

# Determining Food Habits in Süleymanpaşa Town of Tekirdağ City, Turkey

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**Abstract**—Food-borne problems have been placed among the most leading problems of the society especially in recent years. This state arises as a problem which affects the society wholly such as the supply of food stuffs that are necessary for an individual to perform his physiological and biological functions, their amount, compound, their effects on health and distribution by individuals. This study was conducted in order to determine the sensitivities and criteria of people, who have different socio-economic backgrounds and live in Süleymanpaşa Town of Tekirdağ City, in their preference of food stuffs. The research data were collected by means of Interview Technique with individuals within the scope of the study (300) and applying surveys with convenience sampling. According to the research results, quality appears in the first rank among the factors by which consumers are affected while buying food stuffs. Consumers stated that they try to be careful with not buying food sold outdoors. The most preferred food among the ones being sold outdoor were found to be breakfast food. Also, food stuff which consumers become the most selective for while buying was determined to be meat and meat products. Due to general knowledge about the food stuff consumed in human nutrition may affect their health negatively; consumers expressed that they are very relevant with their diets and this circumstances affects their purchase preferences.

**Keywords**—Consumption, food safety, consumer behavior, purchase preferences.

## I. INTRODUCTION

THE things required for nutrition, growth, improvement, living for a long period as healthy and productive –that are the primary requirements of human- are the intake of required items and their usage in the body [1]. Having a physically, mentally, spiritually and socially well-developed body structure, and maintaining it, briefly living as healthy and productively depends on the factors such as nutrition, inheritance, climate and environmental conditions. The researches made on nutrients and nutrition reveal that the people will not be able to live without nutrients and that these nutrients are required to be healthy and balances [2].

Balanced nutrition is a very important factor that preserves health, in other words which keeps the individual away from the diseases that ensures physical and social peace that improves and grows the body, that provides power and energy

to the body, and that increases strength and success. Nutrition is the primary factor that is required for successful working and healthy life [3].

The manpower of the countries is among the elements that will realize development and industrialization by the beginning of twenty first century in which the countries rapidly head for industrialization. The most important source of this country is healthy, productive and skilled manpower. The most important precondition of gaining these listed features and the life of the individual is dietetics. Many people are clueless or have incorrect information regarding the nutritional values of the nutrients, preservation of these values and the nutrients that are suitable for health [4].

In respect of nutritional status, Turkey has an appearance including the problems of both developing and developed countries. The nutritional state of public in Turkey is showing significant differences as per the regions, seasons, socio-economic level and urban-rural settlements. The main reason of this is the unbalance in the distribution of income. This condition is being effective on the quality and frequency of nutritional problems. Moreover, the cluelessness regarding nutrition and incorrect selection of food is causing the application of incorrect preparation, cooking and storage methods on food, and it's causing the dimension of nutritional problems to increase [5].

Acceptance of food is basically the result of the interaction between food and consumers at a certain moment. Food characteristics (chemical, nutritional composition and physical structure properties) and those of each consumer (gender, age, health) together with the surrounding environment (family and geographical habits, religion, education, fashion, price or convenience) can influence a consumer's attitude when accepting or rejecting food [6].

In food safety, the most important criteria are staying away from physical, chemical and biological risks in the process passing from the primary production stage of the food products until the submission of the consumer's access to the latest with the main lines.

Consumers show a rising interest in the nutritional value of the food they purchase, and there is a growing need to avail consumers of correct information about the food they consume.

Henson and Traill [7] define food safety as “the inverse of food risk—the probability of not suffering some hazard from consuming specific food” absence of food safety causes national and global problems. Food health safety as a whole is a topic which comes first in terms of public authority and procedures when indispensability and economic importance of

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food products in daily life are considered. At the same time the demand for the food products that have quality warranties has increased. Quality of food products can be defined as acceptable characteristic set by consumers. The product can be considered to have good quality if it meets the need of consumer and has the acceptable objective (energy, vitamin, mineral, toxic material content of the product and freshness) and subjective values (color, shape, taste and smell etc. of the product). The use of methods that receive direct opinion of consumer in the correct measurement of quality and relatedness of the quality in food products to the conception of the consumer has increased the importance of the concept of conscious consumer [8].

Today, the production and presentation to consumers of nutrients within the frame of rules of hygiene as well as their inclusion of the required nutritional elements at sufficient levels are also very important. In Turkey, still deficiencies on this issue are attracting attention unfortunately. And as the result of this, significant health problems are being encountered. The developed countries are dwelling on this issue meticulously, and they are generating various formulas regarding this. These countries have substantially succeeded the healthy food production by successfully implementing the HACCP (Hazard Analysis Critical Control Point) system – which has recently started to be extensively implemented also in Turkey- at workplaces producing food. It is pleasing that significant steps are being taken relevant to this system and its requirements in Turkey. But it will be beneficial to raise the awareness of not only the producers but also the consumers on this issue [9]. In spite of the expeditious progression in economic, social and technical aspects in the world, starvation and malnutrition are still great concerns for humankind. By the improvement of technology, people have started to live in metropolises and this crowded life style has promoted the diseases and outbreaks. Also living in big cities has negatively affected the resistance of the human against infections.

Although it is well known that the Turkish consumer's tendency towards food safety has been increasing steadily, research relating to food safety is very limited within Turkey, particularly when considering the inadequate state of forecasts for the future [10]. In recent years, it has become also apparent that consumer concerns about health have led to significant changes in consumer preferences, which have yet to be fully investigated. Food safety is immediately top-of-mind for consumers as they have low levels of confidence in the safety of food produced in Turkey.

The purpose of this research is to determine the consumption and shopping habits and knowledge level of a random group of 300 individuals -with different economic structures living at the center of the Tekirdag province- regarding various food products

## II. MATERIAL AND METHOD

The research had been realized on 300 individuals -residing at various neighborhoods and districts of the center of Tekirdag province- who were selected as randomly. In this study, that is performed for determining the importance

attached to nutrition by the participants of the research and the issues they consider in the consumption of food products, the data of questionnaire had been listed on computer and it had been arranged as charts by using the Microsoft Word and Excel programs. And the interpretation of the charts had been realized by using arithmetical averages and % calculations. The research had been performed through face-to-face interviews with individual being members of various occupational groups, and it had been asked them to respond 30 questions.

## III. FINDINGS OF THE RESEARCH

30% of the participants of the research were male and 70% of them were female, and 57% of them high school graduates, 23% of them university graduates and 17% of them primary school graduates. It had been determined that the monthly income of 29% of the participants was 1.500 TL and more, of 29% of them was in between 1.250-1.500 TL, of 17% of them was 1.000-1.250 TL, and of 14% of them was in between 700-1.000 TL. Considering the monthly food expenditures of these individuals, while 43% of the consumers are allocating a budget of 400 TL and more for food expenditures, 34% of them are allocating in between 350-400 TL, and 14% of them are allocating in between 200-250 TL. In our study, it has been understood that the economic structure affects food expenditures and thus the nutrition. Mazicioglu and Ozturk [11], in their similar study by which they had performed in order to search the nutrition of university students, had informed that the economic condition affects the nutrition level, but that there is no statistically significant difference.

Ozcicek and Dolekoglu [12], in a similar study by which they had searched the nutritional levels of household living at the Adana province, had determined that the participant families of the research allocate less than 50% of their disposable income for food expenditures.

While 72% of the consumers had specified that they consider the existence of quality assurance system in food products, 63% of them had specified that they believe the approval of Ministry of Agriculture and Rural Affairs is enough. Simsek et al. [13], in their research, realized for determining the habit of drinking milk at the Istanbul province, had informed that majority of the consumers (55%) do not consider the quality assurance system while buying milk.

Through our study, it has been found out that quality comes by 34% among the criteria considered in food products purchased (Fig. 1). Yilmaz et al. [6], in a questionnaire that they had realized on purchase of products as being affected from advertisements at the Tekirdag province, had informed that the most effective factor in the selection of products is quality (44%). A parallelism among these two research is attracting the attention.

In another similar study, Demirci and Yilmaz [14] realized on the nutritional habits of university students, had informed that the hygiene (50.75%) is the issue considered the most in the purchase of food products.

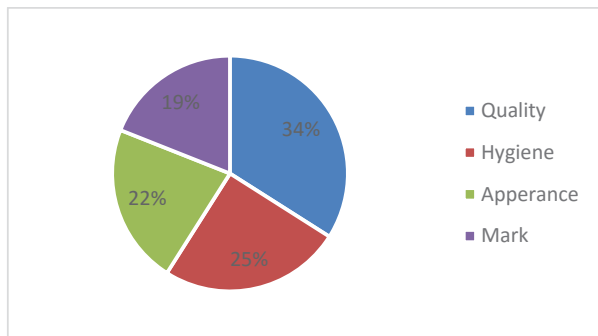


Fig. 1 Criteria Considered in the Food Products Purchased

77% of the participants had gave the answer “No” for the question of “Are you buying products that are being sold as open?”, and 23% of them had informed that they are buying the same. While breakfast products consist 38% of the products that are being sold as open, vegetable-fruit and meat follows it by equal rates (25%) (Fig. 2).

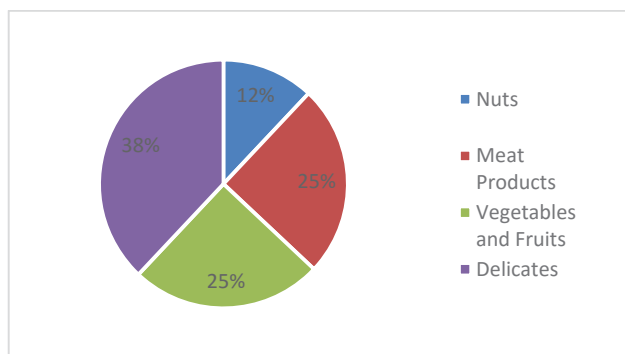


Fig. 2 Food Products that are Being Bought as Open

The term “meat and meat products quality” includes a sum of characteristics which are classified as: hygienic (absence of toxic, microbiological and parasitological agents), dietetic (chemical composition, fatty acid profile, cholesterol content, etc.), organoleptic (color, tenderness, etc.) and technological properties (pH and water-holding capacity).

92% of the participants had emphasized that they care for the food products to be packaged, and 55% of this care is in respect of health. Again in this questionnaire, it had been understood that a significant part of the consumers (26%) care pretty much the label information on the packaging of food products.

When it was asked to the consumers what the factors that affect them while purchasing food products are, 21% of them had used the phrase of “quality”, 20% of them had used the phrase of “price” and 17% of them had used the phrase of “brand”, and a majority of them (42%) had used the phrase of “all of them are important”.

Product quality is evaluated by a wide range of parameters including external, internal parameters. However, in some cases, sensory and safety scores gain higher importance than above ones. External quality parameters, such as surface

colour, texture, presence of bruises and defects, are generally monitored and sorted manually by workers, whereas the internal quality parameters including firmness, pH value, soluble solid contents, and titratable acidity are evaluated using common techniques. Sensory (e.g. sweetness, flavor) and food safety (e.g. pathogenic bacteria and fecal contamination, pesticide residues and other hazardous residues) characteristics influence general palatability of the products.

And for the question of “Are the places that you shop change as per the variety of food products?” 64% of them had responded as “Yes”. When it was asked to the consumers in which food products they are more selective, 35% of them had specified as meat and meat products, 20% of them had specified as milk and milk products, 11% of them had specified as vegetable and fruit, and 23% of them had specified as all the food products (Fig. 3).

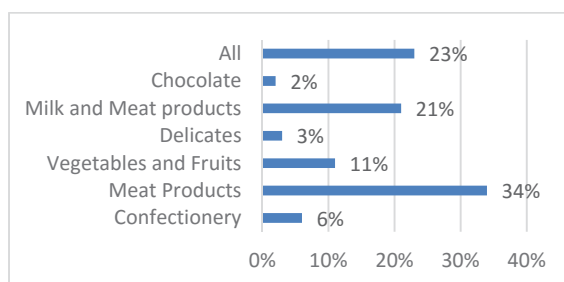


Fig. 3 The food product groups that the consumers act more selective while buying

92% of the participants of the research had specified that they did not encounter food poisoning before, and it had been determined that 8% of them -which had incurred food poisoning before- had encountered it due to chicken (37%), fish (19%) and rice (19%) (Fig. 4).

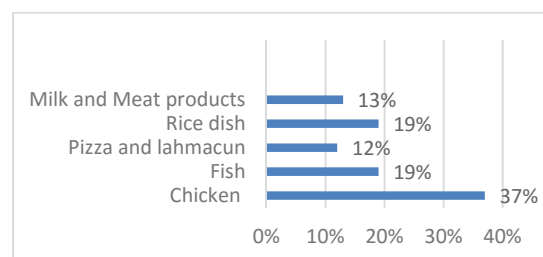


Fig. 4 Food products that the participants had encountered poisoning

Finally, when it was asked to the participants of the research whether they are aware of the consumer rights, it had been determined that majority of them were aware (49%).

#### IV. RESULTS

Today, nutritional problems are among the primary problems of a society. This condition is being encountered as a problem affecting the whole society in respect of procurement of food products -required for fulfillment of physiological and

biological functions of the individual, their amount, combination and distribution as per individuals.

In our country, economic power has significant share in the arise of differences among the nutrition of individuals. It is inevitable to encounter a specific difference among the food product consumption of consumers of different socio-economic groups. In addition, the educational level of the individuals is ranking high among the factors directly affecting their nutrition.

Income is not the only factor affecting consumption patterns. In countries with high or rising incomes, there is often a change in lifestyles. These changes usually result in an increase in the demand for foods which are quickly and easily prepared or are premade. Consumers are to be provided with essential and accurate information so that they can make informed choices.

In our country people can be affected easily and can change their choices according to media news. Yılmaz et al. [9] found out the same results about the effect of media news on the consumers' decisions. Akben et al. [15] reported that based on their study, the negative impact of the pandemic on the poultry sector could have been alleviated by informing consumers about it and also they reported frequent users, older consumers, and females are derived to be more concerned about the pandemic.

Radio, television and other media can seriously affect the consumer purchasing behaviors. Additionally, these media telecast some informative programs and news about food consumption and for this reason they have serious duties in the meaning of informing consumers. Also they have to pay enough attention to prevent misunderstanding of the public about this kind of serious disease.

In order to make more reliable and healthier food production, the consumers should adopt the matter of food safety as a life philosophy.

Food safety and quality approach is complex and multi-dimensional. Food safety and quality include economic, social and cultural results and it is related not only in the first process of agricultural production but to new technologies such as production place, animal health, storing conditions, marketing, hygiene conditions and amendments, consumer awareness, eating habits and the products genetically modified. At the same time, the relationship between social actors and policies, social and cultural differences are also in close relationship with food safety and quality concept. A comprehensive piece of legislation will be proposed in order to recast the different control requirements. This will take into account the general principle that all parts of the food production chain must be subject to official controls.

In future, research priority must be given to study more in details opinion about consumer expectation and behavior for food safety in Turkey.

In this research, it has been observed once more that the consumers of different socio-economic and educational structures have differences in between how they purchase and consume the food products. By this study, it has been understood that Tekirdag is among the cities where it is being

acted meticulously in the consumption of food products due to high level of socio-economic structure and educational level.

Undoubtedly, lack of education and insufficiency of nutrition knowledge are the primary reasons in the arise of nutritional problems in societies. In all the societies, the raising of high level of manpower –that is required-by economic, cultural and social development- is possible only through education. It is obvious that education will have a great impact in removing the nutritional problems that are being encountered and may be encountered in our country. Besides that, significant duties fall to us as the educators and the specialists on the issue being in the first place.

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