

# **CONSUMER DECISION MAKING PROCESS WITH RESPECT TO SOYOIL**

**BY**

**ELİF ERGÖZ CEZİRLİ**

**B.A. in Political Science and International Relations**

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**I wish to thank my friend Sevil Ermin, for her valuable moral support.**

## **ABSTRACT**

The main purpose of this study is to present the consumer decision making with respect to soyoil.

The issues that are being discussed here are the decision making criteria employed in purchase together with respective degrees of importance that the consumer assigns to these criteria; the general perceptions of consumer about health with respect to particular fast moving consumer goods - including soyoil; purchasing patterns for certain food items; the level of consumer awareness considering soybean derivative products; consumers' information sources for soybean derivative products -particularly about soyoil; general consumer attitude towards various types of vegetable oil; level of awareness for brands within the vegetable oil categories; and the degree of innovativeness with reference to usage of a new type of vegetable oil -soyoil.

After the literature on consumer decision making has been reviewed, an empirical research has been conducted with consumers, both users and non-users of soyoil. A questionnaire has been given to a sample of 60 respondents, which was a convenience sample, selected by non-probabilistic judgmental sampling method. In order to support the findings of this quantitative study, further qualitative research has been carried out. One focus group interview has been conducted with 6 female participants in order to have a deeper insight into their decision making criteria about soyoil. Another qualitative study has been carried out, which was structured as a store survey with the consumers, who were purchasers of soyoil. The objective in this fieldwork has been to determine their choice criteria during their purchase behavior.

The program used for data entry is Excel 4, and for data processing SPSS PC. The analyses used in analysing data were chi-square, difference of means test, and oneway analysis of variance.

In the last part of the study, implications have been derived from the main findings of the study, which addresses to producers, consumers, governments, organizations, and the researchers.

## ÖZET

Bu çalışmanın amacı, tüketicinin karar verme sürecini, soya yağına ilişkin olarak incelemektir.

Çalışmanın kapsadığı konular, tüketicinin satın alma kararı verme sürecinde yer alan kriterler ve bunlara verdiği önem derecesi, tüketicinin çeşitli tüketim maddelerinin -soya yağı dahil- sağlıklı olan ilişkisini ne şekilde kurduğu; çeşitli gıda maddeleri için gösterdiği satın alma davranış biçimleri; soya türevi ürünler hakkındaki bilinç düzeyi; tüketicinin soya türevi ürünler konusunda bilgi aldığı kaynaklar; bitkisel yağ kategorisinde bulunan markalarla ilgili bilinç düzeyi ve Türk tüketicisi için yeni bir bitkisel yağ çeşidi olan soya yağı kullanımında ne derece yenilikçi bir yaklaşım içerisinde olduğunu belirlemek olarak sıralanabilir.

Çalışmada önce tüketicinin karar verme sürecinin incelendiği çalışmalara yönelik yazın taraması verilmiş, sonra soya yağı kullanan ve kullanmayan tüketiciler üzerine yapılan saha çalışması sunulmuştur. Tesadüfi olmayan kolayda örnekleme yöntemi ile belirlenen 60 deneğe verilen anketlerin yanıtlanmasıyla çalışmanın ampirik bölümü oluşturulmuştur. Söz konusu kantitatif bölümün bulgularının desteklenmesi amacıyla kalitatif araştırmalar yapılmıştır. İlk araştırma, 6 bayan deneğin katılımı ile gerçekleşen grup tartışması; bir diğer kalitatif araştırma, önceden belirlenmiş bir satış noktasında tüketicilerin satın alma davranışı sırasındaki karar verme kriterlerini incelemeye yönelik olmuştur.

Verilerin girişinde Excel 4, değerlendirilmesinde ise SPSS PC programları kullanılmıştır. Veri değerlendirmesindeki yöntemler ki-kare, ortalama farkları testi, varyansın tek yönlü analizidir.

Tezin son kısmında, tüm çalışmalardan ortaya çıkan bulgulardan üretici, tüketici, kamu ve özel sektördeki ilgili kuruluşlar ve araştırmacılara yönelik sonuç ve yorumlar belirtilmiştir.

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## 1.INTRODUCTION

"Nothing is more difficult, and therefore more precious, than to be able to decide".

Napoleon I

This quotation of Napoleon I underlies the significance of one basic ability of human being, which is the ability to decide. This ability is actually derived from one very important characteristic of human beings, being able to think, and to relate this thinking to a specific end, namely the decision itself.

Decision making has been an important aspect of life since man has realized that he is a thinking animal and that his thoughts do follow a process, when they are on the way of execution. Therefore, decision making has been the focus of many researches in many fields, information sciences, psychology, consumer research, and so on. And these various sciences have contributed to explaining different points within the decision making process.

Decisions are the process of reply to a stimuli stemming either from external or internal sources. The underlying motives for a decision is to adapt to a change, satisfy a need, or to establish projections for the future.

All decisions that human beings are faced with, could be explained by variables, which could be grouped under similar major categories, but operationalized under various formats depending on the nature of the decision.

The purpose of this study is to analyze the underlying motives for the consumer decision making as far as the soyoil consumption in Turkey is concerned. Thereby the study has a supporting objective for this analysis which is drawing the profile of the soyoil consumer.

The framework, in which this research will be presented, is structured in the following phases:

First, a historical summary of the evolution of the soy bean and its derivative products into an everyday consumer good is given.

In the next part, theoretical background of this study, both of conceptual and empirical in nature, will be presented, in order to constitute the basis that sustains the empirical findings of the study. In this part, an extensive literature review on both consumer decision making, and on consumer profile research will be given.

In the third part, research design and methodology will be presented. The research will investigate the decision making process of the consumers facing a new product choice decision -namely soyoil.

In the fourth part, the findings of the research will be reported and discussed. This part will be divided into the following parts:

The first part will summarize the frequency analysis of the sample based on the variable definitions. In this part, frequency distributions will be illustrated for the following issues : health related problems, eating habits, consumption patterns for some food items, product choice criteria, awareness, trial, and purchase levels of soybean products; sources of information for soybean products, vegetable oil consumption, and brand preferences; decision criteria for purchasing vegetable oil; advertisement recall for vegetable oil brands; innovative consumers and their vegetable oil usage.

The second category of analysis will cover some relationships among variables, which are as the following: interrelationship between awareness- and purchase levels for soya sprout, and for soyoil; interrelationship between some perceptions and attitudes for certain vegetable oil categories

The conclusions and implications section will summarize the findings of the study in a framework, which will construct the basis for future research, and will cover the implications for consumers, for the producer, and for the government.

## **1.1.EVOLUTION OF SOYBEAN AND SOYOIL CONSUMPTION IN THE WORLD**

"Large parts of the world are already hungry, and with population growth making increased demands on depleted resources, we can only expect the dimensions of the problems to grow.

Feeding people could be the major political and economic pre-occupation of the remaining years of this century.

Fortunately there is hope. In vegetable protein, the soybean in particular, and in the advances of food chemistry, one can see a possibility of solving this problem. Making more efficient use of Mankind's resources for the benefit of Mankind." ( Groot, 1990 p.1 )

In the Western world the protein that satisfies daily human needs comes from animal sources. Throughout the world, the consumption of vegetable protein (in the West from grain, in other areas from rice, lentils, etc.), has been relatively uniform. It has been the consumption of animal products that has differentiated those who can eat well from those in danger of malnutrition.

One must not discount the attractiveness of meat as a protein source. Meat is an adequate source of protein in a balanced diet, but animal products are an inefficient way to use the world's hard-pressed resources.

To put it another, and more dramatic way, one hectare will provide protein for daily needs of 190 human beings if used for beef production. Under wheat, it will feed 2,166, and under soybean, it will feed minimum 5.493 humans. ( Groot 1990).

Soybeans are referred as "The Gold that Grows" , because it is widely known that if one lives on soybean, he can live forever. The nutritional benefits that soybean provides, mainly in terms of contribution to health, has been scientifically proven.

The products of the soybean in various forms can meet all dietary criteria and is well accepted by the people. There is also an important economic factor which contributes to its availability. The continuous market for soybean oil has created an assured supply of vegetable protein far larger than any other.

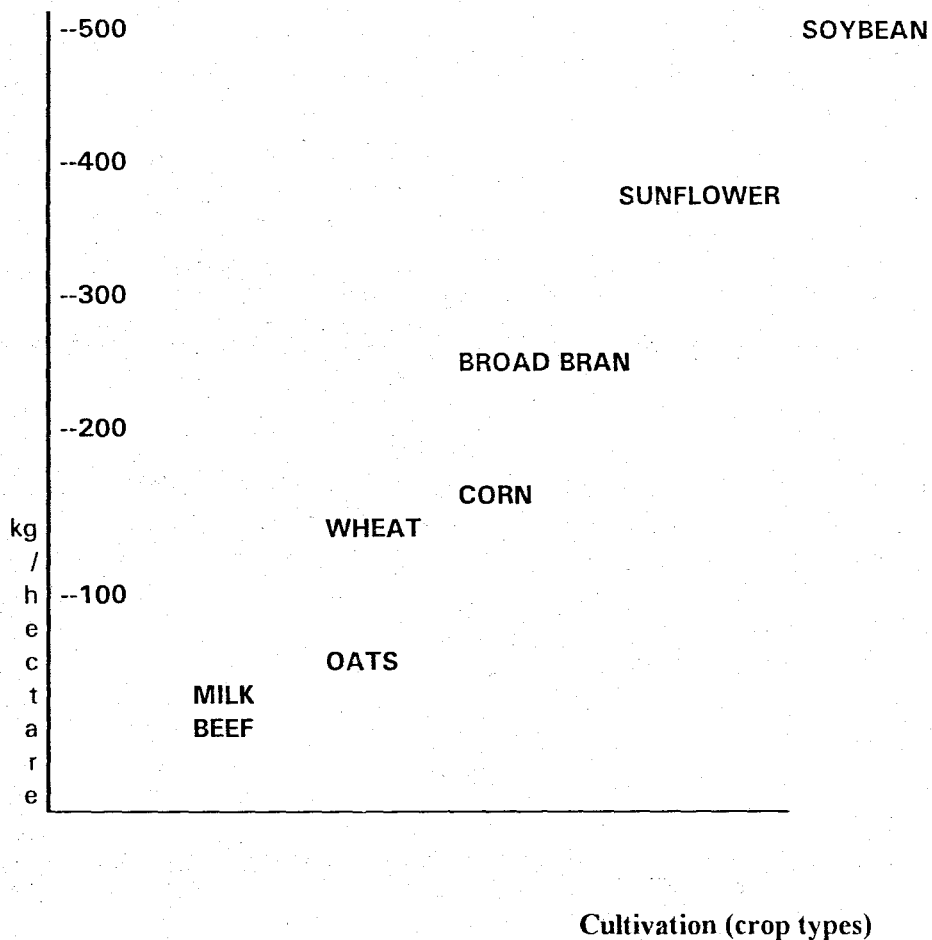
The soybean is native to the Far East, but has proved adaptable to a wide variety of climatic conditions.

"The USA has for several years produced about 3/4 ths of the world's production, with China and Brazil accounting for most of the rest. Total world production approaches 68 million tons." (Agronomy, pg.2; 1990 Soybeans: Food for the Future, American Soybean Association , 1990)

**Soybean was originally regarded as an oil-producing crop. It now accounts for some 66% of the edible vegetable oils used in USA. The by-products of oil production, in various forms, provided a rich source of animal foodstuffs.**

**In the next figure, the efficiency in terms of cultivation for various types of crops has been put on a scale. The soybean is the most efficient crop, proven by its kg per hectare cultivation versus other crops.**

**Figure 1.1. : Cultivated Efficiency for Various Crop Types**



(Y axis : kg/hectare (efficiency), X axis : Cultivations, type of crops)

Source : American Soybean Association (1990) reprinted from booklet Soybeans Food for the Future, 1990, p.3

## **1.2.EVOLUTION OF SOYBEAN AND SOYOIL CONSUMPTION IN TURKEY**

According to a study by Reid, (1978), soybean should be given first priority, because its contribution to the overall nutrition level as well as to the whole economy.

The following quotation from the study of Reid, (1978) illustrates the issue in a clear framework:

"Many people in Turkey have expressed the need and desire to increase the protein supply in the country, through the production of soybeans in Turkey. From officials high in the Ministry of Agriculture and the State Planning Organization to the Feed Manufacturer's Association and individual feed manufacturers, to broiler and layer poultry producers and other livestock farmers, the expression of the need seems to be unanimous. Studies by the Industrial Development Bank of Turkey revealed a need for 3 million tons more protein and 70,000 tons of vegetable oil for the country in 1980 and greater needs in the years ahead. Soybeans could provide both protein and oil.

The calculations pertaining to animal products industry of Turkey indicate that the contribution of 1 kg. of proteinaceous soybean meal to the economy is the equivalent of the value of 560g. milk or 380g. cheese or 500. yogurt.

In the event soybean production is increased to 1,000,000 tons/year, it will be possible to obtain about 200,000 tons of oil and 800,000 tons of soybean meal. This amount of soybean meal, in other words, means production of 300,000 tons of poultry meat or a supply of protein equivalent of 450,000 tons of milk. If soybean meal is processed further to obtain various soybean products, the above values will increase."( Reid, 1978, p.46)

"The soybean production in Turkey amounts to 60,000 tons per year, which is 1/1000 th of the production in USA, 1/16 th of the total European production. Turkey is being perceived as a country with huge potential in this respect, the domestic market needs to be developed, and there is a further potential for Turkey to become a soybean exporting country as far as its strategic positioning is concerned versus CIS and Middle East" (Munyar, 1993 ).

As of the beginning of 1990s, soyoil appears to be a recent phenomena for Turkey, where only 3% of the total vegetable oil category is soyoil (Leysen, 1993). Soyoil is a new product category which is positioned as a substitute for other vegetable oil categories, especially sunflower oil, therefore, analysis of consumers' perception of this product is basically related to new product concepts.

The very essential concept for a new product is its distinctiveness from the existing products; in other words, the new product must have a very reliable unique selling proposition to justify its entry to the market and to the consumer's mind. Soyoil has a strong claim that it is the most healthy oil, because it is a soy bean derivative product. And soy bean has been scientifically proven to contain the essential elements that contribute to good health.

The soybean market in Turkey is limited to a very small market size, and to a few competing brands within this market. Soyola is the main brand in the market, with a 1.3% market share within the total vegetable oil market; other brands are from Paksoy, and from Doğa, with very insignificant market shares. No brand except Soyola has an advertising support, other brands prefer to engage in only point of sale actions.

## **II. THEORETICAL BACKGROUND**

In this section, the literature regarding the consumer decision making and information processing has been reviewed. The objective of this review is by presenting the summary of the literature constructing the theoretical framework of the empirical part of this study. The literature review has been summarized under two subtitles: first the consumer decision making process, and secondly the information processing process; although this classification is not mutually exclusive.

### **2.1.CONSUMER DECISION MAKING PROCESS**

Kendall and Sproles (1990) have explored the interrelationships between individual's learning styles and their consumer decision making styles. A learning style is defined as "the way each person absorbs and retains information and/or skills" (Dunn 1984, pp.11-13). Four different learning abilities were mentioned:

1.Concrete experience abilities: openness to being involved with new experiences and new situations (with emphasis on intuitive rather than analytical learning);

2.Reflective observation abilities: ability to understand the meaning of ideas, experiences, or situations by careful observation (open mindedness and thoughtful judgment are important);

**3. Abstract conceptualization abilities:** ability to integrate concepts into theories (emphasis on analysis and thinking);

**4. Active experimentation abilities:** ability to apply theories and ideas to practical applications or to solve problems.

Kendall and Sproles (1990) have also quoted Kolb's studies (1976,1984) which covered six characteristics of learning styles:

**1. Serious, Analytical Learner:** one who enjoys thinking through difficult material in a serious and abstract manner.

**2. Active, Practical Learner:** experience oriented person who enjoys learning by doing practical learning activities.

**3. Observation centered learner:** enjoys first seeing and then doing his/her learning activities.

**4. Passive, Accepting Learner:** quiet, uninvolved learner who prefers to absorb passively or reflectively what is seen or heard.

**5. Concrete, Detailed, Fact-oriented Learner;** who prefers to interpret the given facts in detail, and base their arguments on concrete findings.

**6. Non-adaptive, Struggling Learner:** one who feels uncertain while learning and perceives learning as a difficult experience.

A consumer decision making style is defined as "a mental orientation characterizing a consumer's approach to making consumer choices" (Sproles and Kendall 1986). "Eight basic characteristics of consumer decision making styles are mentioned in the above mentioned study:

**1.Perfectionistic, High-Quality Conscious Consumer:** a characteristic measuring the degree to which a consumer searches carefully and systematically for the best quality in products;

**2.Brand-Conscious, Price Equals-Quality Consumer:** a characteristic measuring a consumer' orientation towards buying the more expensive, well-known brands;

**3.Novelty -and Fashion-Conscious Consumer:** a characteristic identifying consumers who appear to like new and innovative products and gain excitement from seeking out new things;

**4.Recreational and Shopping-Conscious Consumer:** a characteristic measuring the extent to which a consumer finds shopping a pleasant activity and shops just for fun of it;

**5. Price-Conscious, Value-for-Money Consumer:** a characteristic identifying a consumer with particularly high consciousness of sale prices and lower prices in general;

**6.Impulsive, Careless Consumer:** a trait identifying one who tends to buy unplanned and to appear unconcerned about how much money he/she is spending;

**7.Confused by Overchoice Consumer:** a person perceiving too many brands and stores from which to choose and who likely experiences information overload in the market; and

**8.Habitual, Brand-Loyal Consumer:** a characteristic indicating a consumer who repetitively chooses the same favorite brands and stores."

The conclusion of the above mentioned study has been that consumer decision making is a function of individual's learning styles that the consumer pursues.

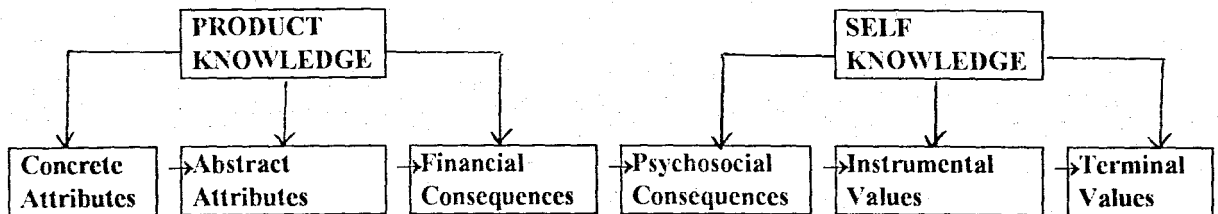
Sproles and Kendall (1986) in one of their other studies have conceptualized the eight basic characteristics of consumer decision making styles, and developed a Consumer Styles Inventory to measure them. Factor analysis has been used to validate these consumer characteristics. This research about Consumer Styles Inventory constituted the basis for the further study mentioned above.

Hafstrom, Chae, and Chung (1992) have compared the consumer decision making styles between young US and Korean Consumers. And they have based their study in the direction of the findings that have been deduced from the study of Kendall and Sproles (1986 ,1990). Hafstrom, Chae, and Chung have quoted Moschis and Moore (1979) for the justification as to why they have focused on the young consumers as the following: "Young consumers are recognized as a specialized market segment for a variety of goods and services" (p.147-148).

The main conclusion that is derived from this study has been mentioned as the generality of several consumer decision making styles of young US and Korean consumers. And this has brought about the outcome that the Consumer Style Inventory of Sproles and Kendall (1986) has elements of construct validity and has potential use across international populations.

Walker and Olson (1991) have constructed a means-end chains model in which the product knowledge is connected with the self knowledge. The model is illustrated below:

**Figure 2.1. : Means-End Chains Model**



Source : Walker,B.A. and J.C. Olson; "Means-End Chains: Connecting Products with Self" Journal of Business Research, Vol.22, No. 2, 1991, p 114.

Means-End Chain Models have been utilized as a tool to analyse and interpret how consumers perceive products or services in relation to themselves. It has become a common knowledge that one of the central functions of marketing is to create a psychological relationship between consumers and products/services. That is, marketing must persuade the consumer to associate the product with satisfying some need, by providing a benefit, that is important to the consumer. By influencing the degree to which the consumers perceive a product to be self-relevant, marketers can affect consumers' level of motivation to learn about, and finally buy the brand.

Means-End chains can be more broadly viewed as representing the relationship between self and products, where the means represent aspects of product knowledge, and the ends represent aspects of consumer self-knowledge.

The conclusion of the above mentioned study is that product related knowledge (i.e., concrete attributes, abstract attributes, or financial consequences) that the consumer considers as choice criteria may change in different decision situations. Different decision situations can activate very different aspects of consumers' self-schema.

The perceived self relevance of a situation is related to the consumer's level of motivation and involvement.

Pitts, Wong, and Whalen (1991) have utilized the means-end analysis as a tool to understand the consumers' information processing, or causal schema in decision making.

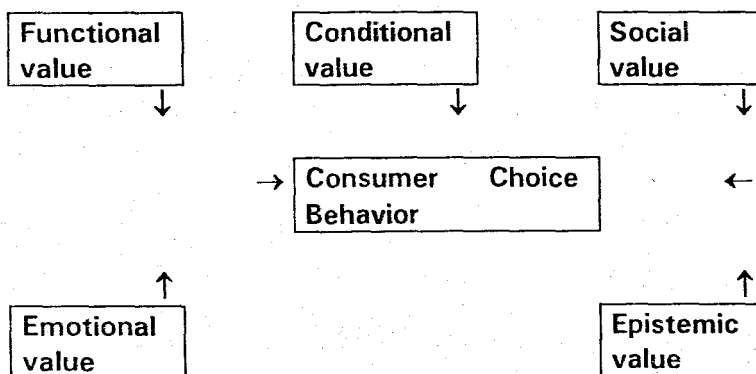
Howard (1977) has been quoted with reference to the weight of the value structure in consumer decision making; wherein the more abstract terminal values are determined to be causal to product class decisions, whereas the more concrete instrumental values are concluded to be more directly related to product attributes and brand decisions.

Solomon and Buchanan (1991) have researched the relationship between product sets and social roles. The term "Consumption Constellation" has been introduced to represent the interdependency. This term is being defined as a cluster of complementary products -complementary in the symbolic sense instead of functional-, specific brands, and/or consumption activities associated with a social role. Consumers are found to encode and communicate through consumption a desired social role and its attendant values.

Sheth, Newman, and Gross (1991) have developed a theory of consumption values to explain why consumers make the choices they do; where five consumption values are identified that influences consumer choice behavior.

The theory is illustrated in the following figure:

**Figure 2.2.: Consumption Values and Consumer Choice:**



Source : Sheth,J.N.; B.I. Newman,; B.L. Gross,; "Why We Buy What We Buy: A Theory of Consumption Values", Journal of Business Research, 1991, Vol.22, No.2, p 164.

The propositions that Sheth, et.al.'s theory depends on are as :

- " 1.Consumer choice is a function of multiple consumption values;
- 2.The consumption values make differential contributions in any given choice situation;
- 3.The consumption values are independent."

Multiple consumption values are functional value, social value, emotional value, epistemic value, and conditional value. According to this model (1991) a decision may be influenced by any or all of the five consumption values.

"Functional value of a choice alternative is defined as the perceived utility acquired from an alternative's capacity for functional, utilitarian, or physical performance. An alternative acquires functional value through the possession of salient functional, utilitarian, or physical attributes. Functional value is measured on a profile of choice attributes.

Social value of an alternative is defined as: the perceived utility acquired from an alternative's association with one or more specific social groups. An alternative acquires social value through association with positively or negatively stereotyped demographic, socioeconomic, and cultural-ethnic groups. Social value is measured on a profile of choice imagery. An automobile might be chosen because of the social image it will create, rather than its functional benefits.

Emotional value of an alternative is defined as: the perceived utility acquired from an alternative's capacity to arouse feelings or affective states. An alternative acquires emotional value when associated with specific feelings or when precipitating or perpetuating those feelings. Emotional value is measured on a profile of feelings associated with the alternative.

Epistemic value of an alternative is defined as the perceived utility acquired from an alternative's capacity to arouse curiosity, provide novelty, and/or satisfy a desire for knowledge. An alternative acquires epistemic value by questionnaire items referring to curiosity, novelty, and knowledge.

Conditional value of an alternative is defined as the perceived utility acquired by an alternative as the result of the specific situation or set of circumstances facing the choice maker. An alternative acquires conditional value in the presence of antecedent physical or social contingencies that enhance its functional or social value. Conditional value is measured on a profile of choice contingencies" (Sheth, et al., pp 162-163).

The consumption values are considered as independent, relating additively and contributing incrementally to choice.

Robinson and Nicosia (1991) have studied the "time" dimension in consumers' purchase process. They have quoted the dimensions of time from Giddens (1987): "1.duration (possibly a reflection of the importance of one activity versus others),

2.time sequence of activities (i.e.,first things first),

3.resource (i.e.,time can be scarce),

4.status/access (e.g., it is high status to be busy),

5.speed/rapidity (e.g., to get things done quickly, or efficiently),

6.organization of the individual and social activities." Robinson and Nicosia, 1991, p.172.

Other dimensions focus on consumers' own perception of time:

"1.Convenience (e.g., high speed of delivery, ready to use, user friendliness),

2.access (i.e., less time to gain accessibility to an item),

3.timing (e.g., stores' open hours),

4.time-filling effect (e.g., it can be sandwiched between two activities), and

5.perceived scarcity (e.g., not having enough time)." Robinson and Nicosia, 1991, p.172.

## 2.2. CONSUMER INFORMATION PROCESSING

The fact, " how the consumers use and process information", has attracted the interest of many researchers, and the information which is related to nutrition and food has been a special area of focus.

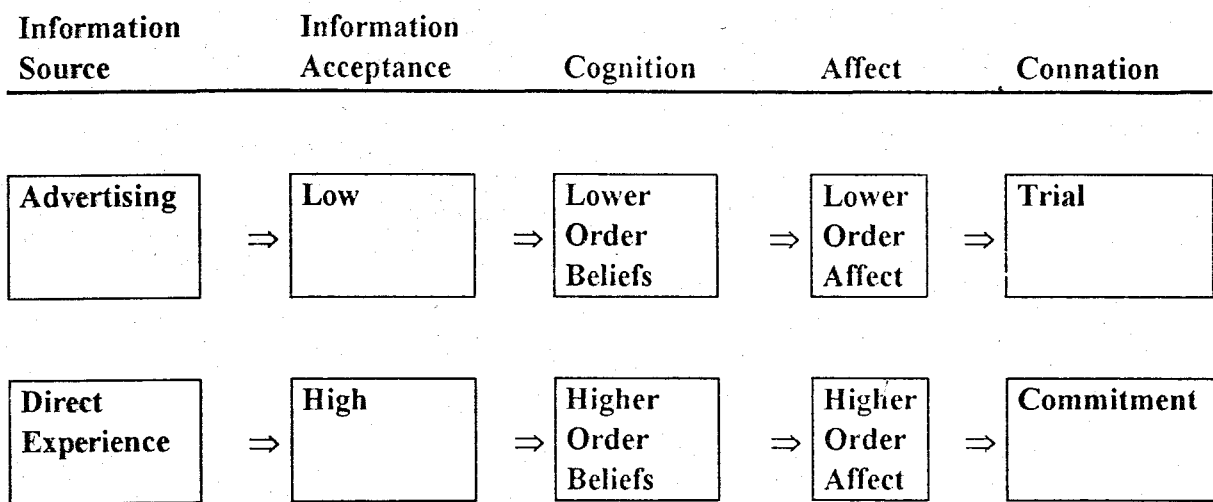
Feick, Herrmann, and Warland (1986) have analyzed in their study the process of search for nutrition information using a cost-benefit model for search. Benefits are operationalized in terms of the importance of nutrition to the consumer.

Smith and Swinyard (1982) have constructed an integrated information response model in which they have analyzed the effects of two information sources : advertising vs direct experience .

The two information sources, advertising and direct experience, are being compared in terms of "Information Acceptance (Persuasion)", "Cognition", "Affect", and "Connation".

"Advertising" and "Direct Experience" have been mentioned as the sources of information for the consumer. "Advertising" has been assumed to have a lower level of "Information Acceptance" compared to "Direct Experience"; and in line with this argument the consumer establishes a lower order of beliefs with "Advertising" versus with "Direct Experience". The level of "Affect" that the consumer attains with "Advertising" is lower than with "Direct Experience" and the Behavior is "Trial" with "Advertising" versus "Commitment" with "Direct Experience".

**Figure 2.3. : The Integrated Information Response Model**



Source : Smith, and Swinyard "The Integrated Information Response Model", Journal of Marketing, Vol.22 1982 p. 148.

Maute and Forrester (1991) have constructed a causal model of external information search in which the effect of attribute qualities on consumer decision making has been analyzed. The attribute qualities have been grouped under three headings (Ford 1988):

1) Search attribute qualities: Those qualities of a product that can be accurately and efficiently evaluated prior to purchase using knowledge, inspection, reasonable effort and normal channels of information acquisition such as consumer reports.

2) Experience attribute qualities: Those qualities of a product that can be accurately and efficiently evaluated only after the product has been purchased and used for a short period of time in comparison to the product's total usage life.

3) **Credence attribute qualities:** Those qualities of a product that cannot be accurately and efficiently evaluated even after the product is used extensively because of the consumer's lack of technical expertise, or because the cost of acquiring sufficient, accurate information is greater than its expected value.

The results of the study were as the following: Consumers respond rationally to higher purchase risk by increasing search. They do not engage in extensive search activities for their regular purchases.

Philips and Bradshaw (1993) have proposed a model of "practical decision making" where it has been stated that consumer behavior can be better understood when state of interaction between the consumers and their environment is analyzed.

Purchase intention is considered as far from being predetermined and fixed; but on the contrary, to be modifiable up to the point of purchase. Foxall has been quoted for the following statement : "The key stimuli accounting for important human behavior are to be found ultimately in the environment rather than in the individual" (Foxall p.96.1990).

In the study of Philips and Bradshaw (1993), the role of point of purchase has been evaluated as a major factor in the environment in determining consumer purchasing behavior.

The consumer, having been motivated to buy a product class, is faced with a brand choice decision. According to Howard (1977), the factors that contribute to his decision are as the following:

1. a set of motives
2. several courses of action
3. decision mediators by which the motives are matched with the alternatives.

"Motives are specific to a product class, and they reflect the underlying needs of the consumer; the alternative courses of actions are the purchase of one of the various brands with their potential to satisfy the consumers' motives. The decision mediators are a set of rules that the consumer utilizes to match his motives and his means to satisfy these motives. They are utilized to serve the function of ordering and structuring the brands based on their potential to satisfy these motives.

The decision mediators are developed within the process of learning about the purchase situation. They are, therefore, strongly influenced by the information and stimuli from the consumers' environment, and especially by the actual experience of purchasing and consuming the brand itself.

The consumer develops sufficient decision mediators to enable him to choose a brand which seems to have the best potential for satisfying his motives. Decision mediators help to establish the decision framework where all motives, attitudes, information sources, degree of involvement, and other intervening facts interact, which at the very end constitutes steps of the decision making process.

With repeated satisfactory purchases of a brand, the consumer is likely to engage into a routinized decision process (Routinized Response Behavior), whereby the sequential steps in buying are well structured and the choice decision is very easily completed. Routinized purchasing implies that the decision mediators are well established, and that the consumer has strong brand preferences.

The phase of repetitive decision making, in which the consumer reduces the complexity of a buying situation with the help of information and experience is called the psychology of simplification.

Decision making process can be divided into three stages in terms of psychology of simplification: Extensive Problem Solving, Limited Problem Solving, and Routinized Response Behavior. The further the consumer is able to simplify his environment, the less is the tendency toward active search behavior for different information from various sources.

In other words, the consumers establish more cognitive consistency among the brands as he moves towards routinization, and the incoming information is screened both with respect to its magnitude and quantity. He becomes less attentive to stimuli which do not fit his cognitive structure and he distorts those stimuli which are forced upon him.

The consumer also feels a need to complicate the buying situation by considering new brands, and/or new categories; and this process is called the psychology of complication." Howard (1977, pp 183-199).

Brand switching may also be induced by the manipulation of marketing variables (price, product design, promotion, distribution), and by changes in situational variables, such as the accessibility of the product and by the desire for variety. Whatever the reason for brand switching, the new brand enters the process of simplification as described above, depending on the degree of loyalty -indispensability- it has built.

The purchase decision making as far as soyoil is considered enters such processes of complication and simplification. Those consumer who perceive the soyoil as a new product places the product into the decision making process with a psychology of complication . The consumer need for vegetable oil is satisfied through the trial of a new category -soyoil- rather than the one that he/she always used so far.

The "Reason Why"s might vary, the consumer may want to try a new category, because of being bored of using the same old category over and over again (From Routinized Response Behavior towards Extensive Problem Solving); the price of soyoil might be more reasonable when compared to the previously used category's price; there might be a promotion activity associated with the soyoil, soyoil might be perceived as a healthier product than previously used oils, etc.

The decision making with respect to soyoil could also be an illustration of the psychology of simplification. The consumer might have already been engaged into a repetitive purchasing process with respect to soyoil because of strong brand/category preference/loyalty; thereby the consumer is on the stage of Routinized Response Behavior stage.

### **2.2.1. THE ROLE OF NUTRITION INFORMATION IN THE CONSUMER DECISION MAKING PROCESS WITH RESPECT TO SOYOIL**

The role of nutrition information in the decision making process with respect to soyoil has been subject to many studies in the literature. Two general approaches have been taken to examine consumers' search for and use of information about food and nutrition.

The first approach has focused on the extent, methods and strategies of prepurchase information-seeking (Jacoby, Chestnut, and Silberman, 1977; Mc Cullough and Best, 1980; Moore and Lehmann, 1980).

The other research approach has focused on intervention programs, which has examined the diet and knowledge changes resulting from information provision programs (Axelson and Delcampo, 1978; Chicci and Guthrie, 1982; Head, 1974; Picardi and Porter, 1976).

Following research has brought another dimension by focusing on consumer information seeking from various sources and within a cost benefit framework (Hermann, Feick, and Warland, 1986). The cost benefit approach has been adopted from Stigler's, (1961) work which argued that the amount for search information for consumers is determined by equating anticipated marginal benefits of search with marginal costs. The anticipated benefits of search are operationalized as the quantity to be purchased times the price reduction expected from an additional unit of search. The cost of search is a function of the opportunity cost of time.

Bloch and Richins, (1983) have developed a model that conceptually differentiates the product-or-topic related motivation for search from prepurchase related search behavior. In this model, it is stated that the individuals whose involvement with a product is situational, would be expected to search before a purchase but seek little information unrelated to purchase. In contrast, individuals with stable involvement in a product class would be expected to continuously accumulate product-class knowledge independent of particular purchase occasions. Such individuals might engage in little additional information seeking at the time of purchase.

In this model, permanent involvement in a product class results from consumers' perception that the product is very important. This importance arises from the relationship between the product-specific attributes and consumers' needs and values. As a result, consumers tend to invest more time in nutrition information search if nutrition is of enduring importance to them.

Another important point is that consumers' health can affect both interest in and action on nutrition-related matters (Heimbach, 1981). Age is a factor affecting the search for nutrition information, since the 'health capital' depreciates with age, and remedial actions are required. And to the extent that these remedial actions involve regulating diet, we should expect to find that increasing age implies greater search for nutrition information.

The benefits of nutrition information-seeking are not limited only to personal ones. Individuals responsible for the diet of others could obtain additional benefits from nutrition information, because such information affects the consumption of others. As a consequence, we should find married individuals and those with children engaged in greater search for nutrition information.

Importance of nutrition information is not related only to current health or family characteristic. It is expected to observe higher importance among individuals who see a relationship between current diet and future health. In other words, nutrition information search is a type of preventive health action.

Importance of nutrition information for the consumer will be shown with the analyses in the empirical part of the research. This section is therefore structuring the theoretical background for the empirical findings of the research.

### 2.3.DRAWING THE CONSUMER PROFILE

Across time and cultures it has been a tradition of mankind to describe the environment by classifying -assigning meanings to objects, ideas, and people. Classification and description has provided the logic for explanation and prediction of different aspects of life; and this has been the basis for knowledge accumulated so far.

In marketing science, as in any other discipline, classification and description of consumers is a prerequisite for understanding their needs and wants, explain their attitudes, intentions, beliefs, and behaviors. In a nutshell, drawing the consumers' profile is a must in order to come up with sound marketing decisions.

At this point, explaining individual differences gains importance. From the marketing point of view, understanding and separating individual differences is important in order to be able to classify or segment the total market based on individual differences.

"Individual differences means different internal states of the consumers; and depending on the internal state, a particular stimulus may result in different responses. " (Howard, 1977).

If a consumer needs to buy vegetable oil, he may respond to a vegetable oil advertisement by buying the oil. The role of information acquired from the advertisement has been leading to behavior, namely purchase, because the advertisement has been able to persuade the consumer to purchase the product; there could be other reactions to the advertisement, for example, the same ad could invoke the need for more information. The ad attracts the consumer's attention and leads him to search for additional information.

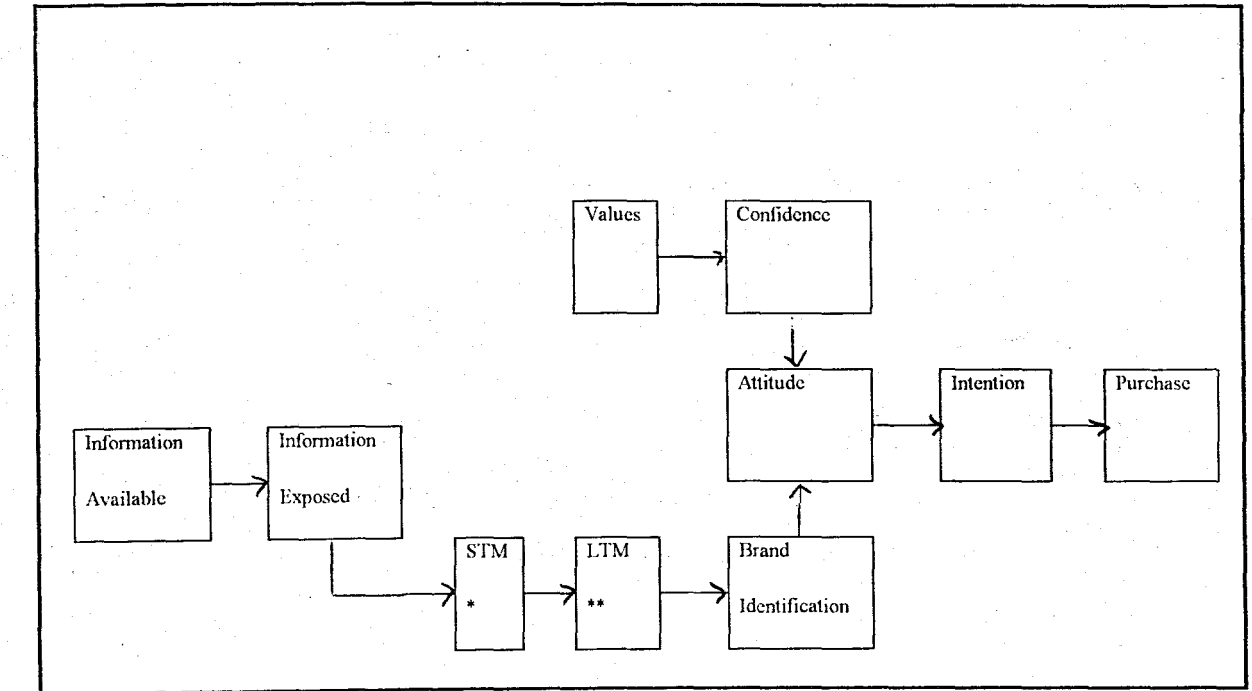
Another consumer may not need the product, being advertised, at the moment when he receives stimulus; he may just notice the ad -or other information source stimuli- and either stores the information or ignores it. All of these cases refer to different levels of motivation, which is a determinant factor in the perception of external stimuli. This is, in other words, the interaction of internal and external factors within a motivation framework.

Alternatively, two consumers may both need vegetable oil, but they prefer to buy two different brands, even two different vegetable oil categories. Such a case might be explained by another construct: predisposition toward a brand, or product class, due to a particular reason for this preference.

In short, according to Howard (1977), to understand individual differences and the logic behind their decision making, it is essential to categorize consumers in homogeneous groups/segments, which will enable the marketing manager to direct his marketing effort to each particular group.

The framework of individual differences in a comprehensive way, has been illustrated in Figure 2.4., below:

**Figure 2.4.: Individual Differences**



\* STM : Short Term Memory

\*\*LTM : Long Term Memory

Source : Howard,J.A.; Consumer Behavior: Application of Theory, McGraw-Hill Book Company; 1977, pp.157.

With one exception, all variables (boxes) in Figure 5, are endogenous (internal); which means that all changes in them are explained from within the system. In other words, changes in one variable are caused by changes in some other variable within the system.

Information is analyzed on two dimensions, the information available is exogenous (external); however, through a search activity the consumer actively regulates information exposed; when this fact is incorporated into the model, information exposed is endogenous. Information exposed is first processed in the short term memory of the consumer, and the screened information goes into the long term memory, which then leads to brand identification / awareness. Brand identification contributes to the formulation of attitude.

"Values" which play an important role in the determination of different choice criteria that various consumers have, is being inserted into the model as an exogenous variable, and this variable affects attitude. The reason behind incorporating the variable "values" into the model is to estimate quantitatively how much a given change in the amount of information would change attitude in a sample of consumers, without incurring a substantial error in the estimate.

A major cause of this unexplained variance -error term- is that consumers have different values. Building confidence on the values reinforces the attitude of consumers, which, at the end, creates an intention, which then turns into purchase action.

This model could be exemplified for the soyoil purchase decision. The consumer, at the beginning, is assumed to have a certain set of values, and the consumer, for example, feels confident that health is an important value for him. The consumer formulates an attitude towards health products, particularly health food.

Meanwhile, this consumer gets exposed to some information about soyoil, regarding its healthiness. This message enters the short term memory, and then long term memory -depending on the intensity of the message, and the motivation of the consumer towards the message. The consumer starts to identify brands of soyoil, approaches the category with a more focused attention. Consumer's positive attitude towards health food is reinforced and directed towards a specific intention to buy soyoil, and the purchase action takes place at the end.

The methodology and findings of the study will be presented in the next section, which shows the facts and relationships within this model.

### **III.FIELD STUDY ON CONSUMER DECISION MAKING PROCESS AND CONSUMER PROFILE WITH RESPECT TO A NEW PRODUCT - SOYOIL.**

In this section, the research design and methodology is presented. The section starts with the definition of the research objectives and research questions in the first part. And the second part covers the research findings.

#### **3.1.RESEARCH DESIGN AND METHODOLOGY**

In this section, the research objectives and questions are mentioned, and data collection process is discussed. Data collection section includes the definition of the population and the sampling process, data collection method and the questionnaire design. This section is followed by data analyses.

##### **3.1.1.RESEARCH OBJECTIVES AND RESEARCH QUESTIONS**

The main objective of this research is to present the decision making process of the consumers who are faced with a new product -soyoil by focusing on their decision making criteria, and their perceptions with respect to this new product.

In this respect, drawing the profile of the soyoil consumers is another objective of the study, that is, who the consumers interested in this new product are.

In line with these objectives, the following research questions are discussed:

1. What are the decision making criteria, and the degree of importance assigned to these criteria, as far as general purchase patterns, and soyoil are considered?

2. What are the perceptions of the consumers about health in general, and with respect to particular products?

3. What is the range of products which are purchased on a regular basis?

4. What is the level of awareness of Turkish consumers regarding the soybean derivative products, and the level of trial and usage of these products?

5. What are the relevant information sources for soybean derivative products?

6. What is the consumer attitude towards vegetable oil categories in general?

7. What is the brand awareness of the consumer as far as the whole vegetable oil category is concerned?

8. What is the degree of innovativeness of the consumer with respect to a new product, soyoil in particular?

### 3.1.2. RESEARCH DESIGN AND METHODOLOGY

The very basic characteristic of this research is that it is exploratory, because it is among the pioneering studies regarding the investigation of the consumer decision making process with respect to a new product -soyoil. And this is the very first study that focuses on soyoil in terms of consumer decision making. It is a crucial issue to explore what the consumers have in mind, when they face a new brand or a new product, and how they perceive it.

### 3.1.3. THE POPULATION AND SAMPLING PLAN

The sampling process starts with defining the population from which the sample will be drawn. This population is composed of vegetable oil consumers, where users and non-users of soyoil are incorporated into the model.

In the determination of the sample size, the formula of the confidence interval approach based on proportions (1) has been used.

The sample size has been calculated to be 60.

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(1)

$$n = \frac{z^2 \cdot p \cdot (1-p)}{E^2}$$

where :

n : sample size

z : z-score for 95% confidence level

p : market share of soyoil within the whole vegetable oil market = 4%

E : error term

$$60 = \frac{(1.96)^2 \cdot 4\% \cdot (1-4\%)}{(0.05)^2}$$

### **3.1.4. DATA COLLECTION AND QUESTIONNAIRE DESIGN**

The data collection method is primarily a survey to be implemented within the selected sample. A structured questionnaire has been used to collect primary data. The order of questions has been designed such that there is a logical flow from general towards specific, with the intention of constructing a framework to detect the underlying aspects of decision making, and determining the basic features of the consumer profile.

The small share of soy oil within the whole vegetable oil market has enabled a small sample to be representative, to ensure reliable and valid findings. Exclusion of the non-users of vegetable oil from the sample, with a screening questionnaire, increased the standard of quality of the findings.

A pilot study has been conducted in order to test the clarity of questions, and thereby to examine the aspects of the questionnaire to be corrected and changed. A convenience sample of 10 people has been used, and qualitative group discussions about the questions were considered to update the questionnaire in the most proper format.

The main questionnaire has been distributed to a sample of 60 people, all of which were vegetable oil consumers.

The questionnaire was composed mostly of structured closed-end questions, which were on nominal, ordinal, and interval scales of measurement. The scaling was constructed depending on the nature of the question, and on the potential answers to these questions.

Open ended questions aimed at letting the respondent feel free to explain the facts, and the related opinions in detail. One of the open ended questions has been in the format of third personalization, where the respondent was "caught", and started to describe himself, and his attitudes, perceptions, and value judgments.

The questionnaire (Appendix 1) is structured mainly by two parts:

**PART 1 :** In the first part, the questions, within a flow from the general to the specific, were aiming to provide answers to the basic aspects of the decision making process, and to draw the consumer profile. To give a clear picture of the structure of the questionnaire, the sections include the relevant question numbers, and the intentions behind asking the questions:

**Section 1:** The general notion of the consumers regarding health has been examined in this section. In the first question an indirect approach has been used to facilitate for the respondent to mention the health related problems he is aware of and he is currently suffering.

The second question has been asked to construct a relationship, and to state the degree of strength of this relationship, between eating habits and the problem areas mentioned in question 1.

**Section 2:** The third question extends the perception of health of the consumer onto a list of regularly purchased products, where he is asked to rate these products on a health scale (ranging from 1-5 point Likert scale). The following question (#4) determines the purchase frequency of the same list of products.

**Section 3:** The fifth question is the rating of a list of decision criteria in terms of the degree of importance that the consumers assigns to them.

**Section 4:** The sixth question aims to measure the degree of awareness, trial rate, and usage rate of soybean derivative products. And the seventh question measures the knowledge level of the respondents regarding soybean derivative products. And the respondent is asked to state the information sources (Question 8), from where he has obtained information related to soybean products in general. In this section, the approach of the respondent to soybean is measured and evaluated.

**Section 5:** This section has the primary goal to measure the purchase behavior of the consumer towards the whole vegetable oil category. Question 9 is directed towards a broader direction, particularly with the intention to segment the consumers in terms of the vegetable oil categories they use. And Question 10, measures the brand awareness, determines the brands purchased, and brands repurchased, to develop a certain level of loyalty.

**Section 6:** The respondent is asked to choose the first three important decision criteria for the purchase of vegetable oil, and to rank them in terms of importance (Question 11). The aim of this section is to find out the most relevant decision making criteria as far as vegetable oils are considered.

**Section 7:** This section is related to the awareness of vegetable oil categories and brands in particular, within an advertising framework. The consumer is asked to state the advertisements of vegetable oils, in an open ended question, and later on to state which one of these ads the respondent likes the most, and the media on which these ads appear (Question 12). The aim of this section is to determine the set of advertisements that are recalled and liked by the consumer, and to determine which media has been most efficient to reach the consumer.

**Section 8:** The degree of innovativeness is measured in this section, and the direction of this section is more profile oriented, rather than consumer decision-making oriented. The aim was to find out whether the consumer was willing to give a try to soyoil as a substitute of other vegetable oils. This section also included an open ended question where the third personalization technique was utilized. This question was a profile question, where the respondent, unconsciously, described his own traits, values, and attitudes (Questions 13,14).

**PART 2:** This part of the questionnaire covers questions that aims to define the demographic characteristics of the respondents. These variables are gender, age, education level, marital status, number of children (family life cycle), number of people living in the household, working status, and total monthly household income (Questions 15-23).

### 3.2.RESEARCH FINDINGS

In this section, findings of the empirical research will be presented.

#### 3.2.1.FREQUENCY DISTRIBUTIONS AND DESCRIPTIVE STATISTICS

The first part of the research findings is structured by the frequency distributions.

##### 3.2.1.1.DEMOGRAPHIC FINDINGS OF THE SAMPLE

Research findings of the demographic characteristics of the sample are summarized in the Table 1:

**Table 3.1. : Demographic Characteristics of the Sample**

%						
<b>Gender</b>	<b>Female</b> 68.9	<b>Male</b> 31.1				
<b>Age</b>	17 and (-) 1.6	18-24 14.8	25-34 36.1	35-44 31.1	45-54 8.2	55 and (+) 8.2
<b>Education</b>	<b>Elementary</b> 1.6	<b>High-school</b> 42.6	<b>University</b> 49.2	<b>Other</b> 6.6		
<b>M.Status</b>	<b>Single</b> 23	<b>Married</b> 68.9	<b>Wid.Divorce</b> 8.2			
<b>Children</b>	0 39.3	1 24.6	2 34.4	3 1.6		
<b>Household Size</b>	1 6.6	2 31.1	3 31.1	4 27.9	5+ 3.3	
<b>Work Sts.</b>	<b>Part time</b> 4.9	<b>Full time</b> 60.7	<b>Non-working</b> 8.2	<b>Retired</b> 8.2	<b>Housew.</b> 14.8	<b>Other</b> 3.3
<b>Income TL</b>	3 mio (-) 6.6	3 - 10 mio 45.9	10 - 20 mio 32.8	20 - 30 8.2	30 (+) 6.6	

Nearly 70% of the sample are female, and 31.1% are male respondents. These percentages are quite representative of the target population, because the target population is the consumer who shops, who cooks, and who is interested in food in general; and female consumers are more closely associated with these characteristics. The sample has been selected as a convenience sample as stated before, which is a limitation for this research.

A very small proportion (1.6%) of the respondents belong to the age group of 17 and below; 14.8% to 18-24; 36.1% to 25-34; 31.1% to 35-44; 8.2% to 45-54; and 8.2% to 55 and above. The majority of the sample is concentrated within the age group 25-34, and 35-44; which means that the sample is relatively young.

Education levels of the respondents are as follows: 49.2% are university graduates, 42.6% are high school graduates, which means that the level of education has been relatively high.

As for the marital status, 68.9% of the respondents are married, which constitutes the majority of the sample; 23% are single, and 8.2% are widowed or divorced.

Nearly 40% of the respondents have no children; 24.6% have only one, 34.4% two, and 1.6% three children. The majority of the respondents have either one or two children; therefore, the author assumes that they are more open to information about nutrition and food, because they have to care for their children and make sure that they follow a proper diet.

As far as the size of household including oneself is concerned, 6.6% lives alone, 31.1% has a household size of 2, 31.1% three, 27.9% four, and 3.3% five. The most common household sizes are 3, and 4.

As to the job status of the respondents: 4.9% work part-time, 60.7% work full-time, which is the majority of the sample; 8.2% do not work at the moment, 8.2% are retired, 14.8% are housewives, and the other 3.3% are working free lance.

Almost 7% of the respondents belong to the income level of "3m TL and below"; 45.9% -which is the largest category- belongs to 3m-10m TL; 32.8% to 10m-20m TL; 8.2% to 20m-30m TL; and 6.6% to 30m and above category. The majority of the respondents belong to the middle and upper middle income levels.

### 3.2.1.2. HEALTH RELATED PROBLEMS

Table 3.2. portrays the findings on health related problems and their respective frequencies that the subject observes in his/her close environment. The most frequently observed health related problem was "Stress Related Problems", "Cholesterol" and "Hearth Related Problems" were the next in terms of frequency.

**Table 3.2. : Frequency Distributions for Health Related Problems**

%	Not			Very		
	Observed	Rare	Common	Common	MEAN *	ST.DEV. *
Stress related prob.s	23.00%	19.70%	34.40%	23.00%	1.574	1.087
Cholesterol	23.00%	21.30%	42.60%	13.10%	1.459	0.993
Hearth related prob.s	24.60%	21.30%	37.70%	16.40%	1.459	1.042
Digestive prob.s	27.90%	31.10%	23.00%	18.00%	1.311	1.073
Psychological prob.s	39.30%	37.70%	11.50%	11.50%	0.951	0.99
Other...	95.10%	0.00%	3.30%	1.60%	0.148	0.093

\*Scale values are: 0=Not observed  
 1=Rare  
 2=Frequently  
 3=Very Frequently

Cholesterol is one of the most commonly observed problems as far as the people within the respondents' close environment are considered. Forty two percent of the sample rated the problem as "common", and 13.1% as very frequently observed.

Heart related problems are also observed frequently; with a 37.7% of the respondents falling into the category of "Common", and 16.4% into "Very Common".

The frequency of the digestive problems of the people, within the respondents' close environment, slightly differs based on the categories (Not observed, rare, common, very common). "Rare" has the largest proportion (31.1%), and "not observed" "27.9" is the category with the second largest proportion. "Common" observation of these problems has been stated by 23% of the respondents, and "very common" has the smallest frequency with 18%. Digestive problems seem to be observed common by a smaller percentage of the sample.

Psychological problems are also "not observed" (39.3%), or "rarely observed" (37.7%); this is either true, or the findings are biased where the respondents did not answer the question honestly.

The category "Common" has the largest proportion as far as the variable "stress related health problems" are considered (34.4%); "very common" has a proportion of 23%; and interestingly "not observed" category also has a proportion of 23%. But "common" and "very common" categories together add up to 57.4% which indicates that this is a problem that is frequently observed in the close environment of the respondents.

Nearly 95% of the respondents did not observe other problems. The main problems that were mentioned were diabetics, gaining weight and allergies.

### **3.2.1.3.EATING HABITS**

Question 2 represents how eating habits affect the health related problems, which are mentioned above in Table 3.2.

The fact that eating habits affect health problems has been measured in this section. Forty four percent of the respondents think that eating habits affect cholesterol problem, which is a self-explanatory finding. This trend is also obvious as far as heart related problems are considered; which means that eating habits also affect heart related problems to a great extent, 37.7% of the sample agreed on this argument.

Digestive problems are the ones which are considered to be affected very much by the eating habits, 50.8% of the sample agree on this statement.

The majority of the respondents share the view that eating habits do not affect psychological problems. And similarly the respondents seem to agree on the fact that eating habits do not affect stress related problems. Some even pointed out that stress related problems affect eating habits.

There is no distinct answer to the 'other' category that the respondents have specified.

Respondents were then asked to rate various food products on a scale for health, where they were asked to assign a value (1=very unhealthy, 5= very healthy) to the respective food product. Table 3.3. summarizes the frequency distribution of responses, and Table 3.4. presents the descriptive statistics for each food item.

Table 3.3.: Frequency Distribution for Products on the Health Scale

%	No answer	Very Unhealthy				Very Healthy
		1	2	3	4	5
	0	14.8	27.9	37.7	13.1	6.6
<b>Frozen Food</b>	0	14.8	27.9	37.7	13.1	6.6
<b>Fast Food</b>	0	1.6	37.7	42.6	16.4	1.6
<b>Soy Bean Products</b>	0	6.6	8.2	2.3	49.2	13.1
<b>Margarine</b>	0	3.3	29.5	54.1	9.8	3.3
<b>Butter</b>	3.3	13.1	32.8	31.1	16.4	3.3
<b>Tea</b>	3.3	16.4	37.7	42.6	0	0
<b>Coffee</b>	3.3	14.8	39.3	29.5	11.5	1.6
<b>Veg.Oil</b>	3.3	8.2	13.1	27.9	31.1	16.4
<b>Beverages</b>	3.3	55.7	29.5	8.2	1.6	1.6
<b>Fruit Juices</b>	4.9	6.6	29.5	41	18	0
<b>Sunfl.Oil</b>	3.3	1.6	11.5	37.7	32.8	13.1
<b>Soyoil</b>	9.8	0	3.3	23	39.3	24.6
<b>Olive Oil</b>	0	0	4.9	16.4	34.4	44.3
<b>Corn Oil</b>	6.6	0	13.1	23	34.4	23

The respondents positioned "frozen food" as a product which is not very healthy, but also not very unhealthy; it is in the middle. Subjects stating that they do not consider frozen food as unhealthy could be due to they consume it very frequently. A medium level of healthiness has been associated with this food item.

"Fast food" shares the explanation mentioned for frozen food. However, the mean (1.787) is closer to the "unhealthy" end.

**Table 3.4. : Descriptive Statistics For Food Items on the Health Scale**

	MEAN *	ST.DEV.
Olive Oil	4.18	0.885
Soyoil	3.557	1.42
Soy Bean Products	3.475	1.219
Corn Oil	3.475	1.337
Sunfl.Oil	3.344	1.109
Veg.Oil	3.246	1.299
Frozen Food	2.689	1.088
Fruit Juices	2.607	1.021
Butter	2.541	1.119
Coffee	2.361	1.033
Tea	2.197	0.833
Margarine	1.803	0.792
Fast Food	1.787	0.798
Beverages	1.541	0.886

\*Scale values are :

1= Very Unhealthy

...

5= Very Healthy

Nearly half of the respondents (49%) stated that "soybean derivatives" are "healthy" products, and 13.1% valued those product as being "very healthy"; only 8.2% assigned to soybean products a medium grade in terms of healthiness, 6.6% did not answered this question. Mean value is 3.475 on a 5 level scale, indicating that soybean products are considered somewhat healthy food items.

"Margarine" is considered as a product which is close to the "unhealthy" end, 29.5% of the respondents classified the product as very unhealthy, and 54.1% as unhealthy. No one said that margarine is very healthy, and 3.3% classified margarine as being healthy.

"Butter" stands closer to the "healthy" end when compared to margarine. Sixteen percent classified butter as being healthy, but the majority of the respondents concentrated at the medium grading (32.8% + 31.1%). Classification for the unhealthy level is made by 13.1% of the sample.

"Tea" is being rated as medium in terms of healthiness, 80.3% of the respondents concentrated in the middle grading. Only a 16.4% has rated tea as being unhealthy.

"Coffee" also joins the trend of medium grading by 68.8% ; but closer to the healthy end of the scale when compared to tea. Those who classify coffee as being very unhealthy amounts to 14.8% of the total sample.

"Vegetable oil" is perceived by consumers as being somewhat healthy, 16.4% of the respondents classified the product group as being very healthy, 31.1% as healthy, 27.9% as somewhat healthy, 13.1% as somewhat unhealthy, and 8.2% as being unhealthy.

"Beverages" (soft, carbonated drinks, such as cola) are perceived as being very unhealthy, 55.7% agree on this fact. 29.5% classify them as being unhealthy.

"Fruit juices" are rated as being closer to the healthy end of the scale, when compared to the beverages, but still has a medium rating. The second grading was given by 29.5% and third grading by 41% of the respondents.

A little over 13% of respondents classified "sunflower oil" as being very healthy, 32.8% as healthy, 37.7% as somewhat healthy, 11.5% as being unhealthy. During the interviews it has been mentioned that eating fried food is unhealthy and they constructed a relationship to the fact that frying is done using sunflower oil.

Nearly 25% of the respondents classified "soy oil" as being very healthy, and 39.3% as being healthy. During the interviews they referred to the protein and mineral contents of the soy oil, and its contribution to future health. Soy oil has a strong product image based on the health concept.

"Olive oil" is the product which is ranked highest in terms of healthiness, 44.3% of the respondents rated olive oil as being very healthy; they argued that olive oil contributes positively to future health; olive oil has minerals/vitamins especially necessary for children. Thirty four percent rated olive oil as being "healthy". The strongest agreement among the respondents is seen on the healthy end of the scale.

Although the healthiness rating is in favor of being healthy as far as "corn oil" is considered, a more even distribution of respondents among the categories on the scale has been observed: 23% rated corn oil as very healthy, 34.4% as healthy, 23% as somewhat healthy.

"Olive oil", with a mean of 4.18 on a five point scale, is the healthiest food item as far as consumer perception is considered; "soyoil" is the second healthiest product on the scale with a mean of 3.557; and "soybean products" and "corn oil" are the following food products, with the same mean (3.475).

The least healthy food item is "beverages" with a mean of 1.541; the second most unhealthy product is "fast food", and the respective mean is 1.787; the third unhealthy food item is "margarine" with a mean of 1.803.

The frequency of consumption patterns of the consumer were probed in Question 3. . The variables match with the product items which has been already rated on the healthiness scale.

**Table 3.5. : Frequency of Consumption Patterns for Food Items**

	None	Once a Week	Several Times a Week	Everyday	Once a Month	Other
Frozen Food	6.6	23	13.1	1.6	45.9	9.8
Fast Food	18	26.2	18	4.9	26.2	6.6
Soy Products	37.7	11.5	14.8	3.3	24.6	8.2
Margarine	11.5	29.5	19.7	4.9	31.1	3.3
Butter	9.8	26.2	14.8	4.9	36.1	8.2
Tea	4.9	19.7	4.9	34.4	29.5	6.6
Coffee	3.3	21.3	4.9	27.9	32.8	9.8
Veg.Oil	8.2	11.5	9.8	18	36.1	16.4
Beverages	8.2	18	31.1	13.1	26.2	3.2
Fruit Juices	14.8	8.2	31.1	11.5	29.5	4.9
Sunfl.Oil	6.6	16.4	9.8	4.9	52.5	9.8
Soyoil	59	4.9	1.6	1.6	26.2	6.6
Olive Oil	6.6	8.2	1.6	13.1	57.4	13.1
Corn Oil	42.6	6.6	4.9	3.3	34.4	8.2

A little less than half of the respondents (45.9%) stated that they purchase "frozen food" once a month. This is due to the fact that "frozen food" is perceived by these respondents as being somewhat unhealthy. On the other hand, 23% of the respondents have a weekly purchase frequency, and 13.1% consume "frozen food" several times a week, which is not a small segment.

One out of every four respondents (26.2%) consume "fast food" once a month, however interestingly another 26.2% of the respondents consume it once a week, 4.9% daily- and 18% several times a week. The most common frequency of purchase is once a week.

Over one third (37.7%) of the respondents stated that they have not purchased "soy bean products" so far, which is the largest category in terms of "soy bean products" consumption. Twenty four percent of the sample purchase "soy bean products" once a month. These percentages are high enough to prove that "soy bean products" have a low consumption frequency.

The most commonly observed purchase frequency of "margarine" is once a month (31.1%). These respondents indicated that "margarine" is an item which belongs to their monthly shopping list -bulk purchases. On the other hand, the second largest proportion of the respondents, with a 29.5%, stated that they purchase "margarine" on a weekly basis -once a week.

"Butter" shares the trend that the margarine has; the most commonly observed frequency of purchase is "also once a month", where 36.1% of the respondents belong to this category. However, 26.2% of the respondents stated that they purchase butter once a week.

"Tea" may have been misinterpreted by the respondents. The question referred to the purchase frequency, not usage frequency. As far as the "tea" is concerned, 34.4% of the respondents stated that they purchase tea every day; and this seems not rational because even the smallest consumption unit for tea is too much to be purchased on a daily basis. The fact that they purchase tea every day can be true only if they pay for ready made tea. On the other hand, 29.5% of the respondents fall into the frequency of "monthly purchase frequency".

Purchase frequency for "coffee" is as the following: the most commonly observed purchase frequency is once a month, with 32.8%; then comes a 21.3% stating a purchase frequency of once a week. 27.9% of the respondents state that they purchase "coffee" on a daily basis; and this is the case where they buy ready-made cups of coffee.

The most common purchase frequency for "vegetable oil" is once a month with a percentage of 36.1%. And 16.4% of the respondents stated different frequencies with larger time intervals, such as once every two months. It is a bulk purchase item.

Slightly less than one third (31.7%) of the respondents consume "beverages" with a frequency of several times a week -such consumption is less in terms of amount. On the other hand, 26.7% of the sample buys "beverages" once a month. They buy units of large package sizes.

The largest proportion of respondents regarding the purchase frequency of fruit juices and non carbonated beverages amounts to 31.1% and this purchase frequency is several times a week. Eleven percent purchase fruit juices every day, and 29.5% every month (bulk purchases).

The second largest proportion of the respondents fall into the category of "once a month" purchase frequency, with a percentage of 52.5% as far as sunflower oil is considered. The amount purchased per shopping trip per month is large when compared to other types of vegetable oil (except olive oil).

It is very interesting to observe that 59% of the respondents did not answer the question regarding the frequency of purchase of "soyoil". Twenty six percent stated that they purchase soyoil once every month, which matches the trend "monthly purchase for vegetable oils". Another type of answer that the consumer stated for "other purchase frequencies" has been: "I buy soyoil as soon as it is finished". Therefore, the conclusion can be drawn that soyoil consumers are addicted to soyoil, and they have constructed loyalty to soyoil. The product is perceived as being unique when compared to other vegetable oil types. Although the soyoil consumers do not constitute a big proportion of vegetable oil consumers, they are heavy users and brand loyal consumers.

The most distinctively largest proportion of the respondents (57.4%) stated that their frequency of purchase was once a month as far as the olive oil is considered. Olive oil has been found to be the most heavily consumed vegetable oil category. And "olive oil" has not been challenged by any other oil category in terms of consumer perception regarding contribution to health.

"Corn oil" is not purchased at all by 42.6% of the sample; and most of the purchasers of corn oil fall into the category of monthly purchase frequency.

### 3.2.1.4. PRODUCT CHOICE CRITERIA

Question 5 refers to various product choice decision making criteria and the degree of importance that the consumer assigns to them on a scale ranging from 1=very important, to 4=unimportant.

**Table 3.6. : Frequency of Product Choice Criteria**

	0	1	2	3	4	MEAN	ST.DEV.
Attractiveness of advertising	1.6	0	14.8	32.8	50.8	3.31	0.85
Early adoption intention	8.2	4.9	6.6	21.3	59	3.18	1.26
Attractiveness of package	3.3	0	16.4	41	39.3	3.13	0.92
Trial intention	3.3	11.5	24.6	32.8	27.9	2.7	1.1
Friend's advice	1.6	8.2	26.2	47.5	16.4	2.69	0.9
Reliability of advertising	1.6	14.8	42.6	18	23	2.46	1.06
Environmental friendly package	1.6	16.4	39.3	29.5	13.1	2.36	0.97
Price	0	14.8	45.9	32.8	6.6	2.31	0.81
Producer image	3.3	24.6	47.5	14.8	9.8	2.03	0.97
Expert opinion	3.3	34.4	49.2	8.2	4.9	1.77	0.84
Previous product experience	0	41	54.1	3.3	1.6	1.66	0.63
Contribution to health	0	49.2	49.2	1.6	0	1.52	0.54
Other	88.5	4.9	1.6	1.6	3.3	0.26	0.85

The product choice criteria, which were perceived as the most important ones by the consumer are "contribution of the product to health", "previous experience with the product" and "expert opinion/advice".

"Price" has been evaluated as a product choice criterion in terms of its importance within the decision making process. Forty six percent of the respondents stated that the price is an important factor, 14.8% stated that it is very important, for 32.8% of the respondents price has little importance. The mean is 2.311.

More than half of the respondents (54.1%) stated that they value "the previous experience with the product" as being important in terms of their purchase decisions. And other 41% said that this fact is "very important" for them. And it is self-explanatory that prior experience is a crucial factor in the decision making.

The "product's contribution to health" has been rated in terms of the relative importance to the consumer as a product choice criteria. It is obvious that this variable is being assigned the value "very important" with a percentage of 49.2% and "important" with the same percentage (49.2%); and a total of 98.4%.

One other fact is in what respect a "friend's advise" is important as a purchase decision making criterion. And only 8.2% valued this as being very important and 26.2% as being important. However, 47.5% stated that friend's advice is not important at all, and 16.4% stated that this is unimportant.

There is an even distribution of responses as far as the issue of environmental friendly packaging is considered, with a concentration of opinions at the middle of the scale. The largest proportion is 39.3% stating that environmental friendly package is important for their considerations; 29.5% say that this is not important, 16.4% says that this is "very important", and 13.1% "unimportant".

The "attractiveness of the advertising" has not been valued as very important by any of the respondents, only 14.8% stated that this is important. The distinctively largest proportion (50.8%) of the respondents stated that attractive advertising is unimportant as far as decision making is considered, which is a self-explanatory fact. No one perceives an advertising as a reliable source of information just because it is attractive; therefore this is not a factor to contribute to the decisions to be structured. The mean and median (4) supports the statement.

On the other hand, the reliability of the advertising is valued as important by the respondents to a great extent. Forty two percent stated that this fact is important, 14.8% valued the reliability of advertising as being very important. However, 23% of the respondents stated that this fact is unimportant for their considerations.

The "attractiveness of package" has been assigned relatively lower degrees of importance. By 41% of the respondents this fact is being assigned the value "not important", and by 39.3% the value "unimportant". Attractiveness of package becomes an important factor in the case of impulse purchase; it has no effect on the purchase decision formulated prior to the act of purchase.

"Expert opinion" has been valued as being "very important" by 34.4%, and as being "important" by 49.2% of the respondents. This fact is self-explanatory, where the consumers value the opinions of someone who is supposed to know more about the product.

"To try the product for the first time" is a fact where the respondents have diverging opinions (standard deviation is 1.101), but the tendency is not to assign high levels of importance to this statement. Thirty three percent valued this fact as not important, 27.9% as unimportant, 24.6% as important, and 11.5% as very important. Only 11.5% of the respondents were very eager to try the product for the first time, portraying their degree of innovativeness. And this is not a small proportion, especially for new products, such as soyoil, is considered.

The producing company image is very important for 24.6%, and important for 47.5% of the respondents. The company is the guarantee behind the product, the company is there to assure quality, and assumes all responsibility regarding its product. Therefore, this fact is highly valued by the consumers.

The intention to be one of the consumers who will adopt the product for the first time (before anyone else) , is found to be irrelevant by the respondents. Nearly 60% of the sample stated that this is an unimportant fact, and 21.3% perceived this as not important. The desire to belong to the innovative core, who are the early adopters, is not strong among the respondents, despite the fact that the intention of trying the product for the first time has not been assigned higher value.

There is no explicit answer in the "other" category; and the specified ones are repeating the answers being listed in the questionnaire.

### 3.2.1.5. AWARENESS, TRIAL, AND PURCHASE OF SOYBEAN PRODUCTS

Question 6 measures the consumer awareness, trial, and purchase levels regarding soybean products on a nominal scale. Table 3.7. presents the results:

Table 3.7. : Awareness, Trial, and Purchase Frequencies of Soybean Products

<b>%</b>	<b>AWARE (HEARD OF)</b>	<b>TRIED</b>	<b>PURCHASED</b>
<b>SOYBEAN PRODUCTS</b>			
<b>SOYA SPROUT</b>	49.2	41	26.2
<b>SOYOIL</b>	55.7	32.8	19.7
<b>SOY FLOUR</b>	21.3	11.5	8.2
<b>SOYA CHEESE</b>	13.1	9.8	6.6
<b>SOY SAUCE</b>	59	50.8	41
<b>TOTAL</b>	59	50.8	41

The percentages in this table are the YES answers.

Referring to the Table 3.7., showing the frequencies of awareness, trial, and purchase findings can be summarized as follows:

The awareness degrees among the soy bean derivatives are ranked as soy sauce being the first (59%), soyoil the second (55.7%), soy sprout the third (49.2%), soy flour the fourth (21.3%), and soy cheese the fifth (13.1%).

The trial rates corresponding to the respective products are: soy sauce the first (50.8%), soya sprout the second (41%), soyoil the third (32.8%), soy flour the fourth (11.5%), and soy cheese the fifth (9.8%).

The act of purchase for these products are as the following: soy sauce is the first with (41%), soya sprout is the second with (26.2%), soyoil is the third with (19.7%), soy flour is the fourth with (8.2%), and soy cheese is the fifth with (6.6%).

Question 7 refers to the knowledge level that the respondents specified for themselves regarding the soy bean derivative products. This knowledge level has been measured on a seven-points scale, where 1=points out to the end of low level of knowledge, and 7=points out to high level.

**Table 3.8. : Frequency Distribution of the Consumers Regarding Their Knowledge About Soybean Products**

1	2	3	4	5	6	7	MEAN	ST.DEV.
39.3	19.7	18	11.5	6.6	3.3	1.6	2.43	1.55

Scale : from 1=low knowledge level  
to 7=high knowledge level

The knowledge level regarding soybean derivative products are not high. The mean is 2.426, indicating a low level of consumer knowledge about soybean products. The majority of the respondents were concentrated on the low level end of the scale. Nearly forty percent of the respondents stated that they are on the level one (the lowest level), 19.7% are on the second, 18% are on the third, 11.5% are on the fourth, 6.6% are on the fifth, 3.3% are on the sixth, and 1.6% are on the seventh level.

### 3.2.1.6. SOURCES OF INFORMATION FOR SOYBEAN PRODUCTS

Question 8 refers to the various information sources for soybean derivatives that the respondents were asked to point out.

Table 3.9. : Information Sources Used For Soybean Products

INFORMATION SOURCES	USED AS A SOURCE	NOT USED AS A SOURCE
PRESS ADS	31.1	68.9
PRINTED MEDIA	57.4	42.6
TV ADS	55.7	44.3
FAMILY MEMBERS	18	82
FRIENDS	24.6	75.4
EXPERIENCE	16.4	83.6
PEOPLE AT SHOPPING AREA	6.6	93.4
OTHER	3.3	96.7

The most frequently mentioned source of information as far as the soy bean products are considered is newspaper and magazine articles (57.4%). The second frequently mentioned source of information is TV commercials with a 55.7% (soybean commercials); press ads are the next information sources (31.1%); the friends are ranked as the fourth information source by 24.6% of the respondents; family members is another source of information, which is pointed out by 18% of the respondents; the next source is consumers' prior experiences with 16.4%. "Other" category includes "cooking sessions on TV" as another source of information with a percentage of 3.3%.

### **3.2.1.7. VEGETABLE OIL CONSUMPTION**

In Question 9 a, respondents were asked whether they purchased vegetable oil or not. And it is a very striking result that 100% of the respondents stated that they purchase vegetable oil.

Question 9 b refers to various types of vegetable oil and the respondent is asked to choose those vegetable oils that he/she consumes.

The vegetable oil categories that are purchased by a majority of consumers are olive oil, soyoil, with a proportion of 85.2% of the respondents falling into each category. The next largest proportion of respondents, amounting to 82%, are the purchasers of sunflower oil. Corn oil is the least preferred vegetable oil category with a proportion of 39.3%.

### **3.2.1.8. VEGETABLE OIL : BRAND PREFERENCES**

Question 10 refers to various brands of vegetable oils, belonging to different categories. The objective is to determine the brand awareness, brand purchase (trial) rate and repurchase rate for these different vegetable oil categories..

**Table 3.10. : Brand Preferences for Vegetable Oil**

%		
BRANDS	NO ANSWER *	REPURCHASE RATE
KOMILI YUDUM	13.1	60.7
KOMILI Z.YAGI	14.8	57.4
AYMAR	24.6	34.4
ONA	39.3	26.2
OLIN	19.7	24.6
KIRLANGIÇ Z.YAGI	34.4	24.6
TARIS Z.YAGI	50.8	21.3
KOMILI M.ÖZÜ	41	19.7
MADRA Z.YAGI	60.7	18
KÖYLÜ SIZMA Z.YAGI	82	16.4
LIVIO	5.8	9.8
BIRYAG	67.2	8.2
SOYOLA	54.1	3.3
PAKSOY ÇİÇEK	50.8	3.3

\* The "NO" answers represent the non users of that brand.

The respondents have usually marked the box indicating the repurchase rate of the brand; although they have not marked the adjacent boxes for the same product, which were referring to brand awareness, and trial / first purchase of the brand. Therefore, the interpretation of the results will be based on the repurchase rates.

The highest repurchase rate is 60.7% belonging to KOMILI YUDUM.

KOMILI ZEYTINYAGI (Olive Oil) has also scored a high repurchase rate 57.4%; where the conclusion can be drawn that KOMILI group has been able to establish a high level of brand loyalty. One main reason for this brand loyalty is the brand image itself, which has been enhanced by effective advertising, and umbrella branding.

Following the KOMILI group, the brands are ranked in terms of their repurchase rates as the following: Aymar( 34.4%), Ona(26.2%), and Olin (24.6%).

SOYOLA is known by one third of the respondents (31.1%); the trial rate is 11.5% and repurchase rate is 3.3%. Soyola is one of the brands with the least loyal consumer base.

### 3.2.1.9.DECISION CRITERIA FOR PURCHASING VEGETABLE OIL

Question 11 refers to the decision criteria that the consumer considers when purchasing vegetable oil. The respondents were supposed to choose three criteria that was most relevant to them, and rank them from first to third in terms of importance.

Table 3.11. : Saliance of Vegetable Oil Choice Criteria

	*	FIRST	SECOND	THIRD
%	NO ANSWER	IMPORTANCE	IMPORTANCE	IMPORTANCE
	0	1	2	3
CLARITY	54.1	21.3	19.7	4.9
QUALITY	13.1	62.3	23	1.6
PRICE	70.5	0	11.5	18
PRODUCING CO.IMAGE	54.1	4.9	21.3	19.7
RELIABILITY OF AD	98.4	0	0	1.6
PROMOTIONAL GIFTS	98.4	0	0	1.6
HANDINESS OF PACKAGE	91.8	0	4.9	3.3
ATTRACTIVENESS OF AD	100	0	0	0
FRIEND'S ADVISE	88.5	1.6	3.3	6.6
ENVIRONMENT FRIENDLINESS OF PACKAGE	91.8	0	0	8.2
EXPERT ADVISE	62.3	8.2	9.8	19.7
POINT OF SALE	90.2	0	3.3	6.6
OTHER	95.1	0	3.3	1.6

\* Percentage of respondents not ranking the criteria within 1,2,3rd importance ranks.

Over 60% of the respondents stated that they assign the first importance to "Quality" as a decision making criterion. Producing company image has been ranked as second important criteria by over one fifth of the respondents (21.3%), because producing company is perceived as a guarantee of the reliability of the product.

"Attractiveness of the advertising" has been stated as a criteria that has no effect on the choice of the vegetable oil. Similarly "reliability of the advertising", "promotional gifts", and "point of sale actions" are considered as unimportant choice criteria. Interestingly the fact that the package is environmental friendly" has been able to acquire a third importance ranking by only 8.2% of the respondents.

### 3.2.1.10. ADVERTISEMENT RECALL FOR VEGETABLE OIL BRANDS

Question 12 A measures advertisement recall ability of respondents related to vegetable oil. The most frequently mentioned commercials are Komili Olive Oil, Yudum, Livio, and Soyola. In these commercials, the key benefits that the brands promise are very clearly stated, and the tone of the ads, the visual devices being used are very definite.

Table 3.12. : Number of ads recalled and liked

	0	1	2	3	4	5	6	7
Number of ads remembered	11.5	23	19.7	16.4	19.7	3.3	4.9	1.6
Number of ads liked	21.3	42.6	21.3	8.2	6.6	0	0	0
Number of TV ads remembered	13.1	21.3	18	19.7	18	3.3	4.9	1.6
Number of press ads remembered	90.2	6.6	1.6	0	0	0	0	1.6
Other media ads	100	0	0	0	0	0	0	0

Over 10% of the respondents have not mentioned any advertising that they remember; 23% remembered only one ad; 19.7% two; 16.4% three; 19.7% four; 3.3% five; 4.9% six; 1.6% seven ads. The mean number for ads remembered is 2.475; standard deviation is 1.719, presenting diverging number of the ads remembered.

The respondents were also asked about which commercials they like the most. The most frequently mentioned commercials are: Komili Zeytinyagi, Soyola, Livio (The order mentioned here is in terms of degrees of liking). Twenty one percent of the respondents have not mentioned any commercial that they like; 42.6% mentioned only one, 21.3% two, 8.2% three, and 6.6% four commercials.

The proportion of the respondents who mentioned the number of commercials that they have seen on TV is also shown in Table 3.12. Thirteen percent have not answered the question, 21.3% have seen only one ad on TV, 18% two, 19.7% three, 18% four, 3.3% five, 4.9% six, 1.6% seven ads.

Another media alternative is the "press ad". Over ninety percent of the respondents did not answer the question, 6.6% only remembered two press ads, and 1.6% remembered seven press ads.

### 3.2.1.10. INNOVATIVE CONSUMERS AND VEGETABLE OIL USAGE

Question 13 covers three pairs of statements, which draw the profile of the respondents in terms of their degree of innovativeness regarding their consumption habits, particularly their approach to new products.

Table 311: Degree of Innovativeness -with Respect to Soyoil

	NO ANSWER	INNOVATIVE	CONSERVATIVE
ITEMS %	0	1	2
RICE COOKING	0	41	59
TRIAL OF A NEW SUNFLOWER/ CORNOIL BRAND	1.6	37.7	60.7
TRIAL OF A NEW VEGETABLE OIL CATEGORY (SOYOIL)	1.6	77	21.3

As far as "cooking rice" is considered, 59% of the respondents stated that they would prefer cooking rice as they are used to cook it. The other 41% of the respondents stated that they might give a try to other types of oil while cooking rice, such as vegetable oil.

Nearly 60% of the respondents stated that they would not prefer to try a new sunflower - cornoil brand.

Seven out of every ten respondents is willing to try a new category of vegetable oil, where soyoil was standing as a reference point; and that they would like to cook their meals that they always cook, with this new vegetable oil -namely soyoil.

Question 14 covers a list of statements, where the respondents were asked to indicate their level of agreement with these statements, on a Likert scale ranging from 1=Strongly agree, to 4=Strongly disagree.

**Table 3.13 a: Attitudes and Predisposition toward Food**

STATEMENTS %	NO ANSWER	FULLY AGREE	AGREE	DISAGREE	FULLY DISAGREE
	0	1	2	3	4
I like food that is practically prepared.	1.6	50.8	21.3	21.3	8.2
Soyoil may not be appropriate for cooking green beans.	3.3	14.8	42.6	42.6	9.8
I like food that tastes good Irrespective of the practicality of its preparation.	1.6	26.2	16.4	16.4	6.6
I want to make a change in the eating habits by including more vegetable oils into the meals I cook / eat, as a substitute for butter and margarine.	1.6	44.3	24.6	24.6	4.9
I think that frozen food is unhealthy.	1.6	21.3	44.3	44.3	19.7
I like to try new types of food.	1.6	52.5	1.6	1.6	1.6
I think that soyoil is healthy.	8.2	52.5	3.3	3.3	4.9
I may use soyoil to cook / eat rice when I have guests, who I want to impress.	6.6	34.4	36.1	36.1	16.4
Healthy food does not taste good.	6.6	6.6	50.8	50.8	26.2
I think that soyoil tastes good.	23	52.5	16.4	16.4	1.6
Please state if you have any other comments.....	91.8	0	1.6	1.6	0

**Table 3.13. b: Mean And Standard Deviation Values Regarding Attitudes Towards Food**

Statements	MEAN	ST.DEV.
Healthy food does not taste good.	2.803	1.138
I think that frozen food is unhealthy.	2.672	0.995
I may use soyoil to cook / eat rice when I have guests, whom I want to impress.	2.492	1.059
Soyoil may not be appropriate for cooking green beans.	2.262	1.094
I like food that is practically prepared.	2.164	0.879
I want to make a change in the eating habits by including more vegetable oils into the meals I cook / eat, as a substitute for butter and margarine.	2.066	0.873
I like food that tastes good irrespective of the practicality of its preparation.	1.77	0.973
I think that soyoil tastes good.	1.672	1.06
I think that soyoil is healthy.	1.656	0.873
I like to try new types of food.	1.59	0.642
Please state if you have any other comments.....	0.115	0.451

Intention to try new food was at a high level within the sample. This fact is proven with the mean value (1.59) for the statement "I like to try new types of food"; and more than half of the respondents agree on this point.

"Taste" is the major concern for food selection which is perceived as being more important than the "easiness of preparation of food". And "soyoil" is perceived as a food item that "tastes good" and "is healthy" at the same time. There is a strong disagreement on the fact that "healthy food does not taste good". In other words, healthy food needs to be tasty at the same time.

More than half of the respondents did not want to change their cooking habits by substituting margarine/butter with liquid vegetable oils, because "taste" cannot be sacrificed for "health".

In the next section relationships among various perceptions, attitudes, and behaviors will be analysed.

## **3.2.2. INTERRELATIONSHIPS AMONG VARIABLES**

In this section, the objective is to examine the interrelationships among some behavioral and attitudinal variables by cross-tabulations and chi-square statistics.

### **3.2.2.1. INTERRELATIONSHIP BETWEEN AWARENESS- AND PURCHASE LEVELS**

In this section, the interrelationships between awareness- and purchase levels for certain products are being examined.

#### **3.2.2.1.1. Interrelationship between Awareness- and Purchase of Soya Sprout**

In this cross tabulation illustration, the rate of soy sprout purchase has been explained by the rate of awareness for this product.

**Table 3.14.a : Interrelationship between Awareness- and Purchase of Soya Sprout**

Awareness Level for Soya Sprout		Purchase Level for Soya Sprout		Row Total
		Purchasers	Non-Purchasers	
Aware	Count	16	14	30
	Row Pct	53.3%	46.7%	49.2%
Not Aware	Col Pct	100%	31.1%	
	Tot Pct	26.2%	23%	
Not Aware			31	31
			100%	50.8%
			68.9%	
			50.8%	
Column Total		16	45	61
		26.2%	73.8%	100%

**Table 3.14. b : Relation: Awareness and Purchase of Soya Sprout (Statistics)**

Chi-Square	D.F.	Signif.	Min.E.F	Cells with E.F.< 5	C.C.	Phi
19.74030	1	0.0000	7.869	0 of 4	0%	0.518 0.6014

\*C.C. : Contingency Coefficient  
 \*C.V. : Cramer's V  
 Phi for 2 X 2 tables

Over one fourth of the respondents (26.2%), who are aware of soy sprout, have purchased it; and 23% of the respondents, who know the product have not. And obviously, a 50.8%, who do not know about soy sprout, have not purchased it.

There is a strong relationship between being aware of the product "soya sprout" and purchasing this product. However, there is still a potential group of consumers, who needs to be persuaded to engage in purchase action as far as this product is concerned.

#### 3.2.2.1.2. Interrelationship between Awareness- and Purchase of Soyoil

In this crosstabulation illustration, the rate of soyoil purchase has been explained by the rate of awareness for this product.

**Table 3.15 a :Interrelationship between Awareness- and Purchase of Soyoil**

Awareness Level for Soyoil		Purchase Level for Soyoil		
		Purchasers	Non-Purchasers	Row Total
Count	Row Pct	12	22	34
	Col Pct	35.30%	64.70%	55.7%
Tot Pct	Aware	100%	44.9%	
	Not Aware	19.70%	36.10%	
Not Aware			27	27
			100%	44.3%
			55.10%	
			44.30%	
Column Total		12	49	61
		19.70%	80.30%	100%

**Table 3.15. b : Relation: Awareness and Purchase of Soyoil (Statistics)**

Chi-Square	D.F.	Signif.	Min.E.F	Cells with E.F.< 5	C.C.	Phi
9.73478	1	0.0018	5.311	0 of 4	0.4035	0.441

\*C.C. :  
Contingency  
Coefficient

\*C.V. :  
Cramer's V

Phi for 2  
X 2  
tables

Nearly one fifth of the respondents (19.7%), who are aware of soyoil, have purchased it; and 36.1% of the respondents, who know the product have not. There should be more intense communication efforts (advertising on mass media, and on other communication channels) to stimulate trial among the consumers who are aware; and also to create a higher awareness level among consumers.

There is a moderate relationship between being aware of the product "soyoil" and purchasing this product. In other words, being aware of the product "soyoil" does not strongly lead to a purchase decision. The consumer needs to be persuaded to buy the product.

### **3.2.2.2.INTERRELATIONSHIP BETWEEN PERCEPTIONS AND ATTITUDES FOR SOME VEGETABLE OIL CATEGORIES**

In this section the relationship between consumer perceptions and attitudes are being analysed with reference to some vegetable oil categories.

#### **3.2.2.2.1.Interrelationship between soyoil and corn oil health perceptions**

In this section the objective is to compare the grading of soyoil on a scale, in terms of its perceived degree of healthiness and the grading of corn oil. Paired t-test has been used as the statistical measure to indicate the difference.

**Table 3.16. : Comparison of soyoil and corn oil health perceptions**

	Mean	St.Dev.	SE	t-value	D of F.	2-tail pr.
Soyoil	3.5574	1.42	0.182	0.41	60	0.686
Cornoil	3.4754	1.337	0.171			

The t-value is not large enough to reject the hypothesis that the means are equal -grading of soyoil and cornoil in terms of healthiness. Both vegetable oils are being perceived as healthy.

**3.2.2.2.2. Interrelationship Between Intention to Try Soyoil Versus Any Other Vegetable Oil**

The relationship between willingness to give a try to a new sunflower oil and willingness to try soyoil -a new vegetable oil category- has been researched.

**Table 3.17. a: Interrelationship Between Intention to Try Soyoil Versus Sunflower Oil (New Brand)**

		Intention to try soyoil		Row Total
		YES	NO	
Intention to try a new sunflower oil brand	Count	23	1	24
	Row Pct	95.8%	4.2%	39.3%
	Col Pct	47.9%	7.7%	
	Tot Pct	37.7%	1.6%	
YES	Count	25	12	37
	Row Pct	67.6%	32.4%	60.7%
NO	Col Pct	52.1%	92.3%	
	Tot Pct	41%	19.7%	
Column Total	Count	48	13	61
	Row Pct	78.7%	21.3%	100%

**Table 3.17. b : Interrelation Between Intention To Try Soyoil and Sunflower Oil (Statistics)**

Chi-Square	D.F.	Signif.	Min.E.F	Cells with E.F.< 5	C.C.	Phi
6.93553	1	0.0084	5.115	0 of 4	0%	0.3195 0.3372

\*C.C. :  
Contingency  
Coefficient

\*C.V. :  
Cramer's V

Phi for 2  
X 2  
tables

Over one third of the respondents (37.7%) constitute the most innovative segment within the sample. They have stated that they may both try a new brand of sunflower oil and a new vegetable oil category, namely soyoil.

Nearly half of the respondents (41%), who stated that they may try a new vegetable oil category, namely soyoil, however they do not want to change the sunflower oil brand they are currently using. They are innovative when a niche is considered, but they have developed a loyalty to the sunflower oil brand, that they are currently using.

One fifth of the sample (19.7%) shows a conservative attitude, where they have stated that they neither try a new sunflower oil brand, nor a new vegetable oil category.

A very small group of respondents (1.6%) stated that they may try a new sunflower oil brand, but they will not try soyoil, since this is a new category, and they have stated their reasoning that a new type of vegetable oil may change the taste of their meals.

**3.2.2.2.3. Trial Intention For A New Product and For Soyoil**

Intention to try a new product for the first time has been compared with the intention to try soyoil for the first time.

**Table 3.18. a: Relation Between Trial Intention For A New Product and For Soyoil**

		Trial Intention for Soyoil		
		1	2	Row Total
Trial Intention for a New Product	Count	7	2	9
	Row Pct	77.8%	22.2%	14.8%
	Col Pct	14.6%	15.4%	
Tot Pct	11.5%	3.3%		
	1	2	Row Total	
1	41	11	52	
	78.8%	21.2%	85.2%	
	85.4%	84.6%		
	67.2%	18.0%		
Column Total	48	13	61	
	78.7%	21.3%	100%	

**Table 3.18. b : Trial Intention For A New Product and For Soyoil (Statistics)**

Chi-Square	D.F.	Signif.	Min.E.F	Cells with E.F.< 5	C.C.	Phi
0.00522	1	0.9424	1.918	1 of 4 25%	0.009	0.009
*C.C. : Contingency Coefficient		*C.V. : Cramer's V	Phi for 2 X 2 tables			

A large group of the respondents (77.8%) have stated that trial intention is a very important decision making criteria. When this group of respondents were asked whether they would like to try soyoil for the first time, only 11.5% of the respondents have given a positive answer. There is no relationship between the degree of importance for intention to try a new product and intention to try soyoil for the first time. This fact is attributable to the acceptance of trial for a product, which can be any kind of product; however, when this product is given a name -soyoil- the trial decision is no longer general, instead it needs to be focused on soyoil and attributes and connotations associated with soyoil.

**3.2.2.2.4. "Environmental-friendly Packaging" as a Decision Making Factor in The Purchase of a Given Product -Opinions of Two Genders-**

The degree of importance assigned to the factor "Environmental-friendly Packaging" in the purchasing decision, is being examined by analysing the related opinions of two group of respondents, females and males.

In this section, the objective has been to determine whether there is a significant difference between females and males with respect to their concern for environmental friendly packaging. T-test has been used to track the difference.

**Table 3.19. : "Environmental-friendly Packaging" as a Decision Making Factor in The Purchase of a Given Product; Opinions of Two Genders**

Gender	Mean *	St.Dev.	St.Error
Female	2.4878	0.925	0.167
Male	2.2105	0.918	0.090

\*Scale : 1=Very important,...4=Unimportant

**Pooled Variance Estimate**

**t-value D.of F. 2 tail pr.ty**

**1.08      58              0.283**

T-value is small with a high two tail probability; therefore, the null hypothesis that the group means of females and males are equal with

respect to the concern for environmental packaging has not been rejected. In other words, females and males share the same concern for environmental friendly packaging. Although not significant, females seem to be more concerned.

#### 3.2.2.2.5. Concern For Environmental Friendly Packaging With Respect

To

Education

The perception in the previous section, concern for environmental friendly packaging, has been analyzed with respect to education. The objective is to find out whether the concern for environmental friendly packaging is different for the people belonging to different education levels.

The test used in this section is oneway analysis of variance. The null hypothesis, to be tested, is that the group means at the various education levels are equal.

**Table 3.20. : "Environmental-friendly Packaging" as a Decision Making Factor in The Purchase of a Given Product -Education-**

	<u>Group Means*</u>		
	<u>Primary School</u>	<u>High School</u>	<u>University</u>
<u>Concern for Environmental friendly packaging</u>	4.0	2.3846	2.3667

\*1=Very important,...4=Unimportant

F Ratio                      F Probability  
 1.3726                              0.2622

F ratio is too small with a high observed significance level (probability of F statistics when group means are equal). Therefore, the null hypothesis, that group means at the respective education levels are equal, has not been rejected. In other words, people belonging to different education levels do not differ from each other regarding their concern for environmental friendly packaging.

**3.2.2.2.6. Knowledge Level for Soybean Products -With Respect To Gender**

In this section the aim is determine whether females and males are at different knowledge levels as far as soybean products are concerned. The t-test will be used to analyze the difference between the two groups.

**Table 3.21. : Knowledge Level for Soybean Products With respect To Genders**

Gender	Mean *	St.Dev.	St.Error
Female	1.1667	0.381	0.078
Male	1.4167	0.515	0.149

\*Scale : 1=Low knowledge level, 2=high knowledge level

**Pooled Variance Estimate**

<u>t-value</u>	<u>D.of F.</u>	<u>2 tail pr.ty</u>
-1.65	34	0.108

T-value is high with a low two tail probability (significance levels); therefore, the null hypothesis, that the group means -of females and males- are equal with respect to knowledge level for soybean products, has been rejected. In other words, two groups differ in terms of their knowledge level regarding soybean products, within 90% confidence level. Although not significantly diverging, males seem to be at a higher knowledge level.

3.2.2.2.7. Knowledge Level for Soybean Products -With Respect To Education Levels

As a follow up to the previous section, the knowledge level regarding soybean products has been analyzed with respect to different education levels. The test used is oneway analysis of variance, where the null hypothesis to be tested is as follows: "The group means at the various levels are equal".

Table 3.22. : Knowledge Level for Soybean Products With Respect To Education

<u>Knowledge Level for Soybean Products</u>	<u>Group Means</u>			
	<u>Prim. School</u>	<u>High School</u>	<u>Univ. Grad.</u>	
	1.0	2.0385	2.3667	3.0
	*Scale : 1=Low knowledge level, 2=high knowledge level			

<u>F Ratio</u>	<u>F Probability</u>
1.4219	0.2458

F ratio is small versus table F value at 0.05 significance level (2.76), which leads to the conclusion that the null hypothesis will not be rejected. Although as education increases knowledge level is assumed to increase, this statement remains unsatisfied statistically.

In other words, people belonging to different education levels do not differ from each other regarding their knowledge levels about soybean products.

### 3.2.2.2.8. Advertising versus Age

The objective in this section is to determine whether there are different advertising recall rates at various age levels. The oneway analysis of variance test will be used to determine the difference. The null hypothesis is that the group means -age groups- are equal with respect to advertising recall.

Table 3.23. : Advertising Recall versus Age

	<u>Group Means</u>					
	<u>17 &amp; below</u>	<u>18-24</u>	<u>25-34</u>	<u>35-44</u>	<u>45-54</u>	<u>55 &amp; above</u>
<u>Advertising Recall versus Age</u>	3.0	2.5556	3.2273	1.7895	2.20	1.80
<u>F Ratio</u>	<u>F Probability</u>					
1.7538	0.1378					

F ratio, together with significance level indicates that the null hypothesis can not be rejected, which means that advertising recall rates are equal for various age groups. Although 25-34 age group recalls more than other ages, this finding is not justified statistically.

### 3.2.2.2.9. Eagerness To Try New Types of Food -With Respect To Gender

In this section, the test will determine whether being eager to try new types of food differs between females and males. T-test has been used to test the difference of mean values of both groups.

The null hypothesis is that the group means are equal with respect to eagerness to try new food.

Table 3.24. : Eagerness To Try New Types of Food -With Respect To Gender

Gender	Mean	St.Dev.	St.Error
Female	1.3846	0.496	0.097
Male	1.25	0.440	0.078

#### Pooled Variance Estimate

<u>t-value</u>	<u>D.of F.</u>	<u>2 tail pr.ty</u>
1.09	56	0.278

T- value is insignificant with a high 2-tail probability level, which enables us to arrive at a conclusion not to reject the null hypothesis. In other words, females and males do not have different preferences as far as the fact being eager to try new food is concerned.

Although females are more willing to be innovative, where they seem to be more open to new types of food, this finding is not justified statistically.

In this section of the thesis, empirical findings have been summarized, in which descriptions for variables have been mentioned in terms of frequency distributions. The previous part of the empirical findings has been the analysis of the interrelationships among variables.

The next part of the research summarizes the findings together with implications of the study.

#### **IV. SUMMARY, CONCLUSIONS AND IMPLICATIONS**

The major objective of this study was to analyze the decision making process of the consumers when they are faced with the decision to buy a new product - in this case soyoil. The analysis has been within the framework of determining the criteria they utilize in their decision making processes, and understanding their motivations underlying the purchase decision.

The other dimension, which is complementary to the main objective of the research, has been to get to know who the soyoil consumers were, drawing their profile by portraying their preferences, attitudes, and approach to certain issues. They are highly health conscious, innovative, and open to new usages of soyoil (i.e.using soyoil as a substitute for other vegetable oil categories, especially for olive oil).

The analyzed aspects were their expectations, benefits they sought, their individual values, and aspirations. Within this main framework, the areas of focus were first the analysis of the degree of innovativeness of the soyoil consumers.

In order to measure their degree of innovativeness, they were asked whether they would like to try a product for the first time. Only 11.5% of the respondents stated that it is very important for them to try a product for the first time, and 24.6% as important. This result may not be considered as a reliable starting point to conclude that a majority of the respondents are highly innovative.

However, when the analysis is extended to a more specific framework, in order to measure the degree of innovativeness of the consumers as far as the vegetable oils are considered, the consumers were standing at high levels in terms of innovativeness. Seventy seven percent of the respondents were willing to try a new category of vegetable oil, where soyoil was standing as a reference point, and that they can cook their regular meals, with it.

Openness to innovative ideas has been more obvious when the answers to an open ended question, related to a hypothetical case, were analyzed. In this case, a brief illustration of a cooking occasion has been presented, where soyoil has been used to cook a meal, which traditionally was known to be cooked with olive oil. This story has also been discussed in a focus group, and the participants in the discussion appreciated innovative ideas in cooking, in this case substitution of a new oil category of a traditionally accepted one. And the words that were associated with soyoil in this group discussion, were creating a distinctive, innovative, novel personality for soyoil; for example soyoil has been personalized as a member of the young generation, who is rebelling against the established rules of tradition.

The second area of interest was the analysis of consumers' perceptions of health, and how they positioned soybean derivative products, and 'soyoil' in particular, together with their perceived concept of health. Forty nine percent of the respondents stated that they perceive soybean derivative products as being healthy. Thirteen percent valued these products as being very healthy.

The third characteristic of the analysis has been to find out the positioning of soybean derivative products, and soyoil in consumers' minds with respect to the positioning of a set of other regularly purchased products. This positioning has been structured by comparing consumers' perceptions of these product categories in terms of how they value the products on a 'health scale', and how frequently they purchase these products.

Arnold, (1992) has quoted the basic approach of a social values survey, called "Monitor", which is applicable to the analysis of consumer perception in this case. This scheme divides the consumers into three major groups based on their psychographic or attitudinal types, as the following:

"Sustenance driven people stand on the very conservative end, they have isolated themselves from the new dynamics. One statement, exemplifying their general attitude is: 'They prefer to eat less because the food is getting expensive'. (Arnold, 1992 page 86).

Outer-directed people have created reference groups for themselves and they move with the crowd. 'Their reason for eating less is that they want to loose weight to achieve social recognition'.

Inner-directed people, the so-called 'new consumer' have their personal values which derive from individual motivations for quality of life. This group will be concerned with self-fulfillment and individualism, and will be socially aware of environmental and health concerns. 'They eat less because they feel much better by eating less'. (page 87)."

The soyoil consumers do belong to the last category. They are after something unique and novel with which they can identify themselves. They have attained an advanced level in terms of health consciousness, and soyoil is valued as a product that fits into a health oriented lifestyle. In other words, the perceived benefits of soyoil coincides with the individual values and choices. This conclusion has been derived from the open ended question, where the respondent has been given the chance to act as a third person, where he was supposed to interpret a text, where innovative cooking with soyoil has been the main theme.

The current trends within this segment can be summarized as follows: there is a quite high degree of awareness of nutrition and its contribution to health; convenience food is preferred due to certain social life style patterns of these consumers; and new types of food, especially niches are appreciated. It has found in the empirical part that females are more open to new types of food. They are more innovative.

At the fourth stage of analysis consumers' perceptions about soyoil, and the related positioning has been the focus. Soyoil has been found out to possess distinctive benefits for the consumer.

The consumers of soyoil stated during the focus group interview that they have invented many usage occasions for soyoil, different from usage occasions for other vegetable oils. The protein content of the soyoil makes the product more attractive for the preparation of children's' meals. And its taste is appreciated for various dressings especially those prepared for guests. In a nutshell, soyoil allows its target-core consumers to express their individuality, creativity, and their distinctiveness.

Twenty four percent of the respondents classified soyoil as being very healthy, 39.3% as healthy. When this perception is compared with the sunflower oil image, the soyoil has a higher value in terms of healthiness; 13.1% of the respondents classified sunflower oil as being very healthy, 32.8% as healthy.

The health image of olive oil has not been able to be challenged by any other vegetable oil category, 44.3% of the respondents ranked olive oil as being very healthy, and 34.4% as healthy. It has been stated by the consumers that olive oil is the best oil that provides highly valued consumer benefits in terms of health, one of the most frequently mentioned, health related consumer benefit has been that olive oil contains the essential vitamins and minerals, especially necessary for children.

Soyoil was slightly superior to corn oil in terms of healthiness, 23% rated corn oil as very healthy, and 34.4% as healthy. Corn oil did not appear as a category that is widely consumed, it is the least preferred vegetable oil category, with a 39.3% of the respondents being corn oil users. Over eighty five percent of the respondents used olive oil, and same percentage of the respondents use soyoil, 82% of them use sunflower oil.

One of the major conclusions that can be drawn from this study is that Turkish consumers are heavy users of various vegetable oil categories. And the cannibalization rate among the vegetable oil categories is very low, where different vegetable oil types are available in the households for various usages. In other words, the intersection sets between the various category consumers are very large.

Another interesting finding has been related to the purchase frequencies of vegetable oil categories. The most common purchase frequency for all vegetable oils has been on a monthly basis. In other words, oil has been found out to be a bulk purchase item, because this purchase pattern allows certain amount of savings -economical bigger consumption units, such as 5kg-, and because the availability of vegetable oil within the household is very important.

One other striking finding regarding the purchase frequencies has been about soyoil, where some respondents stated that they buy soyoil as soon as it is finished. This indicates that there is a certain degree of loyalty as far as the soyoil is concerned.

Soyoil has many aspects that matches the profile of its consumers. Although soyoil has been a new product in the market, it has been able to create a perceived difference in the eyes of the consumers, both in terms of healthiness, and in terms of distinctive positioning.

Implications of this study are being summarized below, which have been categorized as implications for the consumer, producer, government, and for further research.

Implications for the consumers : The consumer is found out to be highly aware of health problems that are related to eating habits, and there is a strong intention to avoid these problems, such as collestrol, and heart problems, by improving the eating habits.

Liquid vegetable oil is perceived by the consumer as a reliable product that will contribute to his health. This fact is very strong for olive oil and soyoil. In the focus group, the consumer was able to mention some key attributes of these two liquid oils as benefits, for olive oil the benefit was that it contains Vitamin E, and for soyoil the benefit was that it contains protein. Therefore, one very outstanding implication is that the consumer will increase its consumption of both products in order to ensure a good health.

Furthermore, price brings about another implication for soyoil consumption. Soyoil is approximately 40% lower than olive oil ; therefore, it is considered a less expensive alternative versus olive oil, and therefore, the consumption of soyoil is more likely to increase. These outcomes were reached in the store survey.

**Implications for the producer:** The producer should focus its attention on the very key benefit to be communicated to the consumer, which is health. And the producer should assume the responsibility to create a distinctive positioning for soyoil in order to educate the public that soyoil contributes to health.

The producer should also be able to cooperate with international associations, related to soyoil in order to initiate informative and education related activities in Türkiye; and thereby create a higher awareness, and preference for soyoil.

Since the taste of soybean is sweet, which is not a common characteristic for a bean, the producer should be able to communicate this characteristic as a novelty. Similarly, the taste of soyoil can be used to position soyoil differently than other vegetable oil categories, and thereby to create a niche in the vegetable oil market.

0 0 Times ew oman Multiple USP ( unique selling proposition) usage for soyoil n effective when compared to a strong single USP, such as taste, or health. In addition, price might be used as a leverage for soyoil, since it is cheaper than olive oil, and the consumer still can consume a healthy, and or tasty vegetable oil.

A monthly frequency of purchase pattern is observed for all vegetable oil categories including soyoil. Therefore, the author s recommendation for the producer is to focus on big package sizes and to engage in promotional activities with larger sizes.

Quality and clarity are the top two ranking choice criteria with respect to vegetable oil; and the producing company image is very important as well since the producer is perceived as a guarantee that supports the quality of the product.

Expert opinion is another choice criterion that the consumers consider in their decision making with respect to vegetable oil. This fact might be used in the soyoil advertisements, where reassurance by an expert opinion will strengthen the product benefits.

Printed media and T are the two most important information sources that the consumer utilizes in gathering information about soybean products including soyoil. The producer, together with government, and related institutions, may use the printed media to inform the consumer about soyoil, its benefits, and usages.

As stated in the section, where empirical findings have been presented, there is a moderate relationship between being aware of the product "soyoil" and purchase action directed towards "soyoil". In other words, the consumer needs to be heavily persuaded to buy the product, since being aware of "soyoil" does not strongly lead to a purchase decision.

The producers should use more intense communication efforts to stimulate trial. While information channels, such as TV and printed media, are used by the producer, other communication channels might be activated. A very good marketing channel to stimulate trial and to convince the consumer to engage in the purchase action, is sampling, which is accomplished by visiting the households which are in the target consumer group, and distributing free trial-size samples of soyoil.

It has been found out in this research that the innovative consumers have approached soyoil more closely, and willingly. The producer should direct its promotional activities to this innovative and modern core; and try to expand this consumer base.

**Implications for government** : The government should provide incentives in order to increase consumption of both soyoil, and other soybean derivative products, since soybean has high nutrition values, and is economical to be cultivated versus other crops.

The government should cooperate with the international associations, related to soyoil, in order to increase consumption in Türkiye.

**Implications for further research** : Literature about on and soyoil consumer is very limited; therefore, further research is very essential to analyse future trends and developments within the product life cycle of soyoil.

In the section "interrelationships among variables" "environmental-friendly packaging" has been evaluated as a decision making factor in the purchase of a certain product within a comparative framework for two genders. This issue might be subject to further research, where "environmental-friendly packaging" would be analysed with respect to some packaged food products with different packaging materials. This analysis might be extended by conducting a focus group test with participants from both genders, in order to have a deeper insight about the "environmental-friendly packaging" concept.

The interrelationship between awareness- and purchase levels for certain products might be analysed based on different disposable income levels in order to assess the importance of "money loss" as a perceived risk.

Soyoil taste test (monadic) may be conducted in order to determine whether the taste is appreciated by the Turkish consumers. The test should include cooking with soyoil, and results should be published to increase awareness of the consumer related to soyoil.

In this research, "fast food" has been rated as "unhealthy" by the consumer. There should be more research about consumer perception about fast food, since there is a tremendous increase in the fast food consumption in urban areas of Türkiye.

**This research can be replicated by implementing a quota sampling method, by selecting a sample composed of just females or males, in order to understand the differences due to gender during the purchase decision making process.**

**Furthermore, family life cycle is another very important criterion that is assumed to determine the consumption habits, health perceptions, and purchase patterns. The follow-up empirical research should also include this variable.**

## APPENDIX 1

Bu anket, Bogaziçi Üniversitesi İşletme Master programı çerçevesinde hazırlanan bir araştırmaya işik tutacaktır.

Katkılarınız için tesekkürler.

1. Aşğıda belirtilen sağıkla ilgili sorunlardan hangisine/hangilerine yakın çevrenizdeki kişilerde rastlıyorsunuz?  
Lütfen seçtiğiniz sıklara bir isaret koyun ve bu sorunlara ne sıklıkta rastladığınızı belirten sayıyı daire içine alın.

	<u>Nadiren</u>	<u>Sık</u>	<u>Cok sık</u>
Kollestrol	1	2	3
Kalp ile ilgili sorunlar	1	2	3
Sindirim problemleri	1	2	3
Psikolojik sorunlar	1	2	3
Stresle ilgili sağık sorunları	1	2	3
Diğer (lütfen belirtin).....	1	2	3
Hiçbiri	1	2	3

2. Sizce yemek yeme alışkanlıkları, sözü geçen sağık problemlerini ne derecede etkileyebilir?

	<u>Hiç etkilemez</u>				<u>Cok etkiler</u>
	1	2	3	4	5
Kollestrol	1	2	3	4	5
Kalp ile ilgili sorunlar	1	2	3	4	5
Sindirim problemleri	1	2	3	4	5
Psikolojik sorunlar	1	2	3	4	5
Stresle ilgili sağık sorunları	1	2	3	4	5
Diğer (lütfen belirtin).....	1	2	3	4	5

3. Aşğıda adı geçen ürünleri 'sağıklı - sağıksız' ölçeğinde nasıl derecelendirirsiniz?

	<u>Cok sağıksız</u>				<u>Cok sağıklı</u>
	1	2	3	4	5
Derin dondurulmuş gıda	1	2	3	4	5
Hızlı yiyecekler(Fast food)	1	2	3	4	5
Soya ürünleri	1	2	3	4	5
Margarin	1	2	3	4	5
Tereyağı	1	2	3	4	5
Çay	1	2	3	4	5
Kahve	1	2	3	4	5
Sivi yağ	1	2	3	4	5
Kolali mesrubatlar	1	2	3	4	5
Kolasız mesrubatlar	1	2	3	4	5
Ayçiçek yağı	1	2	3	4	5
Soya yağı	1	2	3	4	5
Zeytinyağı	1	2	3	4	5
Misirözü yağı	1	2	3	4	5



8. Soya (fasulyesi) ile ilgili bilgi kaynaklarınız nelerdir?  
(Birden fazla seçeneği işaretleyebilirsiniz)

dergi ve gazete reklamları  
 dergi ve gazete yazıları  
 TV reklamları  
 radyo reklamları  
 aile bireylerim  
 arkadaşlarım  
 kendi deneyimim  
 alışveriş yaptığım yerlerdeki kişiler  
 Diğer (lütfen belirtin)..

9. Sıvı yağ satın alırsınız?  
Evet (lütfen sorulara devam edin)  
Neden?.....

Hayır (lütfen 10.soruya geçin)  
Neden?.....

- 9.B Hangi sıvı yağları satın alırsınız? (Birden fazla seçeneği işaretleyebilirsiniz)

Ayçiçek yağı  
 Soya yağı  
 Zeytinyağı  
 Mısırozü yağı  
 Diğer (lütfen belirtin)..

10. Aşağıdaki markalardan hangilerini tanıyorsunuz/satın alдыңız/tekrar satın alдыңız?  
Lütfen 'Evet' cevaplarınızı gerekli kutulara işaret koyarak belirtin.

	Tanıyorum	Satın Aldım	Tekrar Satın Aldım
Olin			
Aymar			
Ona			
Vita			
Soyola			
Livio			
Komili Z.yağı			
Komili Yudum			
Komili M.özü			
Paksoy Çiç.			
Biryag			
Kırlangıç Z.y			
Madra Z.yağı			
Taris Z.yağı			
Diğer (lütfen belirtin)..			

11. Yağla ilgili aşağıdaki belirtilen özelliklerden sizce en önemli 3 (üç) tanesini seçin ve bu seçtiklerinizi önem sırasına göre numaralandırın.  
(1.Birinci derecede önemli,..,3.Üçüncü derecede önemli).

- Yağın berraklığı  
 Yağın kalitesi  
 Yağın fiyatı  
 Üretici firmanın güvenilirliği  
 Reklamın doğruluğu  
 Yağla birlikte verilen hediyeler  
 Ambalajın kullanışlı olması  
 Reklamın çekiciliği  
 Arkadaş tavsiyesi  
 Ambalajın çevre dostu olması  
 Uzman önerisi  
 Ürünün satıldığı yer  
 Diğer (lütfen belirtin)..

12. Hangi sıvı yağ reklamlarını hatırlıyorsunuz? (TV, radyo, basın,v.b.)

12. Hangi sıvı yağ reklamlarını beğeniyorsunuz? (TV, radyo, basın,v.b.)
- | <u>reklam</u> | <u>nerede gördünüz</u> |
|---------------|------------------------|
| _____         | _____                  |
| _____         | _____                  |
| _____         | _____                  |
| _____         | _____                  |

13. Aşağıda 3 (üç) cümle görüyorsunuz, her cümlede belirtilen iki şıktan sizce en uygun olanı seçin.

- Pilavı her zaman margarin ve / veya tereyağı ile pıfırırım / yerim; ancak sıvı yağ ile pilav pişirmeyi / yemeyi deneyebilirim.  
 Pilavı alıştığım şekilde pişirmek / yemek isterim.

- Daha önce hiç kullanmadığım bir marka ayçiçek / mısırözü yağı denerim.  
 Her zaman aynı marka ayçiçek / mısırözü yağı kullanırım.

- Soya yağı gibi yeni bir sıvı yağ deneyebilirim ve / veya soya yağını her zaman pişirdiğim yemeklerde kullanabilirim.  
 Her zaman pişirdiğim yemekleri,baska bir yağ kullanarak değiştirmek istemem.

Lütfen aşağıdaki paragrafı okuyun.

Bir akşamüstü saat 6'da çalışan bir hanım ofisten eve dönüyor. Mutfaga giriyor ve akşam için zeytinyagli fasulye pisirmeye karar veriyor. Derin dondurulmus fasulye paketini buzluktan çıkarıp bir tencereye bosaltiyor, üstüne biraz seker, tuz ve soya yagi koyuyor ve ocagi yakiyor. Bütün bunlari yapmak sadece birkaç dakikasini aliyor.

14. Sizce bu hanım nasıl biri, lütfen tanımlar mısınız? (Kaç yaşlarında, eğitim durumu nasıl, v.b.)

Aşağıdaki yorumlara ne derecede katıldığınızı, görüşünüzü belirten sayıyı yuvarlak içine alarak belirtin.

<u>tamamen</u> <u>katiliyorum</u>	<u>katiliyorum</u>	<u>katilmiyorum</u>	<u>hiç</u> <u>katilmiyorum</u>
1	2	3	4

A. Pratik ve çabuk hazırlanan yemekleri severim.

1	2	3	4
---	---	---	---

B. Zeytinyagli fasulye pisirmek için soya yagi kullanmak pek uygun olmaz.

1	2	3	4
---	---	---	---

C. Tadî güzel olan yemegi severim, pratiklik benim için önemli degil.

1	2	3	4
---	---	---	---

D. Tereyag ve/veya margarin yerine sıvî yag kullanarak yemek yapma / yeme aliskanliklarimda biraz degisiklik yapmayi düşünüyorum.

1	2	3	4
---	---	---	---

E. Derin dondurulmus gıdaların saglıksız olduğunu düşünüyorum.

1	2	3	4
---	---	---	---

F. Yeni yiyecekler denemekten hoslanırım.

1	2	3	4
---	---	---	---

G. Soya yagının saglıkli olduğunu düşünüyorum.

1	2	3	4
---	---	---	---

H. Yemege misafirlerim gelirse, onlar için yaptığım / birlikte yiyecegimiz pilava soya yagi koymak / konulmus olmasını isterim.

1	2	3	4
---	---	---	---

I. Saglıkli gıdaların tadî genellikle güzel degildir.

1	2	3	4
---	---	---	---

J. Soya yagının tadî güzeldir.

1	2	3	4
---	---	---	---

K. Baska yorumlariyz varsa lütfen belirtin.

15. Cinsiyet

Kadın

Erkek

16. Yas

---17 ve alti

---18-24

---25-34

---35-44

---45-54

---55 ve üstü

17. Egitim

---Okur-yazar

---Ilkokul

---Orta-Lise

---Üniversite

---Diğer(lütfen belirtin)..

18. Medeni hali

Bekar

Evli

Dul / bosanmış

19. Çocukunuz var mı?

Kaç tane ve yaşları nedir?

20. Siz dahil evinizde kaç kişi yaşıyor?

Yalnız yaşıyorum

2 kişi

3 kişi

4 kişi

5 kişi ve üstü

21. Lütfen çalışma durumunuzu belirtir misiniz?

Yarım gün çalışıyorum

Tam gün çalışıyorum

Su anda çalışmıyorum

Emekliyim

Ev hanımıyım

Diğer (lütfen belirtin)..

22. Mesleğinizi/görevinizi nasıl tanımlarsınız?

23. Bir ayda evinize giren parayı belirtir misiniz?

3 milyon ve daha az

3.000.001-10.000.000

10.000.001-20.000.000

20.000.001-30.000.000

30.000.001 ve üstü

## APPENDIX 2

This questionnaire will constitute the basis for a study, which is conducted within the MBA program at Bogaziçi University.

Thank you for your contribution.

1. Which of the below mentioned health related problems you confront in your close environment ?

Please mark the health related problems and state the degree of frequency of these problems by marking the proper number on the scale.

	<u>Rare</u>	<u>Often</u>	<u>Very often</u>
Collestrol	1	2	3
Hearth related problems	1	2	3
Digestive problems	1	2	3
Psychological problems	1	2	3
Stress related health problems	1	2	3
Other (please state)....	1	2	3
None	1	2	3

2. In what respect can the above mentioned health problems be affected by the eating habits ?

	<u>Not affected</u>			<u>Highly affect</u>
Collestrol	1	2	3	4
Hearth related problems	1	2	3	4
Digestive problems	1	2	3	4
Psychological problems	1	2	3	4
Stress related health problem	1	2	3	4
Other (please state)....	1	2	3	4
None	1	2	3	4

3. How do would you grade to the following food items, on a health scale ?

	<u>Very unhealthy</u>			<u>Very healthy</u>
Frozen food	1	2	3	4
Fast food	1	2	3	4
Soya products	1	2	3	4
Margarine	1	2	3	4
Butter	1	2	3	4
Tea	1	2	3	4
Coffee	1	2	3	4
Liquid oil	1	2	3	4
Carbon.beverages	1	2	3	4
Non-Carbon.beverages	1	2	3	4
Sunflower oil	1	2	3	4
Soyoil	1	2	3	4
Olive oil	1	2	3	4
Corn oil	1	2	3	4

4. In what frequency do you purchase these food items ?

	<u>Once a Week</u>	<u>Several times Aweek</u>	<u>Daily</u>	<u>Once a month</u>	<u>Other (please state)</u>
Frozen food	1	2	3	4	
Fast food	1	2	3	4	
Soya products	1	2	3	4	
Margarine	1	2	3	4	
Butter	1	2	3	4	
Tea	1	2	3	4	
Coffee	1	2	3	4	
Liquid oil	1	2	3	4	
Carbon.beverages	1	2	3	4	
Non-Carbon.beverages	1	2	3	4	
Sunflower oil	1	2	3	4	
Soyoil	1	2	3	4	
Olive oil	1	2	3	4	
Corn oil	1	2	3	4	

5. When you are deciding to purchase a food product, how important would the following criteria be for you ?

	<u>Very important</u>	<u>Important</u>	<u>Not important</u>	<u>Unimportant</u>
* Price	1	2	3	4
* Prior experience	1	2	3	4
* Contribution to health	1	2	3	4
* Friend's advice	1	2	3	4
* Environmental friendly packaging	1	2	3	4
* Attractiveness of the ad	1	2	3	4
* Reliability of the ad	1	2	3	4
* Attractiveness of the package	1	2	3	4
* Expert opinion	1	2	3	4
* Intention to try for the first time	1	2	3	4
* Producer co.image	1	2	3	4
* Intention to be an early adopter	1	2	3	4
* Other (please state)...	1	2	3	4

6. Which of the following soybean products are you aware of / tried, and tried before

	<u>Aware</u>	<u>Trial</u>	<u>Purchase</u>
	Yes No	Yes No	Yes No
Soya filizi	Yes No	Yes No	Yes No
Soya yagi	Yes No	Yes No	Yes No
Soya unu	Yes No	Yes No	Yes No
Soya peyniri	Yes No	Yes No	Yes No
Soya sosu	Yes No	Yes No	Yes No
Please state other soybean product	Yes No	Yes No	Yes No

7. Please state your information level regarding soy bean products ?

<u>Very little knowledge</u>	1	2	3	4	5	6	<u>High knowledge</u>
							7

8. What are your sources of information for soybean products ?  
(You may mark more than one alternative)

- Press ads
- Press articles
- TV ads
- Radio spots
- Family members
- Friends
- Own experience
- People at the shopping area
- Other (please state)...

9. Do you purchase liquid oil ?  
YES If yes please continue the questions.  
Why ?

NO  
Why ?

9.B What type of vegetable oil do you purchase ?

- Sunflower oil
- Soyoil
- Olive oil
- Corn oil
- Other (please state)...

10. Which of the following brands are you aware of, have you tried, and have you purchased ?

	Aware	Purchased	Re-purchased
Olin			
Aymar			
Ona			
Vita			
Soyola			
Livio			
Komili Z.yagi			
Komili Yudum			
Komili M.özü			
Paksoy Çiç.			
Biryag			
Kırlangiç Z.y			
Madra Z.yagi			
Taris Z.yagi			
Other (please state)...			

11. Please rank the three most important decision criteria for oil.  
(1.First importance,..., 3.Third importance)

- Clarity of oil
- Quality of oil
- Price of oil
- Trust in the producing company
- Reliability in TV ad
- Promotional gifts with the oil
- Practical package
- Attractiveness of TV ad
- Friend's advice
- Environmental friendly packaging
- Expert opinion
- The place oil is sold
- Other (please state)...

12. Which ads of oil do you remember (TV, press, radio) ?

12. Which ads of oil do you like the most (TV, press, radio) ?

Ad

Media

---

---

---

---

---

---

---

---

13. You will find 3 pairs of statements below.

Please mark the statement, with which you agree the most.

---

I always cook / eat rice with butter; but I may try to cook/eat differently.

I prefer to cook/eat rice as I used to cook/eat.

---

I may try a new brand of sunflower / corn oil.

I always try the same brand of sunflower/corn oil.

---

I may try a new type of vegetable oil, such as soyoil, and I may use soyoil in the regular meals I cook/eat.

I would not use a different type of oil, and change the taste of my meals.

---

Please read the paragraph below.

A working women comes back to home at 6, afternoon. She goes into the kitchen and decides to cook beans. She takes out frozen beans from the fridge, puts it in a pot, puts some sugar, salt and soyoil on it. It takes only few minutes to do all these things.

14. What kind of person is this women, please describe.

Please state to what extend you agree with the following statements.  
Please mark te proper number.

<u>Fully</u> <u>Agree</u>	<u>Agree</u>	<u>Do not</u> <u>Agree</u>	<u>Disagree</u>
1	2	3	4

A. I prefer quick and practical food.

1	2	3	4
---	---	---	---

B. It is not proper to use soyoil to cook beans.

1	2	3	4
---	---	---	---

C. I prefer food that has good taste, practicality is not important for me.

1	2	3	4
---	---	---	---

D. I am thinking about substituting margarine and butter with liquid oil.

1	2	3	4
---	---	---	---

E. I think that frozen food is unhealthy.

1	2	3	4
---	---	---	---

F. I like to try new food.

1	2	3	4
---	---	---	---

G. I think that soyoil is healthy.

1	2	3	4
---	---	---	---

H. I prefer to use soyoil for the dishes prepared for the guests.

1	2	3	4
---	---	---	---

I. Healthy food do not taste good.

1	2	3	4
---	---	---	---

J. Soyoil has a good taste.

1	2	3	4
---	---	---	---

K. Please state other opinions.

15. Gender

Female

Male

16. Age

---17 and below

---18-24

---25-34

---35-44

---45-54

---55 ve üstü

17. Education

---Literate

---Elementary

---Highschool

---University

---Other (please state)...

18. Marital status

Single

Married

Widowed - divorced

19. Do you have children ?

How many, of what age?

20. House hold size, including the respondent.

Alone

2 persons

3 persons

4 persons

5 persons and above

21. Work status.

Part-time

Full-time

Not working

Retired

Housewife

Other (please state)...

22. How do you describe your job ?

23. What is your monthly income ?

3 and less

3.000.001-10.000.000

10.000.001-20.000.000

20.000.001-30.000.000

30.000.001 ve üstü

## Health related problems

<u>VAR1</u>	Collestrol	(1,2,3)
<u>VAR2</u>	Hearth related problems	(1,2,3)
<u>VAR3</u>	Digestive problems	(1,2,3)
<u>VAR4</u>	Psychological problems	(1,2,3)
<u>VAR5</u>	Stress related health problems	(1,2,3)
<u>VAR6</u>	Other (please state)....	(1,2,3)
<u>VAR7</u>	Collestrol	(1,2,3)

## Health related problems and eating habit relationship

<u>VAR1</u>	Hearth related problems	(1,2,3,4)
<u>VAR9</u>	Digestive problems	(1,2,3,4)
<u>VAR10</u>	Psychological problems	(1,2,3,4)
<u>VAR12</u>	Stress related health problems	(1,2,3,4)

## Food items on a health scale

<u>VAR13</u>	Frozen food	(1,2,3,4,5)
<u>VAR14</u>	Fast food	(1,2,3,4,5)
<u>VAR15</u>	Soya products	(1,2,3,4,5)
<u>VAR16</u>	Margarine	(1,2,3,4,5)
<u>VAR17</u>	Butter	(1,2,3,4,5)
<u>VAR18</u>	Tea	(1,2,3,4,5)
<u>VAR19</u>	Coffee	(1,2,3,4,5)
<u>VAR20</u>	Liquid oil	(1,2,3,4,5)
<u>VAR21</u>	Carbon.beverages	(1,2,3,4,5)
<u>VAR22</u>	Non-Carbon.beverages	(1,2,3,4,5)
<u>VAR23</u>	Sunflower oil	(1,2,3,4,5)
<u>VAR24</u>	Soyoil	(1,2,3,4,5)
<u>VAR25</u>	Olive oil	(1,2,3,4,5)
<u>VAR26</u>	Corn oil	(1,2,3,4,5)

## Frequency of purchase for these food items

<u>VAR27</u>	Frozen food	(1,2,3,4,5)
<u>VAR28</u>	Fast food	(1,2,3,4,5)
<u>VAR29</u>	Soya products	(1,2,3,4,5)
<u>VAR30</u>	Margarine	(1,2,3,4,5)
<u>VAR31</u>	Butter	(1,2,3,4,5)
<u>VAR32</u>	Tea	(1,2,3,4,5)
<u>VAR33</u>	Coffee	(1,2,3,4,5)
<u>VAR34</u>	Liquid oil	(1,2,3,4,5)
<u>VAR35</u>	Carbon.beverages	(1,2,3,4,5)
<u>VAR36</u>	Non-Carbon.beverages	(1,2,3,4,5)
<u>VAR37</u>	Sunflower oil	(1,2,3,4,5)
<u>VAR38</u>	Soyoil	(1,2,3,4,5)
<u>VAR39</u>	Olive oil	(1,2,3,4,5)
<u>VAR40</u>	Corn oil	(1,2,3,4,5)

**Decision criteria to purchase a food item**

<u>VAR41</u>	Price	(1,2,3,4)
<u>VAR42</u>	Prior experience	(1,2,3,4)
<u>VAR43</u>	Contribution to health	(1,2,3,4)
<u>VAR44</u>	Friend's advice	(1,2,3,4)
<u>VAR45</u>	Environmental friendly packaging	(1,2,3,4)
<u>VAR46</u>	Attractiveness of the ad	(1,2,3,4)
<u>VAR47</u>	Reliability of the ad	(1,2,3,4)
<u>VAR48</u>	Attractiveness of the package	(1,2,3,4)
<u>VAR49</u>	Expert opinion	(1,2,3,4)
<u>VAR50</u>	Intention to try for the first time	(1,2,3,4)
<u>VAR51</u>	Producer co.image	(1,2,3,4)
<u>VAR52</u>	Intention to be an early adopter	(1,2,3,4)
<u>VAR53</u>	Other	(1,2,3,4)

**Awareness, trial, purchase of soybean products.**

<u>VAR54-56</u>	Soysprout	Yes	No	Yes	No	Yes	No
<u>VAR57-59</u>	Soyoil	Yes	No	Yes	No	Yes	No
<u>VAR60-62</u>	Soya flour	Yes	No	Yes	No	Yes	No
<u>VAR63-65</u>	Soya cheese	Yes	No	Yes	No	Yes	No
<u>VAR66-68</u>	Soysauce	Yes	No	Yes	No	Yes	No
<u>VAR69</u>	Information level regarding soy bean products..7)						

**Sources of information for soybean products**

<u>VAR70</u>	Press ads	(0,1)
<u>VAR71</u>	Press articles	(0,1)
<u>VAR72</u>	TV ads	(0,1)
<u>VAR73</u>	Radio spots	(0,1)
<u>VAR74</u>	Family members	(0,1)
<u>VAR75</u>	Friends	(0,1)
<u>VAR76</u>	Own experience	(0,1)
<u>VAR77</u>	People at the shopping area	(0,1)
<u>VAR78</u>	Other	(0,1)

**VAR79 Purchase of liquid oil(1,2)**

**Types of vegetable oil purchased**

<u>VAR80</u>	Sunflower oil
<u>VAR81</u>	Soyoil
<u>VAR82</u>	Olive oil
<u>VAR83</u>	Corn oil
<u>VAR84</u>	Other (please state)...

Brands been aware of, purchased, repurchased,3)

	Aware	Purchased	Re-purchased
VAR85	Olin		
VAR86	Aymar		
VAR87	Ona		
VAR88	Vita		
VAR89	Soyola		
VAR90	Livio		
VAR91	Komili Z.yađı		
VAR92	Komili Yudum		
VAR93	Komili M.özü		
VAR94	Paksoy Çiç.		
VAR95	Biryag		
VAR96	Kırlangiç Z.y		
VAR97	Madra Z.yađı		
VAR98	Taris Z.yađı		
VAR99	Other		

Decision criteria for (1,2,3)

VAR100 Clarity of oil

VAR101 Quality of oil

VAR102 Price of oil

VAR103 Trust in the producing company

VAR104 Reliability in TV ad

VAR105 Promotional gifts with the oil

VAR106 Practical package

VAR107 Attractiveness of TV ad

VAR108 Friend's advice

VAR109 Environmental friendly

VAR110 packaging

VAR111 Expert opinion

VAR112 The place oil is sold

VAR113 Other

VAR114 Which ads of oil has been remembered (TV, press, radio)

Which ads of oil has been liked the most (TV, press, radio)

VAR115 TV

VAR116 Press

VAR117 Radio

Degree of innovativeness

VAR118 Cooking rice with different oil vs not

VAR119 Trial of a new sunflower/corn oil brand vs not

VAR120 Trial of a new vegetable oil category, soy oil vs not

Agreement on the following statements (1,2,3,4)

VAR121 To prefer practical food

VAR122 It is not proper to use soy oil to cook beans.

VAR123 To prefer food that has good taste, practicality is not important

VAR124 Thinking about substituting margarine and butter with liquid oil

VAR125 Thinking that frozen food is unhealthy.

VAR126 Like to try new food.

VAR127 Thinking that soy oil is healthy.

VAR128 Preference to use soy oil for the dishes prepared for the guests

VAR129 Healthy food does not taste good.

VAR130 Soy oil has a good taste.

VAR131 Other opinions.

**Demographics**

**VAR132** Gender  
**VAR133** Age  
**VAR134** Education  
**VAR135** Marital status  
**VAR136** Marital status  
**VAR137** # of Children  
**VAR138** Household size  
**VAR139** Income

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