



# Challenges for the New Rurality

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In a changing world

Proceedings from the  
7th International Conference on  
Localized Agri-Food Systems

Editors  
Paulina Rytönen & Ursula Hård

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## Motives for Food Choice of Consumers from Central Mexico

Angélica Espinoza-Ortega<sup>1</sup>, Carlos Galdino Martínez-García, Humberto Thomé Ortiz & Ivonne Vizcarra Bordi

**Abstract** – Social studies of eating habits have less than thirty years, the main advances has taken place in the Francophone and Anglophone schools. In Mexico, for the first time, the analysis of food choice has been addressed. The objective of this work was to identify segments of Mexican consumers from the motives for their food choices, through the Food Choice Questionnaire, and through multivariate factor and cluster analysis. The results show that there are signs of different consumers, Mexican consumers have other priorities, particularly in terms of taste, in general expressing low sensitivity to issues of health and nutrition, even more so towards animal welfare and products that are friendly to the environment.

Keywords: Food choice questionnaire, México, consumers.

### INTRODUCTION

Social studies on human food consumption are recent with just over thirty years, with the largest advances in the Francophone and Anglophone schools, and to a lesser degree, the Spanish school.

In contemporary Western societies, the distance between the consumers and the preparation of their own food makes the global agri-food industry and its distribution system as symbols of a current void (Díaz and Gómez, 2005; Álvarez, 2008), increased suspicion on the manipulation of food by these industries (Aguilar, 2007), and generating interest for differentiated foods where consumption is not ruled by economic aspects, but also by values as health, quality, tradition, culture, the environment and ethics (Espeitx, 1996).

This creates an eclectic gastronomic condition that is fragmented, unequal, postmodern, and strongly anomic (Alonso, 2005), which gives way to a new consumer, less uniform, better informed, and more demanding. Food trends are apparently contradictory. On one hand, there is globalization and its homogenizing effects, and on the other hand, local foods that regain identities (Mili, 2005; Gómez, 2008).

This has led to the proposal of four agri-food systems: 1) *Traditional*, 2) *Modern*, 3) *Late modern or post-modern*, and 4) *An incipient phase* that has not been named where biotechnology plays an important role. These trends are established from work undertaken in western countries, since studies on consumer behaviour in other regions is incipient.

In Latin America, economic development and demographic and socio-cultural changes have promoted phenomena both in the polarisation of livelihoods in their societies as well as changes of lifestyles in different social strata. Therefore, studies are needed on the effect of these changes not only in food consumption, but also in the symbolic elements of that consumption.

In Mexico, the study of food consumption has followed diverse approaches (Ortiz et al., 2004): 1) *as a matter of the state*; 2) *from an economic perspective*; 3) *from anthropology*, particularly focused on indigenous cultures, and 4) *from the nutrition and health field* (Aboites, 2010). A good number of reports are centred in the study of eating patterns, but from the composition of the daily diet, aimed at individuals, families, or groups (Ortiz, et al., 2004), emphasising economic aspects and the urban – rural dichotomy (García, 2014). Those works do not address the role of the consumer and their motivations, therefore research that studies motives in the choice of foods is needed (Gómez, 2008).

This work had the objective of knowing the motivations of Mexican consumers in selecting or preferring their food through a segmentation exercise, applying the Food Choice Questionnaire.

### METHODS AND SOURCES

A total of 1202 questionnaires were applied. 338 questionnaires are enough for infinite populations. Interviewed subjects were randomly selected, and all were over 18 years old (Fotopoulos et al., 2009). Data were collected in two food fairs and two weekly food markets in central Mexico.

Questionnaire comprised two sections to collect quantitative and qualitative information. The first section considered socioeconomic aspects (Fotopoulos et al., 2009), weight and height were also included to determine Body Mass Index (BMI).

The second section collected information on food items, based on the Food Choice Questionnaire (FCHQ) (Stephoe et al., 1995), with 11 variables: Place of purchase of foods, Weight control, Sensorial aspects, Attitude towards natural/ industrial contents, Health care, Economic aspects, Environmental and animal welfare sensitivity, Social sensitivity, Convenience, and Culinary identity. Answers were recorded through a unipolar scale of five points of the Likert type, ranging from 1 = never to 5 = always. Each variable has three items, for a total of 33.

A multivariate factor analysis was performed to identify the relationships among the items of the Food Choice Questionnaire (Stephoe et al., 1995, Fotopoulos et al., 2009). A Varimax orthogonal rotation was used to ease the interpretation of the obtained factors (Field, 2013).

Obtained factor loads were used in a hierarchical cluster analysis in order to identify food consumer groups (Stephoe et al., 1995; Fotopoulos et al., 2009). Non-parametric Kruskal-Wallis and Mann-Whitney tests were performed to identify statistical differences ( $P < 0.05$ ) among groups and for the socioeconomic characteristics.

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#### THEORETICAL FRAMEWORK AND ORGANISING CONCEPTS

The theoretical frame of the work is Sociology of food.

#### RESULTS

Results of factor analysis produced ten factors that explain an accumulated variance of 61.78%. Factors were named after the items that are part of each one.

1. *Care for Weight and Health*. The items that build up this factor are related to the search for foods low in calories, low in fat, and that help for weight control, as well as by the interest in reading the nutritional information; 2. *Social sensitivity*. Composed by the search for Mexican food with a local origin, interest in buying in open air and farmers' weekly markets as well as buying directly from farmers; 3. *Practicality*. Consisting of aspects related to foods easily found in markets and shops located near the house or workplace; 4. *Economic aspects*. It is noteworthy that the factor related to the economic aspects, is not the most important and falls to the fourth place. Nonetheless, it reflects the care for food prices that lead to the search of low price products and a good quality/price relationship; 5. *Not industrialised*, named to, which indicates a positive relationship between the items "I avoid buying in supermarkets" and "I avoid buying packaged foods". Usually, it is in supermarkets where industrialised foods are mainly sold; 6. *Hedonism* concentrates the aspects related with taste and smell of foods, as well as the purchase of products that look pleasant; 7 and 9. *Traditionality in food*, are these factors linked to. The first one avoids the consumption (whether in a restaurant or at home) of international fast food, which was named Traditionality A. The factor that favours the consumption of traditional Mexican food in the street was named Traditionality B. 8. *Familiarity* is related to daily life and practicality in preparing foods, that is dishes that are repeated because they are easy to prepare; and 10. *No sugar*; that indicates the consumption of foods that contain sugar is avoided.

Cluster analysis identified four groups named as: Traditional, Healthy, Conscious, and Careless. The four groups presented highly significant statistical differences ( $P < 0.001$ ) in relation to the 10 factors analysed. The Traditional and the Conscious groups are the most similar but they showed statistical differences ( $P < 0.001$ ) between them in respect to their attitude towards weight control and health. The Healthy group was totally different from the Traditional and Conscious groups in respect to the 10 factors analysed.

The Careless group, although sharing some aspects to the other three groups, was the cluster that presented the lowest score for the Care for Weight and Health factors, Social Sensitivity, and No Sugar. In relation to the Economic Aspects, the Careless group presented a higher score than the Healthy cluster, but similar to the Traditional and Conscious groups.

In order to have a better idea of the characteristics of each group, the variable Sensitivity

towards the Environment and Animal Welfare was added in spite of the fact that those items were not considered by the PCA. It enabled the naming of the groups and to define their characteristics.

There were differences among groups in relation to the variables age, marital status, and education. In terms of sex distribution, the four groups are different, but the Careless group has a larger proportion of males and young people. The variables for Occupation and Body Mass Index were not different among groups.

#### CONCLUSIONS

Choices in food consumption constitute a truly sign system. That is, they constitute a functional unit in a communication structure that surpasses the conscience of actors in the presence of a single word or verbal dialogue. Therefore, they have to be read or given a sense (what do they produce) and a significance (what do they say) (Alonso, 2005), in order to analyse what is being expressed during eating (Espeitx, 1996). In this work, Mexican consumers reflect a certain loyalty to flavours related to traditional cuisine, and in general, being less concerned with aspects related to their health and nutrition and much less sensitive to animal welfare and products that are friendly to the environment.

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