



# 1. INTRODUCTION

In this study, commissioned by the Catalan Food Safety Agency (Agencia Catalana de la Seguridad Alimentaria) to investigators of ANSOAP (company specialised in social analysis), an in-depth approximation to the behaviours of the immigrants living in Catalonia towards the food safety has been carried out. After the execution of the study *Exploración de las percepciones sociales sobre la seguridad alimentaria en Cataluña (2007)* (Exploring of the social perceptions of the food health in Catalonia, 2007), in which the perceptions, assessment and practices of the Catalan people in this field were pinpointed, we now think about which is the situation amongst the new citizens: people born in other countries, with an education, beliefs and acquired habits attained in a different social environment.

In order to answer this question, an investigation concerning the foreigners of African, Asian and Latin American origin has been carried out. The food safety analysis has been tackled, putting it in the context of its general practices concerning food, taking as a reference nine different origins: Morocco, Senegal, Gambia, China, the Philippines, Pakistan, Ecuador, Peru and Colombia. In this way, a qualitative study, based on the exam of 90 homes fairly distributed amongst the different origins, has been developed. The information of each home has been collected by means of an interview with the person in charge of the food/diet or with those members that work in premises in which food is served.



## 2. BASIC CHARACTERISTICS OF THE DIET OF THE STUDIED GROUPS

The first thing to point out is the heterogeneity of the feeding styles of the different populations studied. This is due, partly, to the remarkable differences of the food cultures of these communities, but also to the circumstances of the immigration and to the social and demographic profile of each individual: so, the immigration in certain groups is mainly masculine, whilst in others it is mainly composed by women or families. These differences and others influence on the main home structures of the different groups, on the organization of the housework, on the available economic resources or on the cooking ability amongst the members of that home. Although it must be said that in each group there is a great diversity of situations generated by the differences in the migratory routes and projects, we can speak about the shared characteristics and tendencies, as it will be explained below.

## 2.1. Organization of the housework

We can see that, in the homes inhabited by families, the duties related to the food/diet (buying, cooking, kitchen cleaning, etc.) are mainly carried out by women, whilst the rest of the members participate in minor tasks related with the acquisition of the food. When the woman is the only one that carries out the housework, she becomes the sole person in charge, and this is normally observed in the Moroccan and the Pakistani community, whilst in the one-parent families the same situation is observed and it implies a great overload of duties for the woman in charge. On the other side, in the multipersonal homes made up by lonely men not related between them, there are, mainly, two modalities of domestic organization: The first one consists of every member occupying himself of buying and cooking his own food and cleaning the kitchen and his cutlery, whilst in the second one, these responsibilities are shared by all the members, and rotary turns are established.

## 2.2. Culinary ability

In this sense, the contrasts are wide. An important part of the analyzed women were in charge of the feeding in their home country, so they already had a good culinary competence, and that favours that in many homes consisting of a family, the person in charge of the housework was responsible for these duties before their arrival. However, other women, mainly young women, were not in charge of the feeding/diet at home and have acquired this responsibility after their arrival in Catalonia. Due to this, in this group there is a lack of knowledge of the food safety procedures recommended in the domestic culinary field. This situation is seen mainly, although not exclusively, amongst the Latin American women. In these cases, the abilities are acquired by means of the circle of contacts (relatives, friends, contractors) established in the destination country and of the premises where they buy products. The level of competency of men living alone is even lower, especially those coming from Pakistan, Senegal and Gambia or Morocco. During their learning, the telephone calls to their home country, the initial help by their flatmates and the daily experience have gained prominence, with all the lack of knowledge that it implies.



## 2.3. Eating guidelines

We will present, briefly, which feedstuffs that are to be cooked are still maintained with respect to the home country and which are modified more readily.

- a) **Meat:** The consumption of meat is regular in all the studied groups. The most usual way is in the form of stews, with vegetables and potatoes, and frequently rice, but the consumption of fried or grilled meat tends to be acquired or increased after the immigration. Chicken is the most frequently consumed meat, and pork also has an important role in the non-Muslim groups. With regard to the cooking preferences, generally speaking, well cooked meat is favoured, whilst the consumption of raw or rare meat is infrequent.
- b) **Fish:** The level of consumption is, generally speaking, low, due to different reasons: limited economic resources, lack of habit in their home country and lack of culinary competence.
- c) **Vegetables and pulses:** Their consumption is low, especially amongst men living alone or men that share a flat, partly due to the lack of knowledge of how to cook them. In the specific case of the pulses, in some groups we see a strong decrease in their consumption with respect to the habits in their home country.
- d) **Cereals:** The most consumed cereal amongst the majority of the studied communities is rice. Only the Moroccan community has rice as its main cereal. Although there is an important decrease with respect to the home country, the cooking and consumption of rice is frequently a daily practice in several of the groups: Latin Americans, Chinese, Pakistanis, Filipinos, Senegalese and Gambians. On the other side, the role of maize, relevant in part of the Latin American food cultures, has a secondary presence. With respect to bread, there is a moderate consumption amongst Latin American, unlike Moroccans and Pakistanis, with a higher consumption. Finally, millet, a cereal typical amongst the Senegalese and the Gambian community, is relegated to a limited consumption after the immigration, due to a higher difficulty with respect to their supply and to the new food supply. We must also pinpoint that pasta is not frequently consumed, except in the case of the Chinese community.
- e) **Precooked products:** Their consumption is low. Only frozen potatoes for frying are prominently consumed by Latin American, Moroccans and Senegambians.
- f) **Milk and dairy products:** In the case of the dairy products, its increase after the immigration is a characteristic shared by all the groups, because they have access to a more varied offer at a lower price than in their home country. Milk has, on the other side, a similar consumption, although very varied depending on the individuals and the groups.



## 2.4. Changes in the daily and in the festive days food consumption

The main tendency with respect to the daily and the festive days food consumption lays in the higher amount of time dedicated, in the second case, to the cooking of “typical” dishes, because there is more time to prepare them. Even so, many individuals have a strong tendency to preserve the feeding habits of their home country even in their daily diet. It must be highlighted that those that have arrived in Catalonia at a younger age find easier to alternate between their original habits and those typical of our society, especially if they have gone to school and they have eaten there. They are also the main characters in the introduction of local dishes that were not part of the domestic feeding habits, in their home. However, an important element is that, whatever the degree of permanence of the peculiar domestic feeding guidelines, or even if there has been a good adaptation to the “autoctonous” guidelines, the feeling of homesickness is intense and persistent in all cases.



### 3. FOOD SAFETY AT HOME

## 3.1. Previous considerations

In this sphere we must distinguish between four groups with respect to knowledge and practices observed:

- a) **Declarative knowledge:** the information that the informants declare they have received with respect to the food safety and in which we also think, in first instance, when we make reference to the risks related to the food handling. It is common knowledge, but not necessarily incorporated to the daily practices.
- b) **Internalized knowledge:** unlike the previous, we make reference to the knowledge applied to the practices.
- c) **Practices not based in knowledge:** it is a group of routine practices by part of the individuals, without a conscious and explicit learning about its convenience. These can coincide, for instance, with preferences as, for instance, cooking well the meat “so it does not bleed”, so they do not depend on the knowledge about the risks that a certain way of handling implies.
- d) **Wrong practices:** they are practices in which, due to a lack of information or knowledge, there are risks from the food safety viewpoint.

Once these points have been set out, some common characteristics to the studied groups relative to the food safety (the rest of the Catalanian population shares them) must be pointed out:

- **A medium-low level of theoretical knowledge about food safety.** Those that have a good information are those that have received a specific training due to professional reasons (catering trade workers, shops, etc.).
- **Unequal practical knowledge about food safety, according to certain socio-demographic variables.** So, women are the ones that have more knowledge, and young people have less knowledge than the adults. The emancipation or the higher education in the health or nutrition field also favours the acquisition of knowledge but, in any case, the family appears as a sphere for the transmission of key knowledge, which gives relevance to the variable structure of the home as a factor that explains the differences in the practices associated to the food safety.
- **Unequal willingness to dedicate time to the duties related to the food, according to key variables:** women have a better willingness, but the willingness is reduced in those women that have a job. Being underage or not living with one's family also implies less dedication.

Others, on the other hand, are more particular:

- **The transition, due to the immigration, from guidelines that are more focused on fresh products to others in which the processed products occupy a prominent place.**
- **A lower previous exposure of the immigrants to the awareness related to feeding, in general, and to food safety, in particular.**
- **A permanent and considerable flow of products from the home country to ours.**
- **Specific guidelines in the organization of the housework,** derived from the great number of homes shared by nuclear families not related between them.



## 3.2. The preservation of food

The main spaces for the preservation of food in the homes of immigrants are, in the first place, cupboards, drawers and other pieces of furniture in which food is kept at room temperature. The products more frequently preserved in this way are the different kinds of flours, fruit, potatoes and canned/bottled/packed products. In the case of the individuals that consume more rice, it is frequent that they buy big packages (between 5 and 25 kg), and that can mean their preservation in sacks in the kitchen, sheltered patios or other places.

The fridge is used for the preservation of fresh products (meat, fish, vegetables, etc.) and packed/canned/bottled products that have been opened (for instance milk, juices, etc.). The main part of the informers, but not all of them, also kept fresh eggs in the fridge: the lack of space, especially in the homes in which different families share the fridges, is one of the alleged reasons, as well as the considerations that they do not need refrigeration. With respect to the cooked dishes, its preservation inside the fridge is subject to a certain diversity of situations. The resource of keeping them well covered is unequal. Those that follow this practice think that it must be done to avoid something falling inside, to “avoid them getting dirty” or that the aromas get mixed, without the worries concerning the explicit presence of a possible crossed contamination nor the need to keep the raw and the cooked products apart. This practice is, thus, not based in knowledge. On the other hand, the interviewed women normally preserve the rests of food in a different container (generally made of glass), but in a much lower proportion than men.

With respect to the distribution of the products inside the fridge, it varies according to the structure of the home. In the case of the single-family homes, the products are ordered quite uniformly, respecting the space intended for each kind of product (the eggs in their space, the vegetable in the drawers, etc.). On the other side, in the shared homes, the space is distributed according to the number of persons that have to use it. In those homes where there is a sublease, the main owner normally occupies the ampler spaces, whilst the rest have smaller and more concentrated spaces that make difficult the recommended order from the food safety viewpoint. On the other side, in those homes shared by men, the classification criteria are scarce and the products are left where there is space.

With respect to freezing, it is a practice that increases notably after the immigration, from the point of view of the buying of frozen products and also the freezing of fresh products. It is considered a good way to reduce the expense in food and the frequency of the supply. Meat is the main product in which this practice is carried out because, if the intention is keeping it at home for more than 24 or 48 hours, it is always frozen, and it is also bought in big amounts in order to eat it along several weeks. We can also see that some of the interviewed people clean it before introducing it in freezing bags and that some of them clean it again after taking it out from the freezer in order to cook it. In the case of vegetables, buying them frozen is a growing practice, and the same happens with fish: these products are rarely bought fresh in order to freeze them after. The preference for fresh fish is clear, and with respect to frozen precooked dishes, they are not much consumed in all of the communities.

With respect to the freezing practices, the basic knowledge is quite widespread, at least at the declarative level. The frozen products have always been wrapped previously in a freezing bag or with clingfilm. A minority uses the same papers used by the seller. Generally, it is a shared idea that food previously frozen must not be frozen again: the evaluation with respect to this is that they get spoilt or that they lose their organoleptic quality, although some people do not offer any explanation. Some women interviewed have internalized this practice after their immigration due to their carrying out of the housework, whilst only a small part is unaware of this recommendation, and this favours that they include refreezing amongst their food handling practices. With respect to the methods used for thawing, the practices are not very correct. The way in which thawing is performed is at room temperature, directly on the kitchen marble, in a covered or uncovered dish or even in the same wrapping used for freezing it. The use of the microwave oven for thawing is not common, as well as the thawing of the product taking it from the freezer to the fridge. This is not only explained due to the lack of knowledge; there are also cases in which it is recognized that this is the most correct practice, but it is alleged that it is not carried out due to the lack of time, convenience or speed. It is also frequent to thaw with hot water (Senegalese and Gambian communities, especially), cold or tepid water (frequent

amongst the Latin American communities, although not exclusively) or at low heat. No special precautions are taken in order to protect the frozen products when they are taken from the shop to home, neither the freezing date is written on the bags used for freezing. In spite of not writing the freezing date, it is a shared idea that products like meat get spoilt if they remain for a long time in the freezer so, overall, when it is perceived that a product has remained for a long time in the freezer, it is rejected. The Chinese, Pakistanis and Filipinos declare a higher turnover than the Latinos, and they do not normally keep the products for more than two weeks. The Moroccans have declared lower periods (a week-ten days), and they are also the ones that less freeze products. An exception with respect to the life of the product in the freezer are those products brought from the home country that are considered as key for maintaining their own feeding guidelines: we are talking of aromatic herbs, spices, some vegetables and, more scarcely, cheeses. Freezing cheese is a widely used practice amongst Latin Americans and Moroccans, but not amongst the rest of the communities.

Regarding the preservation of cooked dishes, the preferences are clear with respect to eating immediately what has been prepared. Even so, in the case of products like rice, that are consumed in great amounts, they are prepared in quantities that exceed those that will be consumed, so a part of them will be preserved in order to be consumed in another moment. It is declared that it is mainly kept outside the fridge if it is to be eaten after a few hours, as when it is prepared for lunch and it is left for dinner, but also when it is prepared at night and it is eaten the next day. If more than a day passes, or during the summer, it is normally kept in the fridge. After that, it is reheated in a frying pan, in the oven or in the microwave oven. In the case of pasta, more frequently eaten by children, it is considered necessary to eat it just after being cooked, or it is kept adequately in the fridge for 24-48 hours. Salads are also prepared for their immediate consumption, as well as stews and soups: only the Chinese and the Latin American frequently choose to prepare broth and then they keep it for days, whereas if there is some stew remaining it is normally kept in the fridge for 24-48 hours. It is perceived that the cooked meats can be kept in the fridge, whereas fish is considered more delicate. It must also be pointed out that the practice of cooking certain recipes in advance and keeping them already cooked in order to eat them during the following days is frequent in those women that work out of their home, and they are consumed by their children or partner.

Some food preserving complementary practices observed in the studied communities are the prolongation of the keeping properties of fresh meat adding lemon juice or vinegar, after cleaning it with water, that are frequently mentioned by Latin American informers, as well as the drying of meat at home and the preservation of meat and fish (especially cebiche) by means of marinades (this is a frequent resort in the Chinese kitchen, but seldom used in practice).



### 3.3. Precaution measures during the culinary preparation

As well as in the case of the autoctonous population, the idea that hands must be washed when food is going to be prepared is assumed and shared by all the communities, as well as the notion that the kitchen must be kept clean, at least daily or every time that it is used. Nevertheless, in practice this is not always done due to different reasons: whilst in the single family homes this knowledge is remarkable, in the shared homes the hygienic practices of other members is not always satisfactory, and frequently, the most cautious members end up developing particular practices with respect to the used utensils. In the homes inhabited by families there is also, generally, a higher variety of products for cleaning the different parts of the kitchen and its utensils.

We have pointed out that we have detected the practice of cleaning the meat before freezing it, but also before introducing it in the fridge: the distrust towards the hygienic practices in the home countries seems to be the cause in most of the cases. The most frequently cleaned is chicken, which is bought whole and

quartered after, but also pork, especially in the case of Latin Americans, Chinese and Filipinos. In some cases, lemon juice and salt are added when cleaning it, in order to modify the smell of raw meat. With respect to fruit and vegetables, the convenience of cleaning them is considered common knowledge. In the Chinese community, the convenience of peeling the fruit is underlined or, if it is not done, it is cleaned well, even with washing-up liquid. The same insistence is generally seen with respect to the need of cleaning well the vegetables, adding bleach, salt or vinegar or rinsing them with boiling water. Lastly, the practice of cleaning the rice before cooking it seems common, although part of the individuals say that they have abandoned this practice.

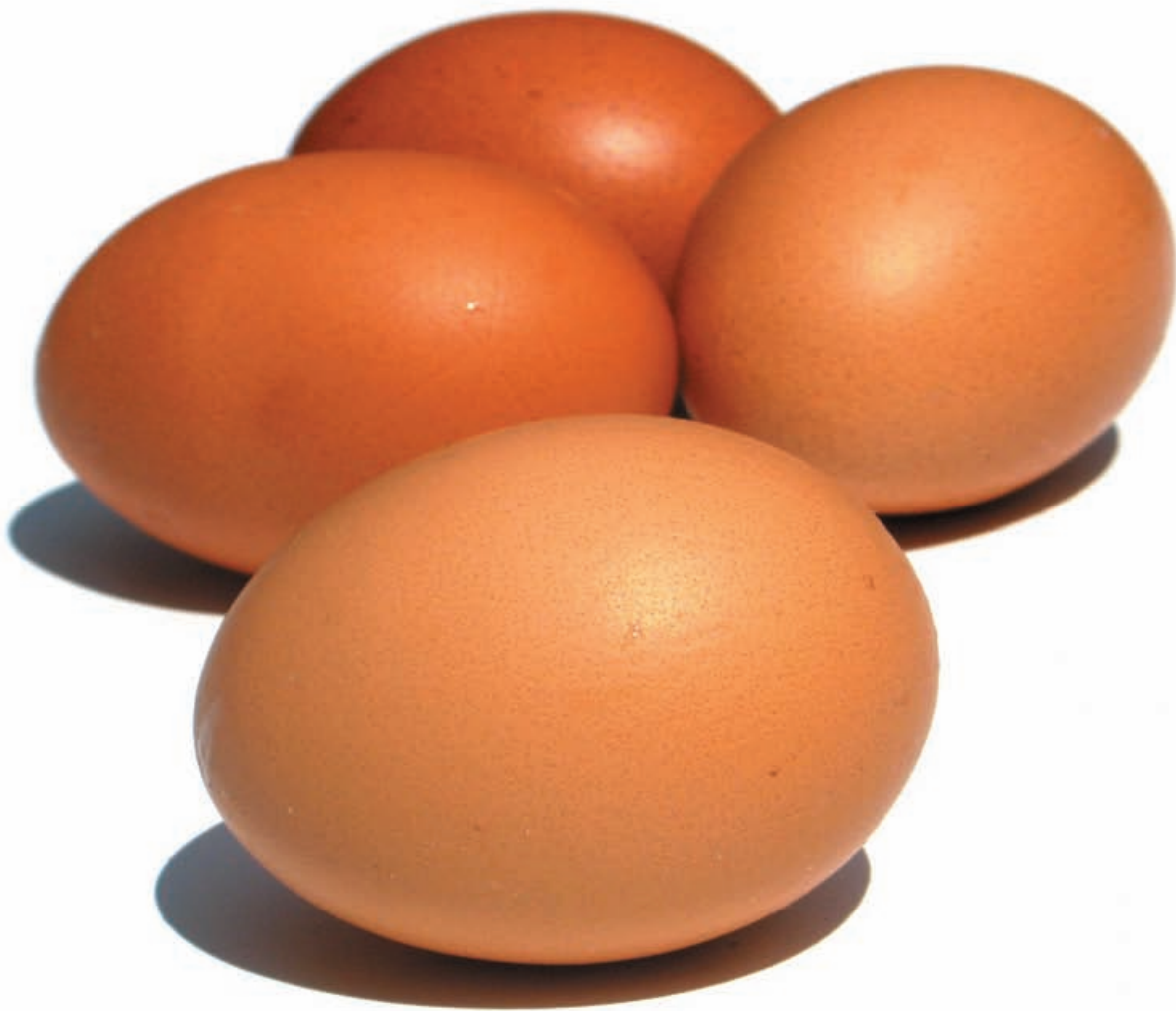
With respect to the cleaning of the fridge, it is more frequent in the single family homes (weekly), whilst in those homes where many families or only men live, the frequency is much lower. Regarding the cleaning of the surfaces for cutting the meat, the majority of the interviewed people prefer the wooden chopping table, although in some cases it is cut directly on the marble surface. Generally, it is considered necessary to maintain them always clean and to clean them with washing-up liquid. It is also considered necessary to replace the tea towels frequently.

Lastly, a final aspect to be highlighted has to do with the detection of a certain lack of knowledge regarding the need to reheat well the previously cooked dishes, and this favours that this erroneous practice is carried out with a certain frequency.

## 3.4. The handling of fragile foods

The most relevant food in this field are eggs, whose consumption is quite high amongst the Latin American communities, moderate in the case of the Pakistanis, the Moroccans, the Chinese and the Filipinos, and very low in the case of Senegalese and Gambians. The attention put on the label and to its “best before date” is generally low, but if it is ascertained that it has been exceeded, they are generally rejected. Also, in general, it is considered that there is a high turnover of this product at home, so there are no perceived dangers with respect to this. Regarding the place where they are kept, the majority say that they keep them in the fridge, but a good part of them leave them outside: the main declarations in this sense come from Peruvian women. Regarding the practice of cleaning them before consuming them, its frequency is low, but a small percentage cleans them with water and, in some cases, with a scourer before using them. Amongst the women that come from rural areas or that have lived in farms, this practice is more common. With respect to the use of raw eggs, it is not frequent: it has been declared that they are used in sauces (amongst the Filipinos) or for preparing milk shakes (amongst the Latin Americans and the Pakistanis). The preparing of mayonnaise is not frequent, and those who prepare it declare that they consume it immediately, otherwise they throw it away. Regarding the cooked eggs, the consumption of soft boiled eggs is not infrequent amongst Latin Americans and Moroccans, nor that of omelettes amongst a great part of the communities. In this last case, the preference for more or less done omelettes varies depending on the individual. On the other hand, in the case of fried eggs, it is frequently stated that the yolks are normally left rare. Other recipes in which eggs are used are soups (some Chinese informers throw the raw egg in the saucepan, where it is cooked due to its contact with the boiling liquid), scrambled eggs or as ingredients of many dishes. Regarding the surface on where the eggs are broken, not many precautions are taken: they are broken on the dish in which they will be beaten or on the frying pan, if they are to be fried or used to make an omelette. If, during the process, a piece of the shell falls, it is normally removed and the egg is consumed. The separation of the egg white and the yolk is almost always done breaking the egg in two and passing the yolk from one half of the shell to the other one. Once cooked, they are normally consumed immediately, but if some remain, they are kept in the fridge or at room temperature.

The criteria used for rejecting an egg are the integrity of the shell and that the colour is not correct or there is a bad smell when it is broken. The knowledge about salmonellosis, although with exceptions, is generally scarce: frequently it is not known what it is and there are no specific references relative to risks related to the eggs and white meats. The perception of the risk when using eggs is moderate, in general terms



For a part of the interviewed people it is not one of the most fragile products, and higher risks are related to milk and dairy products, partly due to the habit of buying raw milk in their home country. In this sense, smell, colour and flavour are the key indicators for identifying the spoilt milk, whilst yoghurt is the product in which the “best before date” is looked up more frequently. Nevertheless, in the case of cheese, it has been detected a circulation of home-made cheeses between the informers, and this fact does not make food safety precautions arise, even when part of the informers suppose that they may be produced with raw milk. Despite that, in the case of meat, its texture, smell and flavour are also considered as reliable indicators of its state, whilst it is recurrently observed that the best way to avoid risks in the case of meat is to avoid that it is not well cooked. The consideration that fish must be very fresh and has to be consumed quickly is also generalized. Anyway, Anisakis is not well known, but consuming fresh fish regularly normally determines that it is known. Lastly, vegetables arise few concerns and they are normally rejected when it is considered that they are “spoilt”.

## 3.5. Perceptions relative to the food safety

Amongst the predominant perceptions with respect to the food safety in Catalonia we can highlight some key elements. The first one is that fresh products, as fruit, vegetables, meat and fish are fresher and more tasty in their place of origin. On the contrary, our society perceives more thorough food safety controls and that the hygienic conditions during the handling are also better. Also, after the immigration, there is a development of new perceptions relative to the food in the home country, which is considered less healthy than before, and this is followed by favourable considerations, from a healthy viewpoint, towards the “autoctonous” cooking, although it is not considered so “good”. This is frequent in Latin American women that have less language barriers for having access to nutritional information, to follow television programs



## 4. THE DOMESTIC SUPPLY: BUYING PRACTICES AND NEW SHOPS

or for reading magazines that include recipes and advices relative to the diet. Even so, a part of the informers has a negative opinion of the Catalanian food guidelines, pointing out that, amongst other things, that little is eaten or that there is an abuse of precooked dishes.

## 4.1. Structuring of the buying strategies

Firstly, it must be pointed out that, although the food/diet represents an important part of the domestic budget, it is restricted in those families that send money to their family in their home country or in the case of families with scarce economic resources. Another aspect to bear in mind and already explained is that there are differences in the frequency of doing the shopping, but these are not so dependent on the community (nationality) as other variables: the domestic structure, age and whether they have a job or not. With respect to the election of the shops where food is bought, the prices play a key role. Generally speaking, packed products are bought in supermarkets, in the chains of supermarkets with cheaper prices. Although sometimes some specific chains are attributed a higher quality, there is a tendency to diversify the places where food is bought. The closeness to the shop has a great influence with respect to fruit and vegetables, and they are frequently bought in specialized shops (greengroceries). The ethnic shops have a marginal importance when buying food, with the exception of the halal butcheries. This assumes that the Muslim community uses these shops for buying meat, whilst in the case of the rest of the communities there is variety of solutions: from supermarkets to specialized shops (butcheries).

The buying of ethnic products has different difficulties depending on the community. Halal butcheries favour the arrival of a great variety of Moroccan products in the same way as the growing presence of shops specialized in Latin American products. On the contrary, Filipinos and Chinese perceive a greater difficulty for finding those products that they consider key products, especially different kinds of fruits and vegetables, or at least with reasonable prices.

On the other hand, in the most numerous communities, the circulation of products generated by the immigrants between their home country and their destination is normally important. A part of them is bought there, and another part is prepared by relatives or given by them as a present. These presents do not only reduce the shortage of ethnic products in Catalonia, but they also contribute to the maintenance of bonds with friends and family. The products that are more easily incorporated into this flow are those especially valued whose equivalents can be found in our society, but whose quality in their place of origin is considered much better: Colombian coffee, Moroccan olive oil, Latin American cheeses, Chinese or Pakistani sweets or pasta, amongst others. In general, those products that allow the cooking of original ethnic recipes are preferred: Chinese mushrooms, spices and seasonings from Morocco and Pakistan, chillies from Ecuador or Colombia, etc. In this sense, a product that normally causes incorrect transportation practices is cottage cheese, that can even be exposed to several thawing and freezing processes.

## 4.2. The ethnic shops

The ethnic shops are those retail shops managed by one or several foreigners that develop any economic activity in commercial premises. We have become interested in studying the different modalities of the ethnic shops that exist in the food field, and we have established the existence of five main typologies:

- a) **Small supermarkets not specialized in products for the foreign population:** They are shops that sell normal supermarket products, but they are focused on the proximity buying. They are detected in high urban density areas where they have replaced the space of the traditional shops. There is a tendency in the evolution of these shops because every time the introduction of ethnic products (foreign drinks,



Latin American cereals, flours, etc.) consumed by foreigners is more frequent. We can also differentiate between a part of them that is focused towards canned/packed/bottled products and another part that is focused towards fresh products.

- b) Small supermarkets in which there are products for the foreign population:** In this category the presence of foreign products is ample because in their vicinity there is an important amount of foreigners. In general, the focus is towards a certain kind of population. In general, they are focused on a certain kind of population (Moroccan, Latin American, Pakistani, etc.), but the varied ethnic origins in some quarters favours that they are frequently focused on different communities at the same time. The presence of ethnic products can be higher or lower, but it is always relevant, because in the last case we are talking of the ethnic products with a higher consumption by part of a certain community. Amongst the most frequently seen products we have fruits and vegetables (yuca, okra...), cereals and pulses (dry, toasted, ground), soft drinks and different precooked dishes. We can also differentiate between two subgroups of shops: those that do not process the product and those that do process them (i.e. they sell fresh meat or cooked products).
- c) Shops specialized in products consumed by foreigners:** In the case of this category a further step is taken, because these shops sell almost exclusively products consumed by foreigners, so they are shops almost exclusively focused on the foreign population. The nationality of the person in charge determines frequently the culinary culture of the sold products: we can say that the shop has a clear cultural dimension, so we can tell the difference between shops specialized in Latin American, Chinese or Muslim countries products, differentiating also between the shops addressed to Maghribian or Subsaharian people. In all of them, the main products are those canned/packed/bottled, but in the case of the Latin American shops, what differentiates them is the presence of fresh products not common in the other categories of shops.
- d) Specialized shops in markets:** They are shops specialized in the marketing of products consumed by foreigner populations and we can normally find them in medium and big cities. They are a kind of shop especially present in markets frequented by foreigners, as the Mercat de la Boqueria, in Barcelona.
- e) Bars and restaurants:** In this classification we must include bars and restaurants, and amongst them we must differentiate between those with a “conventional” offer and those characterized for preparing recipes that are peculiar of foreign populations. In the case of bars, depending on the home country of the person in charge, we see differences in the direction: if the Chinese people that become owners of a bar tend to maintain the previous foods, the Latin American make more notorious adaptations and they direct their bar more clearly to the Latin American population. In the case of the restaurants, the option of the ethnic identity is the main feature.



## 5. GENERAL RECOMMENDATIONS

In spite the low relevance of these premises for the foreigners with respect to the whole of their home supplies, we must highlight that they are directed to the satisfaction of four important demands: they satisfy certain shopping demands (e.g. halal meat); they allow access to products that are difficult to buy in our society; they are, in spite of their prices, the main point for the supplying of certain products (e.g. rice), and they frequently become places to buy that are better adapted, with respect to some needs, than the normal supermarkets, because supermarkets with foreign products have all the interesting products for a foreign consumer. Also, going to ethnic restaurants eases eating out of home when there are festivities and celebrations.

In face of the observations made, the first thing to highlight is that, in relation to the practices in which a high declarative knowledge is seen, the general informative campaigns seem unnecessary, because the information has already arrived to the majority of the population and, in any case, specific information must be addressed to those groups at a higher risk of not translating the knowledge into practices, as well as remembering, periodically, to the whole of the population, the risks involved if they do not follow them. The well internalized knowledge in the form of practices does not require an urgent intervention either, but to repeat periodically general recommendations to all the population (immigrants and locals). The awareness campaigns seem more necessary in relation to those practices already carried out but not based in knowledge, in order to reinforce them, whilst the erroneous practices are the ones that need more intervention measures in order to improve them.

We must ask ourselves which are the best ways to make interventions. In this sense, there are certain limitations and difficulties already present in the communities:

- Linguistic difficulties.
- Access limitations or lack of interest for the “autoctonous” media.
- Lack of time and work excess in the families.
- Not enough perception of the relevance with respect to the food safety aspects.
- Tendency to the “withdrawal” inside their own community (especially in the case of illegal immigrants, with economic difficulties).
- Existence of differences between the recommended and the learnt practices.

However, in front of these elements, there other more favourable ones that prove, at the same time, the most adequate ways of intervention:

- Significant percent of jobs in a critical sector (e.g. catering trade).
- Existence of dense social networks in some communities that facilitate personal communication.
- Existence, in some communities, of a significant social life, with very active women, as well as professional associations.
- Strong links of the sons/daughters with the Catalanian society, which facilitates the transmission of information.
- Frequent contact with sanitary workers and cultural mediators that can be key in the transmission of information.
- Existence of a high number of initiatives developed by associations and public organizations that give place to favourable contexts for the transmission of information (physical activities workshops, learning activities, etc.).
- Existence of their own media, used by different communities.
- Intrinsic relevance for all the communities of the messages relative to food safety if they are related to health.