

# HOW FUNCTIONAL MEASUREMENT OF THE TRADITIONAL FOODS CAN RAISE THE KNOWINGNESS OF OLD RECIPES USED IN ROMANIA AND DIASPORA

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## **Abstract**

*The present research continues a European project on “sustainable exploitation of bioactive components from the Black Sea Area traditional foods”. Known as Base Food, it was a collaborative program, funded by European Union under the 7<sup>th</sup> Framework Programme, few years ago. The initial research brought together scientists from countries situated around the Black Sea together with consultants from Italy, United Kingdom, Greece, Portugal and Serbia. Farther the medical, nutritional and technological approaches (Campos S., Doxey J., & Hammond D., 2011, pp. 1496-1506) in the initial project, the Romanian team initiated a unique and outstanding valuable contribution and extended the local research towards socio-economic tracks. Thus, specific aspects were analysed and detailed within certain doctoral programmes. The present paper is emphasizing farther elements, remained collateral, when the main research was considered.*

**Keywords:** *sustainable development, healthy food, traditional food, consumer awareness*

**JEL Classification:** I15, N50, Q18

## **Introduction**

Base Food aimed to promote robust development and processing of specific identified traditional products containing emerging bioactive compounds with significant health effects in the Black Sea Region. The Base Food objectives focused on:

- ◆ Investigation of the fundamental knowledge of national foods and identify those representatives for the research purposes;
- ◆ Characterisation of nutrient and bioactive data (European Commission, Directorate General for Health and Consumers, 2009) for a subset of about 30

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prioritised traditional foods using previously developed and validated by another European project – Euro FIR ([www.eurofir.org](http://www.eurofir.org)) with appropriate definition and analyses (Trichopoulou A., et al., 2006, pp. 498-504);

- ♦ Analysis of human intervention and address specific requirement for supporting evidence in nutrition and health claims (The European Parliament and the Council of the European Commission 2006, pp. 3-18; Wills J.M., et al., 2012, pp. 229-236);

- ♦ Evaluation of processors and consumers attitudes to enhance the food chain and improve its management and availability and health benefits;

- ♦ Dissemination of any findings and results to sustain and gain more awareness in the traditional foods production and consumption in order to improve health.

The project objectives, entirely congruent with international researches in the world, made a significant contribution to the substantiation of nutrition/health claims for traditional food (Lynam A., McKeivitt A., Gibney M.J., 2011, pp. 2213-2219) and enhanced the cooperation between researchers and stakeholders to promote robust development of SMEs in the Black Sea Region. (European Commission, 2010, pp. 16-18)

The “traditional” elements characterize foods used for ages in smaller or broader local societal groups (Guerrero L., et al., 2009, pp. 345-354); their recipes have been perpetuated from one generation to another either from mouth to mouth or in writing. Even today, traditional foods (Commission of the European Communities, 2006b, pp. 1-11) represent important elements of diets, despite the difficult recover under the rapacious globalisation. The most challenging approaches are to save traditional diets – at least those culturally important and health promoting. The methodological context underlining this work was recently shared under some research project, such as Euro FIR Network of Excellence (2005-2010) ([www.eurofir.org](http://www.eurofir.org)), or the Base Food project (2009-2012) ([www.basefood-fp7.org](http://www.basefood-fp7.org)).

The registration of traditional foods requires comprehensive documentation (Dilis V., Vasilopoulou E., Trichopoulou A., 2011) about all elements linked to the food traditionality. Other related cultural information refers to the etymology of the food’s name, the recipes’ evolution and its importance in the local diet, economy, community life, and other features involving consumption. (Trichopoulou A., Soukara S., Vasilopoulou E., 2007, pp. 420-427)

The preparation procedures (Commission of the European Communities, 2006a, pp. 12-25; Dilis V., Vasilopoulou E., Trichopoulou A., 2011) of the traditional food follow the interest for nutritional (Mejean C., et al., 2012) information and composition. They include all empirical methods and technical parameters: temperatures, utensils etc. allowing reproduction of the recipe without major deviations from the original product. Nutritional analyses (Costa H.S., et al., 2010, pp. 73-81) are always conducted by accredited laboratories (Patterson N.J., Sadler M.J., Cooper J.M., 2012, pp. 121-130) for macronutrients and selected vitamins and minerals. However, the determination of other compounds is recommended – such as the flavonoids in the plant products. Depending on the food, microbiological analysis might also be necessary for safety or quality issues (e.g. for fermented products). In specific circumstances, sensory evaluation brings complementary information.

An important phase of the local analysis on a triple survey referred to Romanians' consumption of traditional food, both in Romania and Diaspora. To reach such goal, the Romanian team decided to do a supplementary survey addressed to Romanian emigrants, western consumers found within the country, to check the awareness and the attitude of westerners towards traditional foods as possible new versions of ethnic foods. Further the chosen foods analysed within the project, more products were considered in our complementary survey: plum jam, dried fruits and green vegetables dish, garlic sauce, hotchpotch of fresh vegetable, nettles dish.

### Deepening the research beyond borders

Given the importance of the topic for the Romanian team, more objectives were added to be considered both at local level and across Diaspora:

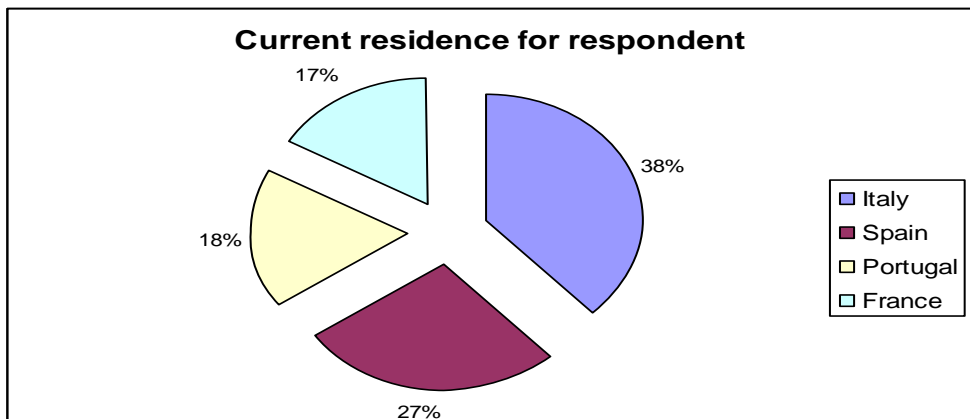
- ◆ Before the analysis, the assessment of the nature and functionality of our traditional products for a better understanding of all processes and their effects on health together with specific generation of data basis standards;

- ◆ Initiation and application of specific surveys to obtain information regarding the awareness, knowledge and acceptance of traditional food dishes from the Black Sea area (www.basefood.eu, Mazoyer, M. L., Laurence, R., 2006); this stage was followed by an accurate process of verification prior to carry out the questionnaire analysis in Romania and in specific locations in four Western European countries where Romanian population is mostly present (Italy, Spain, France and Portugal);

- ◆ Construction of a complete report on how the functional measurement of the traditional foods can raise the knowingness of old recipes used in Romania and Diaspora.

The questionnaires for Romanian emigrants to Western Europe were distributed in four major locations: Italy, Spain, France and Portugal. The figure 1 portrays the place of residence for Romanian emigrants that were interviewed during the data gathering:

**Figure 1.** *Current residence of respondents*



The questionnaires regarding immigrants to Romania were distributed in major locations in Romania, in the Bucharest extended area, most notably Baneasa Airport, Crangasi Square, Baneasa, Auchan, Carrefour Baneasa, Cora Sun Plaza, Cora Lujerului. Both table 1 and figure 2 portray the place in which the interview took place as well the frequency attributed to each location for migrants to Romania:

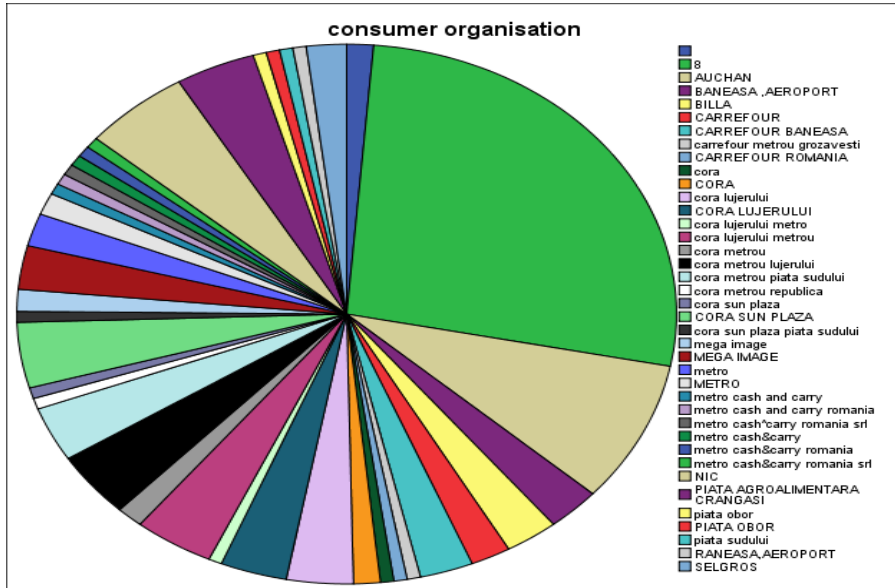
Table 1

**Customer Organisation**

	Frequency	Percent	Valid Percent	Cumulative Percent
Bucharest City Centre	41	27.3	27.3	27.3
Auchan	13	8.5	8.5	35.8
Baneasa Airport	5	3.3	3.3	39.1
Billa Bucharest	4	2.6	2.6	41.7
Carrefour Orhideea	6	3.4	3.4	45.1
Carrefour Baneasa	4	2.6	2.6	47.7
Cora	3	2	2	49.7
Cora Lujerului	11	7.3	7.3	57
Cora Lujerului Subway	14	9.1	9.1	66.1
Cora Subway Piata Sudului	6	4	4	70.1
Cora Subway Republica	1	0.7	0.7	70.8
Cora Sun Plaza	8	5.3	5.3	76.1
Mega Image	6	3.9	3.9	80
Metro	10	7.5	7.5	87.5
NIC	8	5.2	5.2	92.7
Piata Crangasi	6	3.9	3.9	96.6
Piata Obor	2	1.4	1.4	98
Selgros	3	2	2	100
Total	153	100	100	

These questionnaires were filled and collected between March and July 2011. After initial checking, the data was introduced and coded into SPSS. The data set has been updated by eliminating invalid questionnaires and incomplete answers.

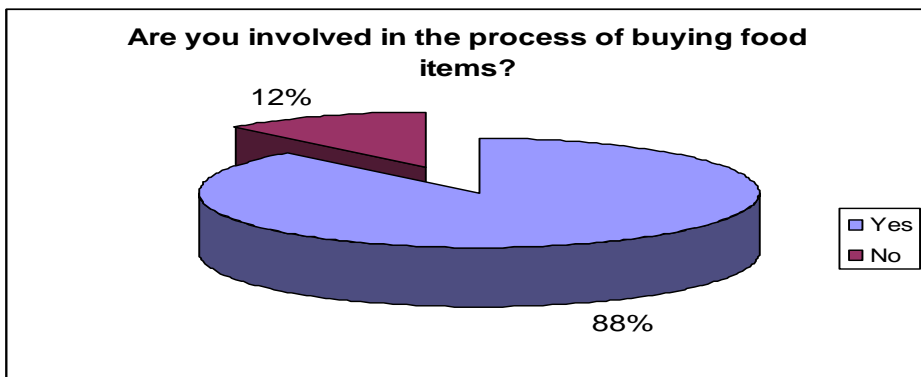
**Figure 2. Consumers Organisation**



### **Increasing the Awareness about the Traditional Food among Romanian Emigrants to Western Europe**

One of the first concerns of the study was to identify whether the Romanian emigrants included in the data collection process played an active role in the decision regarding the acquisition of food products.

**Figure 3. Involvement in the buying food process**



Approximately 88 % of respondents claimed that they were actively involved in the action of buying food items. The remaining 12% claimed that they did not take part in this process. The latter had not been withdrawn from the study since

the objective was to establish the degree of knowledge and awareness among the entire population of Romanian migrants.

The source for acquisition was very important to determine the possibility to introduce traditional food products in the mainstream of commercial production. The table 2 indicates the main sources for buying food according to the respondents:

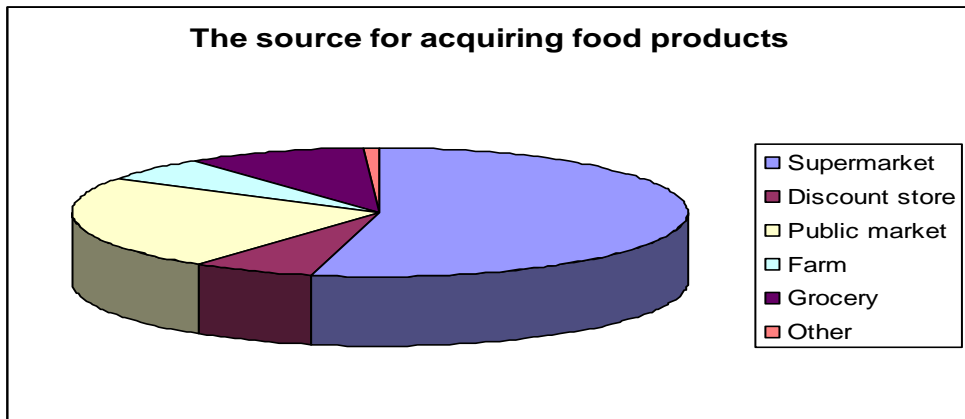
Table 2

**The main sources for the acquisition of food products**

<b>Supermarket</b>	53.65
<b>Discount store</b>	6.36
<b>Public market</b>	24.09
<b>Farm</b>	5.75
<b>Grocery</b>	9.38
<b>Other</b>	0.87
<b>Total</b>	100

The data from table 2 is also represented in the figure 4:

**Figure 4.** *Acquiring food products sources*



In the questionnaire, the supermarket category was also set to incorporate the hypermarkets and other large stores that sell a very large variety of products (foodstuff and other). Supermarkets and other large sellers account for approximately 54% of the food products declared by Romanian migrants, thus, any effort in the mass production and mass selling of traditional food products would have to take into consideration the inclusion of these location in their distribution chains.

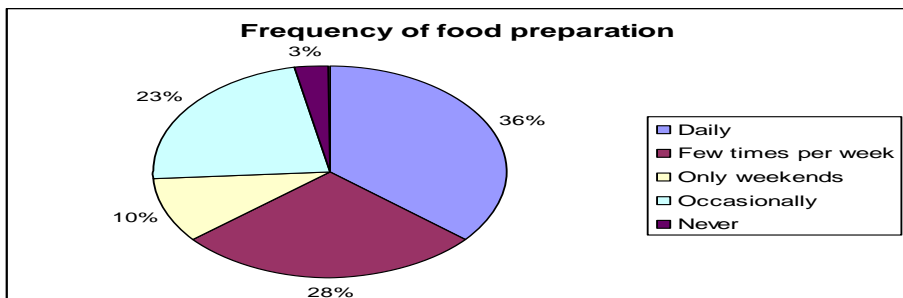
The frequency of food preparation helps illustrate the actual market potential for traditional food products as it can be linked positively with the average number of hours spent for shopping and concurrently, can be linked negatively with the number of visits to specialized restaurants. It can be assumed that individuals, who

prepare food products less often, needed their nourishment prepared and possibly sold by others.

The following figure (5) captures the data regarding food preparation. It can be asserted that 64% of respondents are involved in preparing food at least a few times per week, thus they would represent the potential customers for traditional ingredients or semi prepared food products that can be distributed through supermarkets (and hypermarkets), traditional market places, grocery stores.

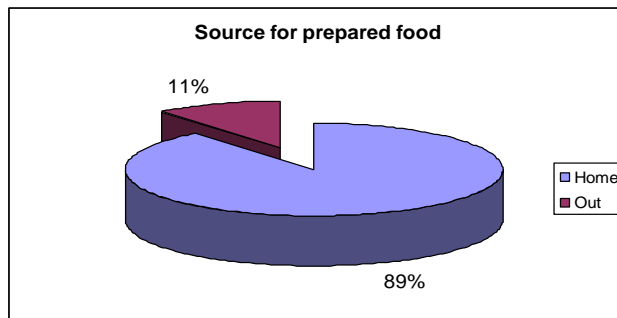
On the other hand, the remaining 36% of respondents, that have expressed their relative lack of interest in preparing their own food, would represent the potential market for traditional restaurants. The fact that they do not prepare their own food during the week represents a strong incentive for this part of the migrants to become customers for vendors specialized in fresh dishes.

**Figure 5. Frequency of food preparation**

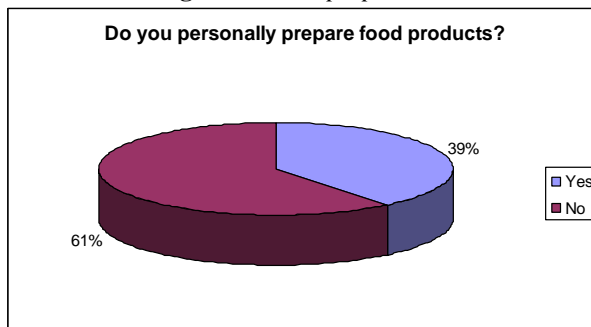


The fact that 89% of respondents usually consume dishes previously prepared at home, support the latter idea of them forming a great potential market for traditional ingredients. On the other hand, the relatively reduced percentage of individuals the habit of eating out indicates a reduced potential for new traditional restaurants that would target solely Romanian migrants in Western Europe. Ingredients and semi prepared traditional food items can more easily be put up for sale as they require a minimum of preparation and less specific means for serving.

**Figure 6. Sources for prepared food**



**Figure 7. Food preparation**



Approximately 89% preferred to dine at home while 61% of respondents felt personally involved in the preparation of food products.

The study participants were also asked to provide their own suggestions for traditional Romanian products prior to knowing the list of selected prioritized food items (selected by the Base Food team). Over 50 food products were suggested. Among these, “sarmale”, potato based products (“cartofi”) and “ciorba de burta” (pig stomach soup) were the most frequent answers.

### **Carrying out the questionnaire analysis in Romania and in specific locations of Diaspora**

Once the questionnaire collection over all the methods and tools already mentioned were applied to get more results, following the Brussels indications and the collateral goal additionally considered. The total number and structure of questionnaires retrieved by the Romanian team can be seen in the table 3:

Table 3

#### **The questionnaires typology and location**

Type	Quantity	Location
<b>Marketers</b>	Total 20	
	4+ 16	Bucharest (including 14 through the MIC.RO private network)
<b>Nutritionists</b>	Total 48	Institute of Nutrition Related Illnesses and Diabetes Dr. Paulescu
	37	Bucharest
	1	Suceava
	1	Adjud
	2	Focsani
	2	Fetesti
	5	Bacau
<b>Technologists</b>	Total 21	The Patronate of Food Industry ROMALIMENTA



Type	Quantity	Location
	1	Bacau
	1	Brasov
	4+4	Bucharest-ROMPAN
	1	Constanta
	1	Covasna
	4	Galati
	1	Iasi
	1	Ludus
	2	Tulcea
<b>Local Population</b>	Total 152	
	70	Supermarkets Bucharest
	41	Supermarkets Targu Jiu
	8	Open food markets Bucharest
	28	Subway Bucharest
	5	Airport Baneasa (Mall)
<b>Emigrants</b>	Total 103	
	45	Italy (online)
	32	Italy Rome
	7	Italy Torino
	6	Italy Milano
	17+15	Spain
	9+15	Spain Madrid
	1	Spain Seville
	2	Spain Valladolid
	3	Spain Valencia
	1	Spain Altea
	1	Spain Saragoza
	21	Portugal
	11	Portugal Porto
	10	Portugal Lisbon
	20	France Lyon Association of Promoting Performance

### **Constructing a complete report on the awareness, knowledge and acceptability of traditional food for Romanian emigrants to Western Europe and for immigrants to Romania**

Based on the information provided by data centralisation from the questionnaires regarding the consumer awareness and knowledge of products the following conclusions can be supported:

1. From the prioritised Romanian traditional foods, someone who likes cabbage leaf rolls (sarma) with dehydrated plums and apples scores very low in all

categories. They are known by less than 50% of migrants, consumed at least once by less than 30%, occasionally consumed by only 20% and remained favourite food for less than 5% of respondents.

2. Products that are very well known, frequently consumed and form the favourite food of a large percentage of migrants in Western Europe are: Cornmeal mush polenta (Mămăligă), Eggplant salad, Nut horns.

3. Other important traditional foods, when it comes to the awareness of migrants are: Elderberry soft drink (Socata), Plums jam (sugar free) Gem de prune, Vegetables soup/cream, Green beans dish, Pumpkin pie.

4. The “problem products” requiring special attention and marketing measures refer to: Vegetables soup with caraway and semolina, Spinach with dill and mint, Onion stuffed with rice, Onion pie.

5. On a scale from 1 to 10, the data show that the most important characteristic for traditional food (according to migrants) are: taste (average score of 9.29), healthiness (average score of 9.06), lack of alteration (average of 9.02). The less important characteristics are: availability in daily diet (average of 5.51), availability in restaurants (average of 6.18), spicy flavour (average of 3.68), lack of sophistication (average of 6.39), green packing (average of 6.75), and organic (average of 6.7), the capacity to be stored (average of 6.18), ability to be prepared with the microwave oven (average of 5.09).

The finalisation of this research could be followed by other follow-up projects to which the Romanian team participated with renewed efforts and aspirations.

During the project development some bottlenecks became obvious: a) the preparation of questionnaires regarding the understanding the socio-economic concepts by the other specialist (non-economists) inside the projects; b) the lack of communication during numerous dialogues developed between specialists with different expertise and backgrounds; c) the questionnaire processing stage caused by some divergent tools and programs supposed to be used.

Despite those bottlenecks, the scientists found out collateral ways to understand traditional foods connected to the results and the right values of traditions, initiated new visions and new missions with confidence, to contribute at a greener, sounder, more prosperous market and society.

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