1 kg) is very lower relative to the global average [10]. The highest fish per capita

consumption (27.4 kg) belongs to industrial countries which results from the extensive production and availability of different aquatic products [11]. Marketing managers analyze the consumers' life style because it affects their needs, interests, as well as buying and consumption behavior and determines most of their decisions to consume which kind of food [12]. Therefore, regarding the young people life style, food production based on their needs is planned. The present study is aimed to examine the Gorgan young people consumption preferences of fishery products based on marketing characteristics to understand the aquatic products' consumption pattern in the current and future market which may be used as a reference for the industry of processing fishery products.

Over the recent years, many studies have been conducted in this field but there is not any study on a certain Iranian age group. In addition to the quality of fishery products, consumers consider the product appearance [13-18] and price [15,17-21]. Also, the product smell is an important factor [14,16,21,22]. Moreover, consumers consider visual aspects, the fish origin, price, the product shape, and its freshness [23]. However, most of consumers hesitate about the safety of seafood available in the market and tend to aquatic products cultured because known them safe [24]. A comparison between species used shows the nutritive value of seafood [25]. Also, there is a positive significant relation between the age and tendency to seafood consumption which lead to an increase in the family consumption [26]. Factors effective in choosing packaged aquatic products are the nutritive value of the food printed on the package, a longer time of food maintenance, information about product, healthy code, the company name and a confident label, information about how to cook seafood, opening the package easily, no need to clean and prepare for cooking, and easy transport [19]. Considering the importance of the age group of young people, the tendency to fast food, and their population share, fishery products are of priority to study to enhance per capita consumption of aquatics and their products in Iran.

MATERIALS AND METHODS

This descriptive study is a surveying one with a method of simple random sampling and information collection via a questionnaire. The questionnaire was designed by searching in library sources, other questionnaires, and interviews. In addition to sociological questions, factors effective on the consumers' awareness of processed fishery products ware under question. The questionnaire was accomplished considering corrective comments of marketing experts and its validity was obtained by Cronbach alpha coefficient 82.6%. The statistical society of Gorgan young people is 107760 ones [27] which the sample volume was 226 ones based on the Cochran formula. A random sampling of 314 young people was done in the Gorgan City. After data collection, the descriptive statistics including frequency, frequency percentage, and average was used to describe demographic characteristics. Also, the Friedman test was done for inferential statistical tests including examining the main and comparative questions.

RESULTS

The sample of 314 young people included 53% men and 47% women. The average, minimum, and maximum age were 24, 15 and
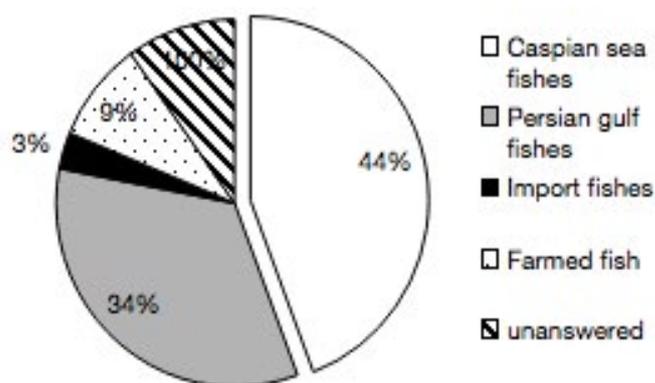
Figure 1: The priorities of young people of Gorgan for consuming different species of aquatic products.

29 respectively. The most and least frequency (47% and 34%) was for ages about 29 and 25, respectively. The average, minimum, and maximum of family members was 4, 1 and 9 respectively. 52.8% of families were annually using packaged fishery products up to 25% of their total annual consumption. 63.1% of consumers were consuming fish during the last two week before collecting the filled questionnaires. On average, families living in Gorgan had a fish consumption in restaurants less than 5 times each year. 51.6% of young people preferred traditional food of restaurants while 37.9% and 8.3% of them preferred fast food and seafood, respectively. Young people priorities for choosing fishery products and priorities of factors effective in buying non-canned fishery products can be seen in Tables 1 and 2 based on which the healthiness, assurance of the product, and simpler cooking relative to raw fish were priorities of consumers for choosing packaged fishery products. 80.3%, 12.6%, 4.8%, 1.6%, and 0.3% of consumers preferred fresh fish, canned fish, processed products, frozen fish, and packaged frozen aquatic products, respectively. Also, the species was the most important factor for choosing non-canned products, and the characteristics of the product printed on the package and the product weight was in the second place.

Brands Tohfeh (26.8%), Kaleh (6%), and BA (2.6%) were the most known ones among consumers. As seen in the Figure 1, the Caspian Sea fish was the first priority of consumers. Based on Table 3, the first and last priorities of young people were the fried and frozen shrimp among studied products.

DISCUSSION

63.1% of young consumers were consuming fish during the last two week before collecting the filled questionnaires which shows the place of fish in the food basket. Pieniak et al., showed that 70.5% of Portuguese and 40.1% of Germans consumed fish more than one time each weak, while most of people of Czech Republic, Greece, Romania, England and Sweden, who participated in the survey, consumed fish more than one time each month [28]. Hoseini et al. reported that 42.2% of families of Sari bought more than 4kg fish each time [4]. Baghiani Moghadam and Eivazi reported that 15.8% of families living in Javanrood consumed fish two times per week [29].

We found that 80.3% of Gorgan young people preferred fresh

fish. 55% of Chinese consumers [30] preferred fresh fish. Also, Romanian consumers [16] and rural consumers [31] preferred fresh fish. Fresh fish was preferred relative to frozen one in china [30]. Wirth reported that fresh shrimp is preferred in USA [24]. Although 55% of the people living in Ibadan, Nigeria, preferred fresh fish, people of higher education level preferred frozen fish [32]. In Portugal, people of higher education level preferred processed products [33]. Salehi reported that Iranian consumers preferred fast food and various fishery products [34].

Based on this study results, 85.4% of young people used packaged fishery products and the healthiness of products was their main reason for buying packaged products rather than raw ones. 62.3% of people living in Tehran tend to use packaged fish and preferred cleaned ones [19]. We found that 19.7% of young people living in Gorgan tend to use packaged fish. At the international level, people living in USA, Australia, and European countries including Norway, Spain, Denmark, and Belgium choose frozen fish because it is clean and has no bone [35]. Salehi and Mokhtari believed that the healthiness is an important factor effective in the increase of fish consumption in Iran which is the reason of buying fishery products [36]. People living in Tehran think that fish grown under control are healthier than wild fish [14].

Young people living in Gorgan choose packaged fishery products because they can be easily cooked which is their second reason to prefer packaged products relative to raw products. Consumers living in USA believe that this a value to cook easily [24]. Cleaned fish frozen or fresh is the first priority of 40% of the Iranian nutritionists [36]. People living in Norway, Spain, Denmark, Belgium, USA, and Australia choose the frozen fish as it can be easily cooked [35].

From the viewpoint of the young people living in Gorgan, the species of aquatic product packaged is of a great importance. Moreover, they prefer the Caspian Sea fish. Therefore, processed fish of the Caspian Sea should be more supplied. Also, the fried shrimp should be more supplied due to the young people preference relative to fresh shrimp. The first priority of people living in Tehran is trout [4,14,19]. People living in Sari prefer sea fish, fish cultivated in cold water, and fish cultivated in hot water, respectively [4]. Aghili et al. reported that families living in Gorgan prefer the Caspian Sea fish, warm-water fish, and cold-water fish, respectively [13]. Consumers living in countries of the south of Europe, Greece, Portugal, and Italy prefer fish cultivated relative to wild fish with respect to their awareness off aquaculture [28].

Although the young people are interested in packaged fishery products, they stated that these products were expensive. Aliabadi et al. reported that families living in Gorgan consider price of fishery products [20]. People consuming shrimp consider price after species, size, and shape of products [24]. Price is effective in buying products [14,19,37]. The price of fish packaged is one of the reasons of disinclination for using packaged fish [13]. Consumers living in Gorgan choose fish cultivated due to the lower price [20]. At the international level, consumers choose the frozen fish due to its price [35]. Thus, price is a factor effective in buying sea products [14,38].

Although young people are interested in consuming fishery products packaged, consuming them are low due to the

geographical location of Gorgan and availability of the fresh fish. They were interested in consuming fish in restaurants, but they stated that there were not enough restaurants selling fishery products and there were not diverse products in these restaurants. Crowded families buy fishery products less because seafood is a luxury one of high price [39]. Increasing the society awareness of advantages of fish consumption, encouraging people to replace fast food by fishery products through media and reference people in the community, advertising extensively for adding these products to the households' food basket, decreasing the products' price, diversity of products supplied, using modern industries, informing young people of fishery products' characteristics and their effect on the human health and preventing from diseases are the most effective measures to promote these products and replacing fast food by them.

CONCLUSION

With respect to the low use of packaged fishery products it is necessary to take measures to improve people awareness of advantages of fishery products relative to fast food, to encourage young people to use aquatic products continually, to advertise extensively fishery products to add them to the family food basket, to reduce the price of packaged fishery products, to supply diverse products fit to people taste, and to distribute products based on the geographic location and its acceptance in the region.

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