

Targeting Consumers at-Risk-of-Poverty: Investigation on Food Chain Actors

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1. Introduction

European countries are experiencing an increase of population at-risk-of-poverty (hereafter ROP) that in 2012 reached 84 million people, about 16.9% of the total population (Eurostat)¹. ROP population have low income in comparison to other residents in the same country and could face constraints in purchasing food, but are not materially deprived and not necessarily have a low standard of living. The need for targeting this segment of the population is already part of the European agenda (Kozovska et al., 2013). By focusing on food consumption, the World Health Organization and European Commission stress how ROP consumers and other categories of low-income consumers, due to their limited access to healthy food, might increase their risk of contracting non-communicable diseases (e.g. hypertension, obesity, cancer) (European Commission, 2013; CSDH, 2008). To this ex-

Abstract

Population at-risk-of-poverty (ROP) is increasing at European level. Considering the attention posed by policymakers and academics on income inequalities as a key determinant for low or inadequate healthy food consumption, the objective of the paper is to explore food manufacturers' and retailers' interest in ROP consumers as target segment for commercialising healthy food. The research adopted an exploratory approach, with interviews carried out with representatives of food industries and retailers located in four European countries. The results suggest that food chain actors have a limited interest in ROP consumers and difficulties in the design and production of healthy food for ROP consumers. The interest in ROP consumers could rise only if supported by a higher awareness on this segment of consumers and by stronger food chain cooperation.

Keywords: Food chains, Food production, Food retailing, Healthy foods, Low income groups.

Résumé

La population exposée au risque de pauvreté (ERDP) est en train d'augmenter en Europe. Compte tenu de l'attention accordée par les politiques et les chercheurs à l'inégalité de revenus comme déterminant d'une consommation alimentaire pauvre ou inadéquate, cette étude a pour objectif d'analyser l'intérêt des producteurs et de la distribution alimentaire pour la population ERDP en tant que groupe cible dans la commercialisation d'aliments sains. En s'appuyant sur une approche exploratoire, des interviews ont été effectuées auprès des représentants des industries et de la distribution alimentaire. Les résultats suggèrent que les acteurs de la chaîne alimentaire ont un intérêt limité pour les consommateurs ERDP et qu'il existe des difficultés dans la conception et l'élaboration d'une nourriture de bonne qualité pour les consommateurs ERDP. L'intérêt pour les groupes ERDP pourrait augmenter à condition qu'on comprenne l'importance de ce groupe cible et qu'on renforce la coopération tout au long de la chaîne alimentaire.

Mots-clés: Chaîne alimentaire, production alimentaire, distribution alimentaire, aliments sains, groupes à faible revenu.

tent, several authors underline how ROP consumers perceive the scarce availability of affordable healthy products, in relation to their preferences and purchasing power, as a relevant barrier to healthy eating improvement (Beaglehole et al., 2011; Brunsø et al., 2004; Dammann and Smith, 2009; Kontinen et al., 2012; Lähteenmäki et al., 2010; Mai et al., 2011; Perez-Cueto et al., 2010). Furthermore, academics link unhealthy eating habits to the consumption of energy-dense processed food and of out-of-home food that is recently increasing at every socio-economic status (Buckley et al., 2007; Fox, 2012; Geeroms et al., 2008; Olsen et al., 2012). In particular, the significant and in-

creasing consumption of snacks and ready-to-eat food, often cheaper than other food offer (Drewnowski and Darnon, 2005; Inglis et al., 2005), are considered a cause of unhealthy food habits.

As other segments of demand, ROP consumers show notable heterogeneous socio-demographic characteristics, such as education, ethnicity and access to food, to lifestyle factors and levels of knowledge that variously influence their approach towards dietary habits and health issues (Holgado et al., 2000; Scholderer and Grunert, 2005). However, at present these characteristics might not be fully exploited by the private sector. In fact, the food industry and retailers are mainly investing and competing on the commercialisation of food products with functional and health enhancing attributes (Boesso et al., 2009; Burch and Lawrence, 2005), mostly accessible and consumed by nich-

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¹ Even if in many papers and statistics people at risk of poverty or at risk of social exclusion are jointly considered, this paper addresses specifically ROP people as defined and quantified by Eurostat (http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:At-risk-of-poverty_rate).

es of affluent consumers (Burch and Lawrence, 2005; Goodman, 2009).

The literature on the private sector's approach towards poorer consumers mainly concerns those consumers living in developing countries and with extreme poverty living conditions, while it scarcely addresses ROP consumers living in developed countries (Kirchgeorg and Winn, 2006; Prahalad and Hammond, 2002). Nonetheless, some aspects of the debate focused on the poorest consumers provide worthwhile suggestions to investigate the food chain's interest and capability of targeting ROP consumers in European countries. To this extent, a private sector's inadequate degree of knowledge of poorer segments of consumers can negatively affect the capability of properly targeting them, as well as, limits the development of a consumer-oriented approach specifically tailored on ROP population (Kirchgeorg and Winn 2006; Rangan et al. 2011). In addition, the capability of satisfactorily assessing the real market opportunity of ROP consumers' segment becomes a determinant marketing challenge for the private sector (Garrette and Karnani, 2010). The production and commercialisation of affordable healthy food, however, need to address certain constraints. First, considering the limited purchasing power of ROP consumers and the notable segment's size, manufacturers should project their future investments mainly expecting profit to come from high volumes of sale (Fry and Finley, 2005; Golan et al., 2009; Grunert et al., 2008; Rodgers, 2008). Second, healthy food product innovation should be able to match the healthy attributes and preferences of ROP consumers, such as reformulating familiar food into healthier proposals. In a food chain perspective, retailers might play a key role in determining the commer-

cialisation of affordable healthy food by exploiting their capability to manage the shelf life and investing both on best price and their own branded product lines (Burch and Lawrence, 2005; Cooper and Nelson, 2003; Kadyali et al., 2000). In fact, private label products are now presented at different price levels and contribute to the differentiation of the products' offer (Cameron et al., 2012; Chapman et al., 2012; Codron et al., 2005). Recent studies on the private label phenomenon underline that the food industry is still the leader in food innovation. However, the food industry can only moderately reach consumer preferences, whereas retailers can interpret and influence them more effectively (Hawkes, 2009; Martin-Biggers et al., 2013; Bunte et al., 2011). Therefore, an improved coordination among food industries and retailers to commercialise private label products may contribute to meeting different aspects of the demand and in targeting ROP consumers.

According to the literature reviewed, studies investigating the food chain actors' approach towards ROP consumers are still lacking. Thus, the objective of this paper is to explore food manufacturers' and retailers' interest in ROP consumers as target segment for commercialising healthy food.

2. Material and Methods

Face-to-face semi-structured interviews were carried out with representatives of food industries and retailers located in Finland, Italy, Lithuania, and Serbia². The representatives were selected to provide an overview of these countries' agribusiness opinions and a first perspective of the heterogeneous European context. Other studies confirmed such prospective context (Samoggia et al., 2014). ROP in these countries are numerically different³ and reflect the different countries' food habits and approaches towards healthy food. Two main criteria were applied to select these food processing industry representatives: the company dimension and the food sector. The selection guaranteed the participation of small and medium/big sized companies⁴ producing and commercialising dairy/eggs, meat/fish, vegetables/fruits, and cereals/bakery at least at the national level. In addition, the industries' recruitment included those enterprises already producing healthy food⁵ to generate grounded and experienced feedbacks. Food retailers' selection included different typologies of operators, namely large retailers, discount retailers and traditional retailers. In particular, large retailers were chosen among the five retailers with the highest annual turnover (counting only national sales) in 2010 in each country. All companies' representatives covered one of the following roles within the company, namely Director General or Chief Executive, Assistant to the Director, Marketing Director, Research and Development Director, Trade/Commercial Director. In total, 49 companies' representatives were recruited (Table 1), and they were interviewed in their native language. Interviewers were university researchers who employed common guidelines methodology to conduct the interviews.

² These countries have been selected in the frame of a FP7 research project.

³ ROP population in 2012 by country: Finland 13.2%, Italy 19.4%, Lithuania 18.6%, and Serbia 24.6% (sources: Eurostat database available at http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_li02&lang=en; Second National report on Social inclusion and poverty reduction in the Republic of Serbia, available at <http://sociojalnouljucivanje.gov.rs/wp-content/uploads/2014/11/Second-National-Report-on-Social-Inclusion-and-Poverty-Reduction-final.pdf>).

⁴ The definition of small, medium and big enterprises refers to the one adopted by the European Commission, as published in the Official Journal of the European Union L 124, p. 36 of 20 May 2003.

⁵ Considering the lack of an official definition for healthy food, the study considers as healthy a food with a good nutrient profile or with a good nutritional density. The first one does not contain high amount of nutrients (sodium, total fat, saturated fat and sucrose) whose high intake could be responsible for an increase in disease risk. The second one is able to guarantee a high content of fibres, micronutrients (vitamin and minerals) and bioactive compounds. This definition attempts at best characterising healthy food, coherently with the available food regulation provided by the European Commission and the European Food Security Agency (EFSA).

Table 1. Number of recruited companies.

Country	Industries		Retailers			Total
	Small	Medium/big	Large not discount	Discount	Traditional	
Finland	1	5	2	2	1	11
Italy	4	4	4		1	13
Lithuania	2	5	1	2	2	12
Serbia	6	3	1	1	2	13
Total	13	17	8	5	6	49

Source: own elaboration.

Questionnaire's structure

According to the objective of the study and due to the lack of previous studies investigating the European food chain actors' views on ROP consumers' segment, the questionnaire was developed with an explorative purpose in order to collect information on three main specific aspects arising from the issues explained in the Introduction.

The first aspect concerned the investigation on the effective degree of knowledge and awareness on ROP consumers' segment and understanding of healthy food products. In particular, the interviewees were asked to evaluate the growth potential and profit of ROP consumers' segment for the food sector in the following 3 years (years 2012-2014). In order to facilitate the answer to this series of questions, at the beginning of the interview respondents were provided with the most recent ROP population data and income level in the respondent's country. To assess the understanding on healthy food, interviewees were asked to provide a definition of healthy food and to provide their evaluation on the margin expectations for healthy food. Then, in order to guarantee coherence to the following steps of the survey, the interviewers provided the pre-set definition of healthy food adopted for this study, which had to be used as point of reference by all interviewees.

The second aspect concerned the food chain's possible constraints to the production of low cost healthy food and was explored by asking the interviewees to evaluate and comment on the technological and economic feasibility of producing low cost healthy food.

The third aspect concerned the interviewees' market expectations on healthy food commercialised for ROP consumers' segment. The interviewees were initially asked to provide the expected level of healthy food consumption in relation to other products that are characterised or that claim specific benefits. Thereafter, they were asked to assess to what extent ready-to-eat (hereafter RTE) food format is adequate to foster healthy habits among ROP people. Finally, the respondents were asked to provide with their e-

valuation on the compatibility of the image of RTE products with the healthy attribute. The opinion was asked both for RTE food in general and for a set of different typologies of RTE food. Then the analysis of market expectations focused on the potential of a private label commercialisation strategy to sell healthy food (low-price or not) to ROP consumers.

The questions were structured as ended questions, answered through a Likert scale from 1 to 7 or a categorical scale from 1 to 3, and some open-ended ones (Oppenheim, 1992).

Data analysis

Interviewees' answers have been elaborated differently according to ended and open questions. Ended questions have been elaborated through descriptive statistics indexes, namely mean, mode, standard deviation. In order to analyse the relation between certain food manufacturers' and retailers' characteristics and their interest in ROP, bivariate statistical analyses have been performed, by computing different statistical indexes. In particular, among the descriptive variables considered, only those referring to the respondents' country and "measured degree of interest for ROP consumers" have provided interesting information. The indexes of associations selected for the results' presentation are Pearson's chi squared (χ^2) for every bivariate analysis, Phi squared of Pearson (ϕ) and Cramér's V (ϕ_c), for nominal or categorical variables, and Kendall's Tau-b (T_b), for ordinal variables⁶. A content analysis has been applied to open questions, through a thematic approach (Draper, 2004, Oppenheim, 1992). The answers have been aggregated and codified according to the main emerging concepts⁷. The items codified have been analysed with a descriptive analysis of frequencies, by highlighting the results at country level.

3. Results

The starting point: respondents' knowledge of ROP consumers and healthy food understanding

Respondents are cautious on ROP consumers segment's growth and profit potential (Mean 3.73, Table 2) and their open comments illustrate their difficulties in clearly assessing this particular consumers' segment.

⁶ The bivariate indexes' values are reported in appendix.

⁷ The codification did not exploit a specific quantitative elaboration of the transcriptions.

Table 2. *Expected ROP consumers' potential of growth and profit for years 2012-2014.*

Description	N.	Mean	± Std.	Mode	Country χ^2	Country ϕ	Country ϕ_c
ROP consumers' growth and profit potential	44	3,73	1,81	2	34.61***	0,89	0,51

Source: own elaboration.
¹ Likert scale from 1 to 7, 1=very negative, 4=neutral, 7=very positive.
*** p < 0.01 - ** p < 0.05 - * p < 0.10

Many interviewees appear to be unable to distinguish ROP consumers from those with an extremely low household income, rather than correctly recognising them as people with sufficient purchasing power to buy and consume their products. Nonetheless, the food chain interest towards ROP consumers seems to be significant, as some of the interviewed food chain actors are aware that ROP consumers is a growing phenomenon. In particular, according to the open comments provided, approximately 30% of the respondents, equally distributed between industries and retailers, describe it as a segment of growing importance in the near future. Still, a minor group of interviewees describe ROP consumers as an interesting segment, but only if targeted through promotional offers and private labelled products. Through the bivariate analysis, it is possible to underline how the expectations on growth potential and interest on ROP consumers depend and are associated with the country variable (χ^2 Country 34.61, ϕ 0.89, ϕ_c 0.51). In particular, whereas Serbian respondents expect ROP consumers to perform negatively, Finnish and Italian respondents appear to be neutral. Finally, Lithuanian respondents consider ROP consumers to be a promising segment.

Concerning the understanding of healthy food, it has been possible to aggregate respondents' open answers according to five main key concepts (Table 3).

Respondents mainly associate healthy food with the attribute of natural, not processed food (39%). This approach is common for both industry and retailers, thus suggesting a common perception along the food chain. Only 28% of respondents characterise healthy food as defined within the study (14%) or they refer to a balanced diet (14%). In addition, it is interesting to focus on 14% of interviewees, equally distributed among industries and retailers, which

refers to the health enhancing, diseases' prevention (4%) and safety attributes (10%), thus overlapping the healthy attribute with other concepts. The results achieved highlight the lack of a homogeneous approach to the definition of healthy food. Thus, while academics and policy makers commonly focus on the degree of knowledge and on the needed awareness improvement among consumers, this result might induce a stronger attention toward the supply chain actors. Moreover, the respondents' attitude toward healthy food is well depicted by their margin expectations (Table 4), as in general they expect them as higher than other processed products (Mean 2.49). In details, manufacturers are almost equally divided between expectations of margin higher or equal than other processed food, while most of retailers expect healthy food to guarantee margin as equal as other processed food. While food manufacturers' representatives perceive healthy food as a product capable of ensuring medium-high margins, retailers seem to be interested in offering healthy food so to maintain or consolidate their positioning. Still, different views are present among the countries investigated (χ^2 Country 14.16, ϕ 0.58, ϕ_c 0.41). The majority of Finnish interviewees expect healthy food margin to be as equal as other processed food, while Italian companies expect it to be higher than other processed food. Finally, Lithuanian and Serbian respondents show mixed expectations.

Producing low cost healthy food

Focusing on the technological and economic feasibility of production (Table 5), respondents are almost neutral (Mean 3.90) about the perceived difficulties to produce healthy food at low cost. Considering the open comments, they express a cautious attitude in relation to the sustainability of a final product able to match a low cost with the healthy at-

Table 3. *Respondents' healthy food understanding.*

Description	Finland	Italy	Lithuania	Serbia	Total	Total
Healthy food	1	4	0	2	7	14%
Balanced diet	4	2	0	1	7	14%
Natural, not processed food	4	4	6	5	19	39%
Health enhancing and disease prevention food	0	2	0	0	2	4%
Safety food	0	1	1	3	5	10%
Other definitions	1	0	3	2	6	12%
Not Available	1	0	2	0	3	6%
Total	11	13	12	13	49	100%

Source: own elaboration.

Table 4. *Expected margin for healthy food.*

Description	N.	Mean	± Std.	Mode	Country χ^2	Country ϕ	Country ϕ_c	ROPgp χ^2
Margin healthy food	42	2,49	0,68	2	14.16**	0,58	0,41	7,23

Source: own elaboration.

¹ Ordinal scale from 1 to 3, 1=below other processed food, 2=on average with other food, 3=above other processed food.

*** p < 0.01 - ** p < 0.05 - * p < 0.10

Table 5. *Expected feasibility of low cost healthy food.*

Description	N.	Mean	± Std.	Mode	Country χ^2	Country ϕ	Country ϕ_c	ROPgp χ^2	ROPgp T _b
Technological and Economic Feasibility of low cost healthy food	41	3,90	1,92	2	29.37**	0,85	0,49	55.53**	-0,04

Source: own elaboration.

¹ Likert scale from 1 to 7, 1=very difficult, 4=neutral, 7=very easy.

*** p < 0.01 - ** p < 0.05 - * p < 0.10

tribute. They address two main constraints. On one side, the high cost of some specific ingredients limits the possibility of reducing production costs and the market prices. This is particularly relevant when the production of healthy food requires new investments on research and development and new technological equipment. On the other side, respondents express concerns that even if healthy food was produced at low cost and sold at a low price, ROP consumers would still perceive the final price as too expensive in relation to their purchasing power. Nonetheless, the perception on the feasibility differs according to the belonging country

(χ^2 Country 29.37). In particular, Finnish interviewees consider slightly difficult or are neutral in relation to producing healthy food at low cost. Lithuanian interviewees consider slightly easy to produce a low cost healthy food, while Italian interviewees show very dissimilar evaluations. Finally, Serbian representatives perceive it as difficult. In addition, the feasibility of a low cost healthy food product able to guarantee technological and economic sustainability for the food chain actors seems to relate to the expectations on ROP consumers' segment growth (χ^2 ROPgp 55.53), despite any clear association is present (T_b -0.04).

Market expectations

Interviewees are cautious on future trends of consumption of ROP consumers for most of the suggested food categories. In particular, the expectation for healthy food is neutral, while a slightly more positive attitude is present for health food, due to the widespread increase of non-communicable diseases, and RTE food, due to the changing lifestyles (Table 6).

Deepening the issue of RTE food, the majority of respondents show positive expectations on its efficacy to improve the consumption of healthy food. Nonetheless, respondents consider RTE healthy food potential as slightly lowered by a moderate compatibility of the image of RTE food with the values and image that are commonly associated with healthy food and healthy diets. When asked to what extent the different types of RTE food preparations are capable of impacting on ROP consumers' healthy food consumption, interviewees identified healthy fresh and chilled RTE food and healthy snacks as the most promising preparations.

Table 6. *Respondents' market expectations for years 2012-2014.*

Description	N.	Mean	± Std.	Mode
Expected ROP consumers' trend of purchases for specific food categories				
Health food, with claim	43	4,37	1,79	6
Organic food	42	3,21	1,80	1
Ready-to-eat food	42	4,26	1,86	5
Traditional and geographical certified food	43	3,81	1,92	4
Fair trade food	41	3,63	2,07	1
Environmental friendly food	42	3,40	2,13	1
Perceived efficacy of healthy ready-to-eat food to improve healthy food habits among ROP consumer				
Ready-to-eat food efficacy to increase ROP consumers' interest in buying healthy food	45	4,60	1,81	5
Compatibility of ROP consumers' perception on ready-to-eat food with healthy food and diet	43	3,72	1,50	5
Perceived efficacy of healthy ready-to-eat food to improve healthy food habits among ROP consumer, according to the typology of preparation				
Fresh healthy ready-to-eat preparation	42	4,81	1,69	5
Chilled healthy ready-to-eat preparation	42	4,45	1,60	5
Hot healthy ready-to-eat preparation	42	3,93	1,90	2
Healthy ready-to-eat snack	43	4,60	1,61	4
Perceived turnover potential for different product development strategies				
Healthy private label food	43	5,58	1,53	6
Low-price healthy private label food	43	5,47	1,33	7
Low-price ready-to-eat healthy private label food	43	5,65	1,36	7

Source: own elaboration.

¹ Likert scale from 1 to 7, 1= very negative/low, 4=neutral, 7=very positive/high.

Notwithstanding the cautious attitudes towards healthy food products for the ROP consumers, the food chain actors appear optimistically convinced that a private label commercialisation strategy would be effective to target ROP consumers, also for healthy food. In particular, they expect the private label to be able to guarantee to ROP consumers adequate loyalty and low-price, so to stimulate healthy food purchases. In addition, they expect that the combination of a private label strategy with the commercialisation at low-price would be surely effective, in terms of turnover potential, both for healthy products and for healthy RTE products. In general, respondents confirm a wide attitude to exploit the available price's leverages to target ROP consumers; so that within their open comments, they clearly refer to promotional offers and to the selection of discounts as preferable retailer channels, as the key strategies to target ROP consumers, in addition to the private label adoption.

4. Discussion

The food industries' and retailers' view on ROP consumers is mainly focused on the low purchasing power, which limits the interest of food chain actors in targeting the segment of ROP consumers. Nonetheless, given the ROP population's absolute numbers and trends, this approach seems inadequate to exploit this emerging market segment. In addition, considering the lack of studies deepening ROP consumers' segment potential, it is possible to underline a widespread delay among several European actors in targeting ROP consumers. In recent years, European agribusiness actors have given attention to the quality attributes of food, but this attention does not seem to have changed the supply and demand patterns for healthy food devoted to ROP consumers. Industries and retailers have poor expectations on the appeal of healthy food for ROP consumers, thus confirming that the target for healthy food are mostly niches of affluent consumers, as emerged from earlier studies. Furthermore, their healthy food high margin expectations confirm that they are sceptical about the prospect of increasing the number of consumers for healthy food thanks to ROP consumers. Their scepticism leads to limited efforts along the food chain in defining marketing strategies towards a massive consumption of healthy food. Food manufacturers and retailers know that healthy food carries the paradox that 'less is more', due to higher costs of marketing, R&D and food processing technologies. This challenge goes hand in hand with companies' margin expectations of healthy food. Healthy food is quality and highly positioned food, and food actors expect to market high quality food at high prices and expect higher profit margins. Healthy food faces stiff competition because there is high financial reward in less healthy food and less healthy food is very appealing to all societal groups. Healthy food commands a high price, and it is not the kind of product that justifies a penetrating price strategy, but rather a skimming price strategy, thereby making ROP consumers' segment difficult to reach. Consistent with this perspective, the design and production of

specific types of healthy processed food to devote to ROP consumers are still difficult to identify. In addition, despite a probable increasing trend of ROP consumers' attention towards certain types of RTE food, the food chain actors are not ready to risk their investments on adding healthy attributes to RTE food, if sold at a low-price. Interviewees' positive attitude towards marketing affordable healthy foods for ROP under a private label confirms the increasing interest and attention of the food chain actors towards the private label's effectiveness. Finally, it still seems premature to expect the chain actors to be proactive about the possibility of targeting lower socio-economic segments of consumers for healthy food products; as well, an increase of competition on affordable healthy food products offer is not expected to rise rapidly.

5. Limitations and Conclusion

The research findings are limited to a qualified, but restricted, number of interviews, due to two main reasons. First, in order to guarantee a grounded comparative analysis of the food chain actors in the different countries involved, the selection criteria included specific and restrictive characteristics, for the country, the company and the interviewee, which partially limited the possibility of easily enlarging the number of observations. Second, the perceived sensitiveness of the investigated issues inhibited the participation of many companies. Nonetheless, the issues arisen confirm the need to adopt a food chain perspective in order to investigate the effective capability of a low-price healthy product to reach the shelf. Still, the study highlights that further attention should be devoted on food industries' and retailers' interest on ROP consumers segments, eventually by defining a specific public-private strategy aimed at increasing food chain actors' attention towards ROP consumers. Similarly, in order to adequately encourage food chain actors interest in ROP consumers, it is urgent to stimulate the demand. A European strategy tailored to low income and ROP consumers would foster these market segments' awareness and interest in healthy eating.

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Appendix

Table A1. Respondents' market expectations for years 2012-2014 – bivariate analysis.					
Description	Country χ^2	Country ϕ	Country ϕ_c	ROPgp χ^2	ROPgp T_b
Expected ROP consumers' trend of purchases for specific food categories					
Healthy food, with claim	26.65*	N.S.	N.S.	53.43**	0,34
Healthy food, without claim	24,46	N.S.	N.S.	33,97	N.S.
Health food, with claim	27.81*	N.S.	N.S.	53.04**	0,45
Organic food	16,37	N.S.	N.S.	54.80**	0,20
Ready-to-eat food	27.75*	N.S.	N.S.	38,13	N.S.
Traditional and geographical certified food	35.60***	0,91	0,53	42,21	N.S.
Fair trade food	25,88	N.S.	N.S.	43,39	N.S.
Environmental friendly food	22,80	N.S.	N.S.	42,71	N.S.
Perceived efficacy of healthy ready-to-eat food to improve healthy food habits among ROP consumer,					
Ready-to-eat food can be an effective way to increase ROP consumers' interest in buying healthy food?	23,62	N.S.	N.S.	44,84	N.S.
Rop consumers' image of ready-to-eat food is compatible with healthy food and diet?	24,13	N.S.	N.S.	44,97	N.S.
Perceived efficacy of healthy ready-to-eat food to improve healthy food habits among ROP consumer, according to the typology of preparation					
Fresh healthy ready-to-eat preparation	36.24***	0,93	0,54	27,48	N.S.
Chilled healthy ready-to-eat preparation	18,53	N.S.	N.S.	34,39	N.S.
Hot healthy ready-to-eat preparation	14,41	N.S.	N.S.	33,60	N.S.
Healthy ready-to-eat snack	15,73	N.S.	N.S.	31,72	N.S.
Perceived turnover potential for different product development strategies					
Healthy private label food	16,84	N.S.	N.S.	29,55	N.S.
Low-price healthy private label food	26.81*	N.S.	N.S.	32,76	N.S.
Low-price ready-to-eat healthy private label food	20,29	N.S.	N.S.	35,97	N.S.
Source: own elaboration.					
¹ Likert scale from 1 to 7, 1= very negative/low, 4=neutral, 7=very positive/high.					
*** p < 0.01 - ** p < 0.05 - * p < 0.10.					
N.S.: The indexes of associations have been analysed when the p-value of Pearson's chi squared is lower than 5%, otherwise the acronym N.S. is reported to signify "not significant".					