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MARKET SEGMENTATION IN THE REPUBLIC OF CROATIA ACCORDING TO FOOD-RELATED LIFESTYLE

The main objective of this paper is to investigate the specificities of food-related lifestyle segmentation in Croatia. Specifically our purposes are: 1. To see what segments can be distinguished on the basis of food-related lifestyles; 2. To compare the attributes of the distinguished segments; and 3. To identify the specific socio-demographic features of the subtracted segments. A survey was conducted in 2006 on a sample of 902 consumers. Households were selected using random zone sampling in the five largest cities in Croatia. In this study, use was made of the cross-culturally validated instrument developed by Brunsø and Grunert (FRL; Brunsø and Grunert, 1995; 1998) with 69 questions on ways of shopping, cooking methods, quality aspects, consumption situations, and purchasing motives. Segmentation was done by using cluster analysis (joining-tree clustering procedure).

Five distinct food-related lifestyle segments were identified: Relaxed, Traditionalists, Modern, Concerned Nutritionists, and Experimentalists. The socio-demographic features of the distinguished segments are described in the paper.

Ključne riječi: food-related lifestyle, market segmentation, consumer behavior

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1. Introduction

In the broader sense, lifestyle is defined as a mental construct that explains behavior in relation to a product class (e.g. “foods”) and describes the concept as a system of cognitive categories, scripts and their associations, which relate a set of products to a set of values (Brunsø and Grunert, 1998).

The notion of lifestyle emerged for the first time in the work of Max Weber (1958). Weber perceived lifestyle as a means of status identification of differentiation among social groups. A similar view can be found in Veblen’s conspicuous consumption, which is largely motivated by desire for social prestige (Katona, 1965). Modern theory of consumer behavior defines lifestyle as a summary construct reflecting the patterns according to which one lives and spends one’s time and money (Engel *et al.*, 1995).

The operational development of the lifestyle concept has attracted many marketing researchers who have seen this concept as a “blueprint” to explain consumer behavior. Most approaches have followed a purely operational definition, measuring lifestyle with measures reflecting large numbers of activities, interests and opinion items (AIO; Wells and Tigert, 1971) that are analytically reduced to a small number of dimensions. These dimensions are then used to classify consumers into lifestyle segments. Instruments like RISC, CCA and VALS are some of the notable examples of this approach. Although still popular for commercial purposes, these instruments have been criticized on several grounds, the most important being their lack of strong theoretical foundations (e.g. Anderson and Golden, 1984; Lastovicka, 1982; Roos, 1986).

These types of lifestyles have also been criticized on the following additional grounds (Anderson and Golden, 1984; Askegaard, 1993; Banning, 1987):

1. There is still confusion about the term lifestyle; in other words, there is no consensus about what lifestyle is (Anderson and Golden, 1984; Askegaard, 1993). Thus, it is necessary to develop a consensus on what lifestyle is before developing a common lifestyle definition and measurement instruments for lifestyle.
2. Instruments have been developed inductively and have not been guided by theory (Anderson and Golden, 1984; Grunert, 1993; Wind and Green, 1974); i.e. instruments for measuring lifestyle have been developed on common-sense reasoning and implicit experience in market research.
3. The cross-cultural validity of international lifestyle instruments remains to be proven. Many of the instruments used to measure lifestyle, e.g. RISC and CCA, provide methods that identify similar lifestyles across borders. Numerous other lifestyle studies have attempted to identify cultural differences in lifestyles (Hui *et al.*, 1990; Laroche *et al.*, 1990). However, in the

process of defining homogenous consumer segments across countries, the problem of cross-cultural validity arises. Namely, the collection of data in different cultures with the aim of obtaining cross-cultural validity on functional, conceptual and instrumental equivalence should be calculated and reported (Green and White, 1976; Sekaran, 1983; Yu *et al.*, 1993).

In an attempt to overcome these problems, Brunsø and Grunert (1995, 1998) proposed a lifestyle definition that clearly breaks with the AIO tradition. Their framework is consistent with a means-end approach to consumer behavior (Olson and Reynolds, 1983), especially in their hierarchical cognitive structure formulation (Grunert and Grunert, 1995; Gutman, 1982). At the top of their hierarchy, personal values are abstract, cross-contextually aggregated cognitive categories. At the bottom level, product perceptions are defined as the situation-specific input to a categorization process. Lifestyle is then defined as an intervening system of a cognitive structure that links context-specific product perceptions to increasingly abstract cognitive categories and finally relates them to personal values (Scholderer *et al.*, 2002).

The above authors regard lifestyle as a mental construct that explains, but is not identical to, actual behavior. Grunert, Brunsø and Bisp (1993) define lifestyle as a system of cognitive categories, scripts and their associations, which relate a set of products to a set of values. The same authors give a set of determinants of this definition:

1. It makes lifestyles distinct from values, because values are self-relevant and provide motivation, whereas lifestyle links product to self-relevant consequences, i.e. values.
2. Lifestyle transcends individual brands or products, but may be specific to a product class. Consequently, it makes sense to talk about a food-related lifestyle.
3. From the abstraction perspective, lifestyle is clearly placed as an intermediate construct between values (low abstraction level) and product/brand perceptions or attitudes (highly abstract).

The present study (2006) is to some point replication of above mentioned researches with the purpose to compare similar results in Western European countries to those collected and analyzed in Croatia.

2. Development of a Cross-Culturally Valid Lifestyle Instrument

Brunso and Grunert (1998) started from the assumption that lifestyle may be specific to a product class (for this paper we have chosen food as a product

category). They developed a cross-culturally validated instrument for measuring the food-related lifestyle. The instrument rests upon the assumptions on how food products are related to values in the consumer's cognitive structure. The authors distinguish relevant cognitive structure components based on five dimensions of buying and consuming food in the family:

1. Ways of shopping. How do people shop for food products? Is their decision-making characterized by impulse buying, or extensive decision-making? Do they read labels and other product information, or do they rely on the advice of experts, like friends or sales personnel? How do they shop? (one-stop shopping versus specialty food shops).
2. Cooking methods. How are purchased products transformed into meals? How much time is spent on preparation? Is preparation characterized by efficiency, or by indulgence? Is it a social activity, or one characterized by a family's division of labor? To what extent is it planned or spontaneous?
3. Importance of quality aspects. This refers not to concrete attributes of individual products, but to the attribute that may apply to food products in general. Examples may be healthy, natural, fresh and tasty food.
4. Consumption situations. How are meals spread over the day? How important is eating out in restaurants?
5. Purchasing motives. What is expected from meals? What is the relative importance of these various consequences? How important are the social aspects, hedonism, tradition, security and other aspects?

On the basis of the categories listed above, a cross-culturally valid instrument was proposed (Grunert *et al.*, 1997) and widely tested in several European countries (UK, Ireland, Germany, Denmark, France). Results from the mentioned study suggest a set of 23 dimensions measured by three items each, resulting in 69 questions covering the five major lifestyle domains, including ways of shopping, cooking methods, quality aspects, consumption situations, and purchasing motives.

Initial analysis of cross-cultural validity (Grunert *et al.*, 1997) drew positive conclusions, and the instrument has been successfully applied to various European and non-European food cultures (Askegaard and Brunsø, 1999; Bredahl *et al.*, 1996; Bredahl and Grunert, 1997; Brunsø *et al.*, 1996; Brunsø and Grunert, 1995; Grunert *et al.*, 1995a, 1995b, 1995c, 1997; Grunert *et al.*, 2001; Reid *et al.*, 2002; Scholderer *et al.*, 2002).

In the recent re-analysis of all FRL surveys conducted in Europe up until 1998, Scholderer *et al.* (2004) found that the FRL was cross-culturally valid in terms of factor loadings, factor covariance, and factor variances, while item-specific means and item reliabilities were biased across cultures.

3. The objectives of the study

In this study, food-related lifestyle is related to the means-end chain approach in consumer behavior (Olson and Reynolds, 1983; Peter and Olson, 1990), because it contains the basic hierarchical chain from product characteristics to values. It extends this approach by including procedural knowledge about shopping and meal preparation.

The previously mentioned significant and rich research in food-related lifestyle influenced our decision to use a cross-culturally valid instrument (Grunert *et al.*, 1997) to investigate the behavior of the consumer in the food market. The current research has the following goals:

1. To see what segments can be distinguished on the basis of food-related lifestyles;
2. To compare the attributes of the distinguished segments;
3. To identify the specific socio-demographic features of the subtracted segments.

4. Method

The research was undertaken at the end of the year 2006. A sample of 902 Croatian consumers was drawn from the five largest cities using procedure of random zone sampling. Questionnaires were completed through personal interviews in 2006. with the person mainly responsible for food shopping and cooking in the household. More than 96% of the respondents were female. Sample structure is presented in Table 1.

Table 1.

STRUCTURE OF THE SAMPLE

Gender	%
Female	96,1
Male	3,9
Age	%
25 or less	4,6
26 – 35	29,6
36 – 50	46,7
51 and more	18,8
No answer	0,3
Number of family members	%
2 or less	26,1
3-4	57,1
5 and more	16,7
No answer	0,1
Education	%
Elementary school	7,7
High school	57,5
Faculty	34,0
No answer	0,8
Income	%
2.000,00 HRK or less	5,7
2.001,00 HRK – 4.000,00 HRK	20,2
4.001,00 HRK – 7.000,00 HRK	35,2
7.001,00 HRK and more	21,6
No answer	17,3

5. Measures

The food-related lifestyle instrument - FRL (Brunsø and Grunert, 1995, 1998) is a 69-item questionnaire measuring 23 lifestyle dimensions in five domains: ways of shopping, importance of quality aspects, cooking methods, consumption situations, and purchasing motives.

Each subscale consists of three items to be answered on a seven-point Likert scale ranging from “completely disagree” (1) to “completely agree” (7). The construct validity of the FRL dimensions has been extensively tested (Grunert *et al.*, 1997; Scholderer *et al.*, 2004) indicating that the factor structures of the subscales in each FRL domain conform to simple-structure models that are stable across cultures and over time.

In our research, in order to distinguish homogenous segments, we used the statistical procedure of joining-tree clustering (Ward’s Method and the Squared Euclidean Distances Measure) and applied it to all 69 variables in order to obtain homogenous segments. The size of the segments was derived on the basis of mean values that were higher than the total mean value of the joint ratings to questions that belong to the specific segment.

6. Results

Using a cluster analysis (the procedure of joining-tree clustering), we distinguished five segments of food-related lifestyles of Croatian families. Additional insights into the segments were added by observing the socio-demographic characteristics of typical segment members.

The statistical procedure distinguished five groups of variables which come together through similarities in the pattern of buying, preparing, and consuming food. With this method, five groups of variables clustered together, thus showing different lifestyles. The second step of the procedure was to make a qualitative exploration, which gave us an approximate size of the segment. All respondents who had higher than average values which represented the segment were categorized in this segment. In this procedure, 1.2% of respondents overlapped and were excluded from the sample. The overall procedure can be considered as an exploratory analysis influenced to some extent by the authors’ judgment.

The derived segments include:

1. The Relaxed segment represents 22% of the surveyed population. Table 2 shows the variables distinguished by the hierarchical cluster tree analysis as the key characteristics of the segment. The variables and the mean values of the attitudes which specify the families belonging to this segment are given in Table 2.

Table 2.

VARIABLES WHICH BELONG TO THE CLUSTER
“RELAXED” AND THEIR MEAN VALUES

Variable	Mean	Std. Dev.
I don't like shopping for food. (S4)	2,956478	1,902680
Usually I do not decide what to buy before I go shopping. (S6)	3,486350	1,964530
I eat before I get hungry, which means that I am never hungry at meals time. (S10)	2,970707	1,776760
We use a lot of ready-to-eat foods in our household. (S14)	2,540404	1,616361
In our house, nibbling has taken over and replaced set eating hours. (S23)	2,731041	1,802062
I do not see any reason to shop in specialty food stores. (S25)	3,627153	1,834090
Going out for dinner is a regular part of our eating habits. (S27)	3,203236	1,974060
I always plan what we are going to eat a couple of days in advance. (S31)	2,954499	1,849869
I use frozen foods for at least one meal a day. (S52)	2,896761	1,845466
I consider kitchen to be a women's domain. (S57)	3,194949	1,947588
I use a lot of mixes, for instance baking mixes and powder soups. (S59)	3,536364	1,933733
I eat whenever I feel the slightest bit hungry. (S65)	3,430303	1,816309

The following statements are characteristic of this segment (having the highest mean value):

- S25 - I do not see any reason to shop in specialty food store.
- S59 - I use a lot of mixes, for instance baking mixes and powder soups.
- S6 - Usually I do not decide what to buy before I go shopping.
- S65 - I eat whenever I feel slightest bit hungry.
- S27 - Going out for dinner is a regular part of our eating habits.

The results show that this segment, in comparison with other segments, has very low mean value on all variables ($M = 3,132$; Standardized alpha: 0,65488). This supports the statement that the respondents who belong to this cluster are not interested in buying, preparing, and serving food. Thus, we call them “Relaxed”.

By exploring the socio-demographic characteristics of this segment, it can be observed that this segment, compared to the normal distribution, is somewhat skewed to the age range from 36-50 (44%), includes members with high school

education (65%), mostly with three children, and enjoying a middle income (600-1,000 EUR).

A loose description of the members of this segment could be as follows: they do not see any reason to shop in specialty food stores; they use a lot of mixes, for instance baking mixes and powder soups; they usually do not decide what to buy before they go shopping; they eat frequently; dining out is a regular part of their eating habits; they dislike shopping for food; they very often use ready-to-eat food products in their households; they eat before they get hungry, which means they are never hungry at meals time. In brief, these respondents are not concerned about buying and preparing food. This segment has the lowest average mean value on most of the variables and definitely the lowest total average mean value compared with other segments. In short, food is not a primary concern for this segment.

2. The Modern segment (approx. 24%). The variables which characterize this segment are given in Table 3 with their mean values.

Table 3.

VARIABLES WHICH BELONG TO THE CLUSTER
 “MODERN” AND THEIR MEAN VALUES

Variable	Mean	Std. Dev.
I do not like spend much time on cooking. (S18)	4,085945	1,813605
I dislike anything that might change my eating habits. (S19)	3,821031	1,686852
I have more confidence in food products that I have seen advertised than in unadvertised products. (S20)	3,531850	1,815990
I watch for ads in the newspaper for store specials and plan to take advantage of them when I go shopping. (S28)	4,033401	1,907140
I always check prices, even on small items. (S41)	4,192929	1,951420
I am influenced by what people say about a food product. (S44)	3,889899	1,699640
Information from advertising helps me to make better buying decisions. (S58)	4,035354	1,663795
What we are having for supper is very often not decided until the last minute. (S61)	4,471183	1,750774
Cooking is the task that is best over and done. (S62)	4,425683	1,954903

The following statements best characterize the “Modern” segment:

- S61 - What we having for supper is very often not decided until the very last minute.
- S62 - Cooking is the task that is best over and done with.

- S18 - I do not like spend much time on cooking.
- S58 - Information from advertising helps me to make better buying decisions.
- S41 - I always check prices, even on small items.

Table 3 gives the number of respondents who belong to the “Modern” segment. Average mean values are higher than those for the “Relaxed” segment (Mean = 4.055; Standardized alpha: 0,551874), but lower than those for the “Experimentalist”, “Concerned Nutritionists”, and “Traditionalists” segments. This implies that this segment is not yet fully profiled and future modifications can be expected.

The typical members of the “Modern” segment are characterized by the fact that they belong to families with 2-3 members, are aged 26-50, have a high school education and a college degree, and enjoy a higher than average income. These socio-demographic characteristics do not differ from those of the segment “Relaxed”. However, the respondents belonging to this segment do not like to spend too much time buying, preparing and cooking food. They gather all information in advance and carefully plan their shopping in order to spend as little time as possible shopping and preparing food. As a result, they do not like to change their habits in preparing and eating food.

3. The Experimentalists segment encompasses 18% of the sample. This segment arose as a whole new segment of the consumers’ food-related lifestyle, probably as a result of the globalization process. The total mean ($M = 4.237$) is higher than that of the two previously discussed segments. The variables which characterize this segment are given in Table 4.

The following questions are specific for this segment:

- S30 - I do not mind paying the premium for ecological products.
- S37 - Recipes and articles on food from other culinary traditions make me experiment in the kitchen.
- S64 - I always try to get the best quality for the best price.
- S67 - I like to try new foods that I have never tasted before.
- S69 - I like to try new recipes.

The size of the segment has been derived from Table 4. This shows that the segment of “Experimentalists” has a higher than total mean value ($M = 4.237$; Standardized alpha: 0,798549) on all the variables that comprise this segment.

This segment is characterized by respondents who have college or higher education (university degree). Consumers who belong to this segment enjoy meeting their friends and cook simple meals from different cultures. They like to try new and foreign recipes; they like to experiment in the kitchen and see shopping

for food as a challenge as they look for ingredients which enable the preparation of unusual meals.

Table 4.

VARIABLES THAT BELONG TO THE CLUSTER
 “EXPERIMENTALISTS” AND THEIR MEAN VALUES

Variable	Mean	Std. Dev.
I look for ways to prepare unusual meals. (S24)	3,788889	1,857098
I do not mind paying a premium for ecological products. (S30)	4,580808	1,826951
Recipes and articles on food from other culinary traditions make me experiment in the kitchen. (S37)	4,197980	1,87221
I love to try recipes from foreign countries. (S40)	4,054601	1,895299
I do not consider it luxury to go out with my family to have dinner in a restaurant. (S42)	4,196356	2,120940
I like to have ample time in my kitchen. (S43)	3,828283	1,755767
We often get together with friends to enjoy easy-to-cook casual dinner. (S45)	3,948485	1,813435
Shopping for food is like a game to me. (S46)	3,738384	1,827008
I always try to get best quality for best price. (S64)	4,891919	1,660654
I like to try new foods that I have never tasted before. (S67)	4,857287	1,723806
When I do not really feel cooking, I can get one of the kids or my husband /wife to do it. (S68)	4,025779	1,995528
I like to try new recipes. (S69)	4,785859	1,772901

4. The Concerned Nutritionists segment comprises 26% of the sample. We believe that the high percentage of this segment is due to increased standards of living as well as changing attitudes toward food-related lifestyles. These changes were to be expected since many consumers are becoming increasingly concerned with what they buy and how they prepare healthy meals for their family.

The total mean value of this segment is higher than three above-mentioned segments (M = 4.65; Standardized alpha: 0786710). This shows that the attitudes of the respondents are stronger toward most of the statements that describe this segment. Variables which cluster in this segment are given in Table 5.

The following statements have the highest mean values and therefore describe this segment most precisely:

- S8 - The recipes which I usually use for my cooking are indeed the best.

- S9 - I make a point of using natural or ecological products.
- S12 - I like buying food products in specialty stores where I get expert's advice.
- S16 - I always buy organically grown food products if I have the opportunity.
- S36 - I like to know what I am buying, so I often ask questions in stores where I shop for food.

Table 5.

VARIABLES WHICH BELONG TO THE SEGMENT
“CONCERNED NUTRITIONISTS” AND THEIR MEAN VALUES

Variable	Mean	Std. Dev.
The kids and other members of the family always help in the kitchen. (S2)	4,376663	1,850285
The recipes which I usually use for my cooking are indeed the best. (S8)	4,949495	1,530768
I make a point of using natural or ecological products. (S9)	4,750505	1,613071
I compare product information labels to decide brand to buy. (S11)	4,557692	1,805573
I like buying food products in specialty stores where I get expert's advice. (S12)	4,298990	1,882144
I notice when products I buy regularly change in price. (S15)	4,605051	1,859736
I always buy organically grown food products if I have the opportunity. (S16)	4,563636	1,861072
I find that dining with friends is an important part of my social life. (S17)	4,518182	1,907140
I compare labels to select the most nutritious food. (S29)	4,617172	1,784074
A familiar dish gives me sense of security. (S33)	4,783620	1,700112
My family helps with other mealtime chores, such as setting. (S34)	4,984144	1,832904
I like to know what I am buying, so I often ask questions in stores where I shop for food. (S36)	4,825076	1,711694
Before I go shopping for food, I make a list of everything I need. (S47)	4,781598	1,874295
It is more important to choose food products for their nutritional value rather than for their taste. (S50)	5,004040	1,605723
I just love shopping for food. (S53)	4,415571	1,748394
I am an excellent cook. (S54)	4,715299	1,545457
I make a shopping list to guide my food purchases. (S60)	4,569697	1,957251
Cooking needs to be planned in advance. (S66)	4,257836	1,724218

As with the other segments, only those respondents who have higher than average mean values for specific components are defined to be within this segment. Following this approach, 26% of all consumers belong to this segment.

This segment is characterized by younger consumers, aged from 36 to 50, with college education and mostly with two children.

It is clear that respondents who belong to this segment are concerned about the nutritional value of the food they buy and eat; they always buy organically produced products; they are very careful in preparing food and in examining the quality of products; they tend to make shopping lists and consider themselves as excellent cooks.

5. The Traditionalists segment comprises 10% of the interviewed consumers. This segment tries to preserve the traditional ways of cooking in Croatia. Table 6 shows the measures which characterize this segment. The total mean value of this segment is the highest ($M = 5.44$; Standardized alpha: 0,855014), which suggests that this segment will remain in the future and will probably not diminish.

The following statements are specific to this segment (have the highest mean value):

- S1- For me product information is of major importance. I need to know what the product contains.
- S7 - It is important for me that I get quality for all my money.
- S22 - I prefer fresh products to frozen or canned products.
- S39 - I do not buy food products that do not look completely fresh.
- S48 - I prefer to buy meat and vegetables fresh rather than pre-packed.

Observing the socio-demographic features of this segment, we found that these consumers are somewhat older than average, have one or two children, have received high school education and have a somewhat lower income. A further description of the members of this segment could be: they buy only those products which they are familiar with; for them the most important aspect is the taste of food products; they value product quality most; they prefer fresh products; they believe women are responsible for keeping the family healthy; being praised for their cooking adds greatly to their self-esteem.

Table 6.

VARIABLES WHICH BELONG TO THE SEGMENT
“TRADITIONALISTS” AND THEIR MEAN VALUES

Variable	Mean	Std. Dev.
For me product information is of major importance. I need to know what the product contains. (S1)	5,566667	1,564618
I buy and use only those food products which I know well. (S3)	5,146613	1,542167
I only buy and eat foods which are familiar to me. (S5)	4,962588	1,667022
It is important for me that I get quality for all my money. (S7)	6,116162	1,316321
I compare prices between product variants in order to get the best value for money. (S13)	5,082828	1,712739
When cooking I first and foremost consider the taste. (S21)	5,355556	1,543716
I prefer fresh products to frozen or canned products. (S22)	5,708081	1,596456
It is women's responsibility to keep the family healthy by serving a nutritious diet. (S26)	5,034343	1,906519
Nowadays the responsibility for shopping and cooking should lie with the husband as much with the wife. (S32)	5,480808	1,670882
To me the naturalness of the food that I buy is an important quality. (S35)	5,457027	1,47025
Over a meal one may have a pleasant chat with friends. (S38)	5,153535	1,773488
I do not buy food products that do not look completely fresh. (S39)	5,682828	1,734795
I prefer to buy meat and vegetables fresh rather than pre-packed. (S48)	5,901921	1,531546
I try to avoid food products that contain food additives. (S49)	5,338384	1,598040
Being praised for my cooking ads a lot to my self-esteem. (S51)	5,403030	1,713620
When I serve a dinner to friends, the most important thing is that we are together. (S55)	5,357937	1,626977
I prefer to buy natural product, i.e. products without preservatives. (S56)	5,571717	1,475245
Eating to me is a matter of touching, smelling, tasting and seeing; all the senses are involved. It is very exciting sensation. (S63)	5,510101	1,584620

7. Conclusion

In this study, the food-related lifestyle instrument - FRL (Brunsø and Grunert, 1995, 1998) was used to investigate whether it could serve to segment the food market and extract different homogeneous segments in the Republic of Croatia. Similar research studies were conducted in Croatia ten years ago (Kesić *et al.*, 1999) and in 2001 (Kesić and Piri Rajh, 2003). In this present study (2006), quite different segments were found, not only by size but also by their structure and the different mean values for the same segments.

By using a cluster analysis (joining-tree clustering) on the data collected from 902 Croatian consumers, and from the cross-culturally valid instrument of 69 questions, five completely different segments were distinguished in food-related lifestyles and sizes. These segments were given the titles: (1) "Relaxed" - 22%; (2) "Modern" - 24%; (3) "Experimentalists" - 18%; (4) "Concerned Nutritionists" - 26%; and (5) "Traditionalists" - 10%. The distinguished segments differ substantially in the content of the chosen statements from the questionnaire as well as in the strength of the attitudes shown toward those statements (mean average value).

The highest average mean value for all variables which categorize these segments (a higher than average value for the segment) was obtained in the segment of "Traditionalists" - 5.44. The following order was then observed: "Concerned Nutritionists" - 4.65; "Experimentalists" - 4.24; "Modern" - 4.05; and finally "Relaxed" - 3.13.

The segment called "Relaxed" has the lowest mean value of only 3.13 which shows that consumers who belong to this segment are not concerned about buying, preparing and cooking food for their families.

The segment named "Modern" comprises 24% of the total respondents, with the average value of all variables which cluster to this segment being 4.05. Only nine items describe this segment. The main characteristic of this segment is that its members use different types of information in order to reduce their buying involvement and save time in the process of buying, preparing and eating food.

"Experimentalists" are a new segment. The size of the "Experimentalists" segment is 18%. Their mean value is 4.24. These consumers like to try foreign and new recipes, to prepare unusual meals and consider cooking as a challenge. This segment is characterized by respondents who have a college or university degree, a higher income, and 3-4 family members.

"Concerned Nutritionists" turned out to be the largest segment (26%). Their mean value is higher than that of the segments discussed above (4.65). This shows that consumers who belong to this segment have very strong attitudes toward the

importance of the food-related lifestyle. So, we expect that this trend will continue in the future and that this segment will grow further. It shows that some consumers tend to follow the global trend in consuming healthy natural food in order to safeguard and protect their families. We expect that this trend will continue in the future.

The segment of “Traditionalists” comprises 10% of the interviewed respondents. The mean value of all statements (eighteen statements) was the highest (5.44) compared to other defined segments. This means that only 10% of consumers have time to prepare meals in traditional ways but their attitudes toward tradition are very strong. This is partially due to the strong Croatian culture, and to the perceived importance of preserving old recipes and traditions, since Croatia is primarily an agricultural and touristic country.

Scientific contribution of this paper refers to an identification of five different consumer segments regarding their food-related lifestyle, in transitional country like Croatia. This paper provides the results that could be very important to future strategic decisions in food industry of the Republic of Croatia, and because of its importance this is the field that should be the subject of further research studies.

The managerial contribution of this study can be of great importance to Croatian food producing companies in helping them to adjust their production to the defined food-related lifestyles and specifically to foresee changes that can be expected in these segments. For this purpose in mind similar studies should be undertaken in the future. This study may be of substantial help to food producers in adjusting their food products to new lifestyle segments and to preferences in buying and consuming food products. It might also be useful to marketers in communicating and adjusting their total marketing strategies to these segments. Beside that, results of this survey will help retailers in process of managing product categories and decision making about the structure of sale program.

Further research in this area should include a replication study testing the relationship between values and the food-related lifestyle (Scholderer *et al.*, 2004). Research should also be conducted on food-related lifestyles targeting some specific food categories (e.g. meat, vegetables, convenience foods).

REFERENCES

1. Anderson, W.T. and Golden, L.L. (1984), “Life style and psychographics: A critical review and recommendation”, in: Kinnear, T.C. (Ed.), *Advances in Consumer Research*, Vol. 11 No. 1, pp. 405- 411.
2. Askegaard, S. and Brunso, K. (1999), “Food-related life styles in Singapore: Preliminary testing of a Western European research instrument in Southeast Asia”, *Journal of Euromarketing*, Vol. 7 No. 4, pp. 65-86.

3. Askegaard, S. (1993), "Livsstilsbegrebet: Problemer og muligheder", *Ledelse og Erhvervsøkonomi*, Vol. 57, pp. 91-102.
4. Banning, T.E. (1987), *Lebensstilorientierte Marketing-Theorie*, Physica-Verlag, Heidelberg, Germany.
5. Bredahl, L., Brunsø, K., Grunert, K.G., and Beckmann, S.C. (1996), "Food-related life style in Spain", MAPP project paper, The Aarhus School of Business, Aarhus.
6. Bredahl, L. and Grunert, K.G. (1997), "Identificación de los estilos de vida alimenticios en España", *Revista Investigación Agraria Económica*, Vol. 12 No. 2, pp. 247-263.
7. Brunsø, K., Bredahl, L. and Grunert, K.G. (1996), "Food-related lifestyle trends in Germany: A comparison 1993-1996", in: Berács, J., Bauer, A. and Simon, J. (Eds.), *Proceedings of the 25th EMAC Conference: Marketing for an expanding Europe*, European Marketing Academy, Budapest, pp. 1505-1510.
8. Brunsø, K. and Grunert, K.G. (1995), "Development and testing of a cross-culturally valid instrument: food-related life style", *Advances in Consumer Research*, Vol. 22 No. 1, pp. 475-480
9. Brunsø, K. and Grunert, K.G. (1998), "Cross-cultural similarities and differences in shopping for food", *Journal of Business Research*, Vol. 42 No. 2, pp. 145-150.
10. Engel, J.F., Blackwell, R.D. and Miniard, P.W. (1995), *Consumer Behavior*, 8th ed., The Dryden Press, Fort Worth, TX.
11. Green, R.D. and White, P. (1976). "Methodological considerations in cross-national consumer research", *Journal of International Business Studies*, Vol. 7 No 2, pp. 81-87.
12. Grunert, K.G., Brunsø, K. and Bisp, S. (1997), "Food-related life style: development of a cross-culturally valid instrument for market surveillance", in: Kahle, L.R. and Chiagouris, L. (Eds.), *Values, lifestyles and psychographics*, Lawrence Erlbaum, Hillsdale, NJ, pp. 337-354.
13. Grunert, K.G., Brunsø, K., Bredahl, L. and Bech, A.C. (2001), "Food related lifestyle: a segmentation approach to European food consumers", in Frewer, L.J., Risvik, E., Schifferstein, H. N. J. and von Alvensleben, R. (Eds.), *Food choice in Europe*, Springer Verlag London Ltd., London, pp. 211-230.
14. Grunert, K.G. and Grunert, S.C. (1995), "Measuring subjective meaning structures by the laddering method: theoretical considerations and methodological problems", *International Journal of Research in Marketing*, Vol. 12 No. 3, pp. 209-225.

15. Grunert, K.G. (1993), "Towards a concept of food-related life style", *Appetite*, Vol. 21 No. 2, pp 151-155.
16. Grunert, K.G., Brunsø, K. and Bisp, S. (1993), "Food-related life style: Development of a cross-culturally valid instrument for market surveillance", *MAPP working paper*, no. 12
17. Grunert, K.G., Brunsø, K. and Bisp, S. (1995a), "Food-related lifestyle in France", *MAPP project paper*, The Aarhus School of Business, Aarhus.
18. Grunert, K.G., Brunsø, K. and Bisp, S. (1995b), "Food-related lifestyle in Germany", *MAPP project paper*.
19. Grunert, K.G., Brunsø, K. and Bisp, S. (1995c), "Food-related life style in Great Britain", *MAPP project paper*.
20. Gutman, J. (1982), "A means-end chain model based on consumer categorization processes", *Journal of Marketing*, Vol. 46 No. 2, pp. 60-72.
21. Hui, M., Joy, C. and Laroche, M. (1990), "Differences in lifestyle among four major subcultures in a bi-cultural environment", in Keown, C.F. *et al.* (Eds.), *Proceedings of the Third Symposium on Cross-cultural Consumer and Business Studies*, University of Hawaii, Honolulu, HA, pp. 139-150.
22. Katona, G. (1965), *Private Pensions and Individual Saving*, University of Michigan Survey Research Center, Ann Arbor, MI.
23. Kesić, T., Piri Rajh, S. (2003), "Market segmentation on the basis of food-related lifestyles of Croatian families", *British Food Journal*, Vol. 105, No. 3, pp. 162-174.
24. Kesić, T., Vranešević, T., Ozretić Došen, Đ. (1999), "The Food-Related Lifestyles of Croatian Families", in Manrai, A.K. and Meadow, H.L. (Eds.), *Proceedings of The Ninth World Marketing Congress – On Global Perspectives in Marketing for the 21st Century*, Qawra, Malta, pp. 310-314.
25. Laroche, M. *et al.* (1990), "Consumption patterns and lifestyle differences between English-French Canadian and Australian consumers", in Keown, C.F., *et al.* (Eds.), *Proceedings of the Third Symposium on Cross-cultural Consumer and Business Studies*, University of Hawaii, Honolulu, HA, pp. 151-160.
26. Lastovicka, L.J. (1982), "On the validation of lifestyle traits: a review of illustration", *Journal of Marketing Research*, Vol. 19. No.1, pp. 126-138.
27. Olson, J.C. and Reynolds, T.J. (1983), "Understanding consumers cognitive structures: implications for advertising strategy", in Percy, L. and Woodside, A.G. (Eds.), *Advertising and Consumer Psychology*, Lexington Books, Lexington, MA, pp. 77-90.

28. Peter, J.P. and Olson, J.C. (1990), *Consumer Behavior*, 2nd ed., Irwin, Homewood, IL.
29. Reid, M., Li, E., Bruwer, J. and Grunert, K.G. (2002), "Food-related lifestyles in a cross-cultural context: comparing Australia with Singapore, Britain, France and Denmark", *Journal of Food Products Marketing*, Vol. 7 No. 4, pp. 57-75.
30. Roos, J.P. (1986), "On way of life typologies", in Uusitalo, L. (Ed.), *Environmental impact of consumption patterns*, Gower, Aldershot, pp. 38-55.
31. Scholderer, J., Brunsø, K., Bredahl, L. and Grunert, K.G. (2004), "Cross-cultural validity of the food-related lifestyles instrument (FRL) within Western Europe", *Appetite*, Vol. 42 No. 2, pp. 197-211.
32. Scholderer, J., Brunsø, K., and Grunert, K.G. (2002): "Means-end theory of lifestyle: A replication in the UK", *Advances in Consumer Research*, Vol. 29 No. 1, pp. 551-557.
33. Sekaran, U. (1983), "Methodological and theoretical issues and advancements in cross-cultural research", *Journal of International Business Studies*, Vol. 14 No. 3, pp. 61-73.
34. Weber, Max (1958), in Gerth, H.H. and Mills, C.W. (Eds.), *From Max Weber: Essays in Sociology*, Oxford University Press, New York, NY.
35. Wells, W.D. and Tigert, D.J. (1971), "Activities, Interests and Opinions", *Journal of Advertising Research*, Vol. 11 No. 4, pp. 27-35.
36. Wind, Y. and Green, P. (1974), "Some conceptual, measurement and analytical problems in life style research", in Wells, W. (Ed.), *Lifestyle and Psychographics*, American Marketing Association, Chicago, IL, pp. 99-126.
37. Yu Hung Hsua, J., Keown, C.F. and Jacobs, L.W. (1993), "Attitude Scale Methodology: Cross-Cultural Implications", *Journal of International Consumer Marketing*, Vol. 6 No. 2, pp. 45-64.

SEGMENTACIJA TRŽIŠTA U REPUBLICI HRVATSKOJ PREMA ŽIVOTNOM STILU U PREHRANI

Sažetak

Cilj rada je istražiti mogućnosti segmentacije prema životnom stilu u prehrani u Hrvatskoj. Pored toga specifični ciljevi rada su: 1. vidjeti koji segmenti se mogu izdvojiti temeljem stila života u prehrani; 2. Usporediti obilježja izdvojenih segmenata; i 3. Identificirati specifična sociodemografska obilježja izdvojenih segmenata. Anketa je provedena 2006. godine na uzorku od 902 potrošača. Kućanstva su odabrana korištenjem slučajnog zonskog uzorka u pet najvećih hrvatskih gradova. U istraživanju je korišten kroskulturalno potvrđeni instrument kojega su razvili Brunsø i Grunert (FRL; Brunsø and Grunert, 1995; 1998). Instrument se sastoji od 69 pitanja koja su se odnosila na način kupovine, metode kuhanja, aspekte kvalitete, situacije konzumacije i motive kupovanja. Segmentacija je izvršena primjenom klaster analize (joining-tree clustering procedure). Identificirano je pet različitih segmenata s obzirom na životni stil u prehrani: Relaksirani, Tradicionalisti, Moderni, Zabrinuti nutricionisti i Eksperimentatori. Analizirane su socio-demografske karakteristike istaknutih segmenata.

Ključne riječi: životni stil u prehrani, segmentacija tržišta, ponašanje potrošača