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Abstract

This chapter analyses the evolution of inequalities in following a healthy diet during the Great Recession of 2008. Using data from the National Health Surveys (from Spain's statistical service, INE), we compare data from 2006 and 2011–12, with paradoxical results. Firstly, it is observed that, in order to adjust economic resources to the shopping basket, the population changes the frequency in consuming certain foods, but does not modify the diet. This shows the strength and deeply rooted nature of Spain's eating habits. Secondly, we find that the population with fewer resources is closer to the dietary recommendations, as the restrictions on consumption caused by the economic recession are in line with the restrictions suggested for healthy eating. With these results, we consider how inequalities in food consumption are expressed today in societies, such as Spain, with a food culture and access to food that in within reach for the majority of the population.

Keywords: food inequalities, following a healthy diet, food and the economic crisis

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Introduction

The concept of social inequality relates to the unequal distribution of opportunities for access to resources in different areas of life in society. In the area of food, despite industrialisation, urbanisation, and rising living standards, consumption has not yet evened out, as was confirmed by researchers at the end of the twentieth century. In many societies, social stratification factors such as gender, social class, age, ethnicity, or location remain sources of inequality in access to food resources and with respect to following a healthy diet (Grignon, 1999; Nielsen et al., 2014; Virtanen et al., 2015; Backholer et al., 2016; Venn and Strazdins, 2017).

To examine this issue in depth, we first need to define is what is meant by a healthy diet. In Spain, several studies have been carried out at the national level on dietary recommendations from the perspective of promoting healthy habits (Moreiras, Carbajal, and Perea, 1990; Serra-Majem, Aranceta, and Mataix, 1994; Mataix Verdú, 1996). All these studies have served to help develop a series of Dietary Guidelines (Sociedad Española de Nutrición Comunitaria, 2001; Aranceta, 2002; Dapcich et al., 2004; Baitrina et al., 2016; AESAN, 2020), which recommend a set of habits and patterns that could be considered healthy. They advocate, in summary, the daily consumption of fruit and vegetables (the trend is towards a generalised recommendation of 5 servings per day), including virgin olive oil in the diet (preferably raw), eating preferably wholegrain cereals to increase fibre intake, eating fish three times a week, and moderating the consumption of meat and animal fats. It is also recommended that people should take care of proper hydration, increase physical activity, and get adequate rest.

These guidelines have also been taken up in other countries, with their own proposals for dietary recommendations based on those of the FAO and WHO, with country-specific developments (FAO, WHO, 1996). More recently the concept of healthy eating has broadened towards sustainability, again following FAO and WHO guidelines (2020), and in line with the Sustainable Development Goals (SDGs). This reorientation has been reflected in multiple publications examining ways to assess current diets in order to bring about a shift towards sustainability (Bechthold et al, 2018; Hachem, Vanham and Moreno, 2020; Loken, 2020; Aldaya et al., 2021).

If we consider the most widely cited factors in the literature addressing dietary inequalities, the relationship between the socio-economic status of the individual or family and the following of a healthy diet has been confirmed by several studies. Social class, measured primarily by occupation, continues to produce differentiated patterns of food consumption between social classes (Fichler, 1995; Warde, 1997; Miqueleiz et al., 2014; Backholer et al., 2016). The same is true for another indicator of socio-economic position, income. It has been observed that middle- and high-income population groups follow a diet that is more in line with dietary guidelines for health, while people at lower income levels have a higher intake of high-calorie foods and their diet is less consistent with dietary recommendations (Murcott, 2002; Giskes et al., 2002; Wilson et al., 2014; Miqueleiz, 2014; Serra-Majem, and Castro-Quezada, 2014; Venn and Strazdins, 2017).

Another indicator of social position that has been closely related to food inequalities is education. Research into this variable indicates that more educated individuals consume a greater variety of produce, and of fruit and vegetables, as well as fewer processed and high-calorie foods (Ball et al.; 2006; Wilson et al., 2014; Miqueleiz et al., 2014). Analysts explain these results by surmising, not without some debate, that this population group has more nutritional knowledge and a better understanding of dietary recommendations.

Difficulties in eating a healthy diet do not stem only from socio-economic position; other stratification variables such as age and gender are also a source of inequality. With regard to age groups, young people are least likely to follow a healthy diet, while at the same time they have a higher consumption of fast food (González et al., 2002; Kestens and Daniel, 2010; Virtanen et al., 2015). Women, on the other hand, find it much more difficult to make dietary choices, as they almost always subordinate their own preferences to those of their partners and children (Charles and Kerr, 1995; Lupton, 2000; Wright, Maher and Tanner, 2015). In addition, the importance of a child's environment, and therefore consideration of the variables related to household composition, is of increasing importance in the study of dietary habits and especially for understanding childhood obesity and its determinants (Mölenberg et al, 2021).

Regarding ethnicity, a large number of studies have documented the importance of this factor in dietary inequalities and health status (Smith, Kelly, and Nazroo, 2011; Nielsen et al., 2014). From both a qualitative and quantitative perspective, research highlights, in particular, the relationship between food, culture, and health. It is widely accepted by experts in the field that arriving in a country with a different food culture leads to changes in individuals' diets, which do not necessarily result in the acquisition of healthier patterns than those of the country of origin. The literature suggests a relationship between migration and food insecurity, although the factors that explain it are diverse, as the dietary changes involved are not only associated with the lower income of these groups (Maynard et al, 2019).

And how does location, another fundamental social stratification factor, play a role in creating food inequalities? Here we find the difficulties in gaining access to foodstuffs in the areas labelled "food deserts", referring to those regions that are characterised by a scarcity or absence of shops, meaning that their population has limited resources available to address their daily food needs (Ramos Truchero, 2015). Rural and semi-rural areas are considered the areas where it is difficult to find food stores, with a relatively lower density of food providers per inhabitant and a lower or non-existent number of supermarkets, which tend to be located far from the rural population (Cummins and Macintyre, 1999:551; Mackett and Thoreau, 2015; Maguire, Burgoine, and Monsivais, 2015). But location has also been explored in considering obesogenic situations in cities, with neighbourhood as a factor in social inequality, insofar as the resources available to citizens (food shops, restaurants, green spaces, sports facilities, etc.) condition the eating and sports practices of residents in these urban areas. These studies highlight the importance of environmental variables in conditioning consumption habits (Burgoine et al, 2016).

The description of the background and current state of the research outlined above highlights the importance of economic, social, environmental, and cultural factors in explaining the origins of food inequality and its effects. Although it is not possible to speak definitively about the determinants, it is clear that there are at-risk groups, which are most affected by the problems connected with poor nutrition. However, the ways in which inequality arises, especially in terms of access to and frequency of consumption of the foods most closely associated with a healthy diet, are still not sufficiently understood.

The aim of this paper, therefore, is to study the factors that relate socio-economic position to the following of healthy diet, in order to reveal food inequalities. We start from the hypothesis that malnutrition is affecting the social groups that are worst placed on the social scale, hence we focus our interest on a specific historical period, the Great Recession of 2008, which had serious social and economic effects on the Spanish population (Bentolila et al, 2010; Schoon and Bynner, 2019; Spijker, 2020).

As is well known, the economic crisis affected households, with a decline in average incomes and forced a redistribution of spending, particularly in those households most affected by unemployment. This effect of the Great Recession was seen both in Spain (CES, 2016; Bassols and Castelló, 2016) and in the rest of Europe (Brakman, Garretsen, and Van Marrewijk, 2015). This crisis had an unequal effect on the labour market, in accordance with variables such as age, education, and gender, and it focused the spotlight on the most vulnerable profiles: young people, women, and immigrants (Schoon and Bynner, 2019; Anghel, De la Riva, and Lacuesta, 2014; Bassols and Castelló, 2016).

Food, as a basic consumer good, was also affected. Economically weaker households spend a larger proportion of their budget on food, giving rise to a "crisis" effect that was not seen among other households (Gutiérrez and Díaz Méndez, 2015; Gracia Arnaiz, 2014). The diet's composition also suffered, although not always in the same direction, as fruit and vegetable intake decreased, especially in high- and middle-income countries, but so did the consumption of fast food and sugary products (Macy, Chassin, and Presson, 2013; Bonaccio et al., 2016; Jenkins et al, 2021).

This period of economic crisis provides an excellent setting to examine whether economic hardship changes consumption patterns and whether it increases or decreases food inequalities. To achieve this objective, this paper is divided into several sections. Firstly, we present the data sources and variables that enable us to determine how far the Spanish population was in or out of line with the guidelines for healthy eating at two time periods, and to compare the two: 2006, before the crisis, and 2011, a year when the Great Recession was at its peak. Secondly, the results are presented, with information on the patterns that emerge regarding the frequency of the consumption of various food groups in these two reference years, and paying special attention to basic foods: fruit, vegetables, meat, and fish. It ends with conclusions that analyse the food inequalities detected.

Methodology

The data source used is the Spanish National Health Survey (ENS, Encuesta Nacional de Salud) conducted by the National Institute of Statistics (INE, Instituto Nacional de Estadística), and the target population is the adult population (16 and over). Data from the 2006 survey have been compared with those from the 2011–2012 survey in order to be able to analyse dietary inequalities during the period of economic crisis (INE, 2016; INE, 2012). These periods represent a period before the recession in 2008 and a period when the impact of the crisis was at its peak, placed by experts between 2011 and 2013, especially in terms of the effects on employment (Izquierdo, Jimeno Serrano, and Lacuesta, 2014; Schoon and Bynner, 2019).

We used the survey's question about the frequency of consumption of twelve types of food that appears in the two surveys of 2006 and 2011–12. The products are: fruit, meat, eggs, fish, pasta-rice-potatoes, bread, vegetables, pulses, cured, dairy products, sweets, and soft drinks. The frequencies of consumption offered in the questionnaire are: daily, three or more times a week (but not daily), once or twice a week, less than once a week, and never or hardly ever.

For each of these products, the difference between the frequency of their consumption in 2006 and 2011 was analysed. Subsequently, the four categories that have received most attention in the specialised literature were selected, as they are foods whose consumption can lead to greater social inequality (Dijkstra et al., 2014; Miqueleiz et al., 2014; Van Lenthe, Jansen, and Kamphuis, 2015; Skuland, 2015): fruit, meat, fish, and vegetables.

As variables which may be a source of inequality, we considered for analysis the socio-demographic variables related to a person selected at random from all the people living in a household: sex, age, size of household, marital status, employment status, and level of education. Household variables included the social class of the main earner and household income. Three indicators related to obesity and a healthy lifestyle were also added for the selected person: the Body Mass Index in one of three bands according to the World Health Organisation's classification (normal and low weight—BMI up to 24.9 kg/m^2; overweight—BMI 25 to 29.9 kg/m^2; obesity—BMI 30 and over); adherence to a diet; and physical exercise. With regard to BMI, it should be noted that these are self-reported measurements, with the biases that such reporting implies, as researchers note that height is overestimated and weight underestimated (Marrodan et al, 2013; González Zapata et al, 2008; Acevedo et al, 2014). Physical exercise, however, seems to be a crucial element in explaining obesity and in whether or not a healthy diet is followed (Brown and Roberts, 2011; Miqueleiz, 2014).

Results

Changes in the frequency of food consumption in the Spanish population

The first question posed in this study is whether a healthy diet is followed in Spain and the answer is not conclusive, as there are categories of food which most of the population eat with the recommended frequency (fruit, meat, bread, vegetables, pulses, dairy products, soft drinks) and other products which they do not (eggs, fish, pasta-rice-potatoes, sweets). With regard to changes in consumption patterns

for these foods, it cannot be said that the crisis moved Spaniards away from a healthy diet, but rather that some of the trends of the crisis years moved people closer to the recommendations (increased consumption of vegetables and pulses and decreased consumption of meat and sweets), while other trends showed a worsening of the diet (in particular with a decrease in the consumption of fruit, fish, dairy products, and pasta-rice-potatoes). These imbalances are not due to an absence of these foods from the diet but to a change away from the recommended frequency associated with healthy consumption. Table 10.1. shows the recommended frequency of consumption, as well as the change that occurred between the years under consideration.

<Insert Table 10.1 here> Frequency of consumption in the total population

Changes in the frequency of consumption of fruit, meat, fish, and vegetables with respect to the recommended levels.

The recommended consumption frequencies are taken from those given by the Spanish Society for Community Nutrition (SENC, Sociedad Española de Nutrición Comunitaria). In the case of fruit and vegetables, the recommended frequency is "daily consumption", and for meat and fish, it is "three or more times a week". In the respective tables for each product given below, we list only the variables that were found to be most significant in terms of the incidence of inequality.

As can be seen in Table 10.2, daily consumption of fruit was more common among women than men in 2006 and, in relation to age, people over 60 stood out as following the recommendations. With respect to marital status, married and widowed people ate more healthily than single, separated, or divorced people. Spaniards were also more likely to follow healthy dietary recommendations than foreigners, and those in higher occupational classes (managers and professionals) were more likely to follow the recommendations than the rest of the population. It is striking that people who were overweight or obese, as well as those on a diet and taking regular physical exercise, were the ones who followed the guidelines most closely. In contrast, young people, the unemployed, and students were the groups that were least in line with the recommendations.

<Insert Table 10.2 here> Proportion of people meeting the recommendations of daily fruit consumption

If we compare the results for 2006 with those for 2011–12 (Table 10.2), we detect that the frequency of fruit consumption fell in practically all social groups, and it was still young people and students who were least likely to follow the guidelines. It is also worth noting the increase in inequality in the case of the unemployed and unskilled workers, whose relative disadvantage in following the dietary recommendations increased.

If we refer to the recommendations regarding meat consumption (Table 10.3), the people who complied most closely with the recommended pattern (three or more times a week) were young people, married people, university students, Spaniards as opposed to foreigners, and those with higher incomes. Lower-educated and lower-income individuals, retirees, and dieters were less likely to meet the guideline, presumably with a tendency towards lower consumption.

<Insert Table 10.3 here> Proportion of people meeting the recommendations for meat consumption (three or more times a week)

Between 2006 and 2011 these results remained largely unchanged. In general, the frequency of meat consumption decreased among older people, those with a lower level of education, retired people, those on a diet, and those with a lower income. If we analyse these results paying attention to change from the frequency of meat consumption in 2006, they seem to indicate that the crisis encouraged people to move towards conformity with the guidelines. Paradoxically, therefore, the crisis brought Spaniards closer to habits considered healthy in terms of meat consumption, as shown in Table 10.3. It should be noted, however, that the survey does not allow us to differentiate between types of meat, which could help to clarify the importance of price in the frequency of consumption, as well as the relationship with health, given that the cardiovascular risk associated with what are known as "red meat" and "white meat" is not the same.

Table 10.4. shows how far Spanish eating habits matched the recommended frequency of fish consumption (three or more times a week). It shows that women, housewives, married people, Spaniards (rather than foreigners), managers and professionals, people with a higher level of education, those on a diet, and those taking physical exercise were more likely to follow the recommended levels. The older the person, the greater the adherence to the guidelines. Young people, people with a lower level of education, the unemployed, students, unskilled workers, and lower wage earners were less likely to follow this pattern of consumption. Comparing this to 2011, the differentiating variables remained the same, but location became highly significant. Populations in rural areas were much less likely to follow the guidelines, making the size of a person's community a relevant variable. Table 10.4. shows that the crisis in Spain made it more difficult to buy fish in places where it was not available for sale through conventional channels, perhaps because of the closure of small businesses and the reduction in mobile fish-sellers in rural areas.

<Insert Table 10.4 here> Proportion of people meeting the recommendations for fish consumption (three or more times per week).

Table 10.5 shows that vegetable consumption was in line with the recommended levels of consumption, and in 2006, women, housewives, older people, married people, dieters, and exercisers were more likely to follow the guidelines. Conversely, the lower the social class, the lower the consumption of vegetables on a daily basis. Comparing this to 2011, the crisis exacerbated social differences, with social class, level of education, and employment status becoming more significant in this area.

<Insert Table 10.5 here> Proportion of people meeting the recommendations of daily vegetable consumption.

During the crisis, better-off people did not change their fish consumption patterns, and the shift towards a lower frequency is only more pronounced in the social groups most affected by the economic effects of the crisis: the unemployed, manual workers, and those with a lower level of education.

Discussion

In order to reveal dietary inequalities, this paper has analysed data from the National Health Survey before and during the Great Recession of 2008, seeking to establish a relationship between the socio-economic position of Spanish people and their adherence to the healthy diet model proposed in the Spanish dietary guidelines (Sociedad Española de Nutrición Comunitaria, 2001; Aranceta, 2002; Dapcich et al., 2004; Bartrina et al., 2016). The results of the analysis show some interesting features that not only describe the relationships of inequality, but also reflect the food culture of the Spanish population.

As has been seen from the initial description of how closely Spaniards follow the recommendations for healthy consumption, the pattern of eating does not strictly match the guidelines, but it cannot be said that the crisis moved Spaniards away from the healthy model of diet in any drastic way. Some trends observed in the crisis years even point to an improvement in eating habits, specifically, the increase in the consumption of vegetables and pulses and the decrease in the consumption of meat and sweets. Contrary trends are also observed, such as a decrease in the consumption of fruit, fish, dairy products, and pasta-rice-potatoes. This does not mean that these products disappeared from the diet, but rather that there was a change in the frequency of consumption, as other researchers have found when relating income and diet (Miqueleiz et al., 2014; Venn and Strazdins, 2017).

Social class establishes differences in the frequency of consumption of fruit, fish and vegetables, but this is not the case for meat, with the income variable being more significant in this case. Education also makes a difference, along with gender, age, and nationality. The eating habits of older people, those with a higher level of education, and Spaniards rather than foreigners are generally more likely to adhere to the healthy model. Women also follow a healthy eating pattern to a greater extent than men, a result that contrasts with other recent research that finds that women eat less well because of subordinating their preferences to those of other household members (Wright, Maher, and Tanner, 2015). Household size also influences the adherence to a healthy diet, although its influence is mainly observed in the frequency of fish consumption, which, during the crisis, fell in the rural areas.

The data seem to indicate that, although the factors of social inequality are still present, there is no evidence of a food pattern "of the rich" and a food pattern "of the poor", as was found last century (Turmo, 1995). However, we should not forget that the data source used in this study, the ENS, has important limitations. In addition to the lack of differentiation in the categorisation of meat, which may be hiding the effect of price on consumption, this survey, due to its methodological design, does not capture the situations of extreme food deprivation in which the poorest households find themselves. These situations have had to be investigated with qualitative methods or with specific surveys dedicated to poverty analysis to reveal forms of material deprivation that are not captured in the ENS (López-Ejeda, Vargas, and Marrodan, 2020; Díaz-Méndez, Garcia-Espejo, and Otero-Estevez, 2020; Díaz-Méndez and Garcia Espejo, 2021).

One fact is particularly striking: obesity is not related to the healthy eating pattern. It can be confirmed that overweight or obese people are no further away from the recommended model. This contradiction is present in studies on obesity and diet in Spain (Norte Navarro et al., 2013; Zazpe et al., 2011). According to the ENS data for 2011–12, 25% of obese and overweight people were on a diet, compared with 6% of those with a normal weight. Presumably, a large proportion of obese and overweight people are motivated to reduce their weight and do so by following healthy guidelines. However, it is often considered that poor diet causes obesity, when there are other factors such as a sedentary lifestyle, mental health, and rest that may help to explain the increase in obesity, particularly among the younger population (Rodríguez-Hernández et al., 2011; Brown and Roberts, 2011; Migueleiz, 2014).

The data provided here confirm that people with obesity are better at following the recommended healthy diet, as they are aware that they need to make adjustments and do so in accordance with the guidelines for healthy eating. However, they are the least physically active group (56% of obese people did not exercise even occasionally according to the 2011–12 ENS). We can therefore hypothesise that, in the Spanish adult population, a lack of physical activity and a sedentary lifestyle have a greater influence on developing obesity than diet. However, we should not rule possible bias caused by self-reporting of weight and height (González Zapata et al., 2008; Marradán et al., 2013; Acevedo et al., 2014).

In view of the food inequalities outlined above, we can describe several effects of the economic crisis on eating habits.

Firstly, the "crisis" effect has an impact on the frequency of consumption of foods, but does not change the basic pattern of eating, which is maintained, very solidly, regardless of the socio-economic characteristics of households.

Secondly, the "westernisation" of the Spanish diet shows excess consumption of certain foods leading Spaniards away from a healthy diet. Indeed, these are the food categories where greater social inequality can be detected, because of their price. However, economic limitations coincide with the restrictions indicated by healthy eating. The economic crisis has forced a reduction in meat consumption that ends up coming closer to the healthy recommendation, an interesting paradox that deserves specific study. We should not forget, however, that the ENS does not allow us to differentiate between types of meat and this may lead to confusion in relation to health (not all meats are equally healthy) and price (there is a great diversity of prices and processed meats are cheaper). For this reason, the data here referring to meat should be taken with caution, bearing in mind that many researchers have found patterns of meat consumption that are differentiated according to social class, as well as the relationship between consumption of red and processed meat, cardiovascular health, and socio-demographic variables (Escriba-Pérez el al., 2017; Retuerto Griesser, Roset Martin, and Salas, 2021).

Fish consumption, on the other hand, which was also affected by economic restrictions, shows social differences indicating a reduction in fish consumption in the most socio-economically disadvantaged

groups during the crisis. These data are consistent with other studies concerning food consumption and the economic crisis (Bellod Redondo, 2014; González Laxe and Martín Palmero, 2013).

Conclusions

Spain has a homogeneous and shared food culture that continues in times of crisis and following this diet leads to a relative blurring of food inequalities. Social position is not accompanied by marked differences in patterns of food consumption as much as it is in other societies with a weaker food culture focused on eating well. Economic shifts do not mean that products are removed from the diet, with a consequent drastic change in eating patterns, although, among the foods that make up the diet, some are more affected than others by economic restrictions, so that inequalities are more evident with respect to these.

In short, decisions based on economic criteria and associated with the crisis do not always mean a move away from a healthy diet. However, this does not mean that inequalities disappear, but it should call our attention to how far they are being blurred.

The existence of a widespread and deep-rooted food culture, along with affordable food for the majority of the population, makes for an environment that remains resilient in the face of hardships, but it may also make it difficult to see clearly the effect of the crisis on the diets of the most disadvantaged.

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TABLES

Table 10.1. Frequency of consumption of foodstuffs in the population as a whole.

Food	**Closeness to the health guidelines in 2006**	**Change between 2006 and 2011**
Fruit	For a majority (67.3%) the frequency of consumption is daily, in line with the recommendations.	A fall in daily consumption shifting towards three or more times a week.
Meat	For a majority (52.3%), the frequency of consumption matches the recommendation of three or more times a week.	A fall in daily consumption and a rise consumption of once or twice a week.
Cured	The recommendation is for occasional consumption (never or hardly ever). None of the five frequencies is the majority, and with consumption distributed across all the categories.	No change.
Eggs	The frequency of consumption is not in line with the recommendation of three or more times a week. Dominant frequency is once or twice a week, with 59.5%.	A fall in the frequency of three or more times shifting towards once or twice a week.
Dairy	Daily consumption recommended and 87.3% are in line with the recommendation.	A slight fall in daily consumption.
Fish	Frequency is not in line with recommended three or more times a week. The dominant frequency is once or twice a week (46.4%).	A fall in consumption three or more times a week and a rise in consumption once or twice a week.

Pasta-rice-potatoes	Frequency is not in line with the recommended daily intake. The dominant frequency is three or more times a week (47.3%).	A fall in daily consumption and a rise in consuming once or twice a week
Bread	Frequency in line with recommendation of daily (86.6%).	Consumption remains steady.
Vegetables	Frequency in line with recommendation of daily (43.7%)	A rise in daily consumption.
Pulses	Frequency in line with recommendation of once or twice a week (56%).	A slight rise in the recommended frequency of once or twice a week.
Sweets	The recommended frequency is occasionally (never or hardly ever). Most common frequency is daily (36.5%).	A fall in daily consumption, and a rise in never or hardly ever consuming.
Soft drinks	The recommended frequency is occasionally and the most common frequency is in line with the norm with never or hardly ever (44.3%).	No change.

(Source: Authors' preparation from INE data, 2006, 2011-2012)

Table 10.2. The proportion of people who follow the recommended daily consumption of fruit.

	2006	**2011-12**
	Percentage	Percentage
Sex		
Male	64.8	63.6
Female	75.6	71.8
Age		
Under 30	49.3	48.7
From 30 to 44	62.7	58.8
From 45 to 59	77.1	72.3
From 60 to 74	85.1	80.3
Over 74	86.2	80.3
Nationality		
Spanish	72.2	69.1
Foreign	59.7	56.3
Marital status		
Single	57.6	56.3
Married	75.3	71.9
Widowed	84.7	78.7
Separated or divorced	64.0	64.6
Employment situation		
Working	65.0	64.4
Unemployed	59.8	56.6
Retired	82.5	78.7
Student	50.2	48.4
Homemaking	79.8	76.1
Social class of the main earner		

Directors and managers of establishments with 10 or more workers; professions associated with a graduate degree	74.7	72.1
Directors and managers of establishments with fewer than 10 workers; professions associated with university degrees	71.7	69.8
Administrative support and professionals	73.2	68.6
Skilled manual workers	69.7	68.4
Semi-skilled manual workers	68.9	67.7
Unskilled workers	71.6	64.3
BMI		
Normal	67.7	64.4
Overweight	73.0	70.4
Obese	75.4	69.7
On a diet		
Yes	81.4	76.8
No	69.7	67.1
Engaging in physical exercise		
Yes	75.7	71.9
No	64.9	63.2

(Source: INE, 2006, 2011-2012)

Table 10.3. The proportion of people who follow the recommended consumption of meat (three or more times a week)

	2006	**2011-12**
	Percentage	Percentage
Age		
Under 30	56.4	58.6
From 30 to 44	57.8	59.5
From 45 to 59	53.2	54.2
From 60 to 74	48.9	47.7
Over 74	45.7	44.7
Marital Status		
Single	53.3	55.5
Married	55.6	56.1
Widowed	45.3	44.3
Separated or divorced	49.0	50.1
Nationality		
Spanish	54.1	54.2
Foreign	41.8	50.9
Educational level		
None	44.8	45.1
Primary education	55.3	54.5
General secondary education	53.7	54.6
Vocational training	55.4	57.0
University education	57.2	57.5
Employment situation		
Working	56.4	58.1
Unemployed	52.5	55.5
Retired	47.3	47.2
Student	59.2	60.7
Homemaking	53.4	51.3
Net income (monthly, in euros)		
Up to 600	44.0	
From 601 to 900	49.1	

From 901 to 1200	52.8	
From 1201 to 1800	56.5	
More than 1800	57.9	
Net income (monthly, in euros)		
Up to 800		47.8
From 801 to 1050		50.7
From 1051 to 1300		54.3
From 1301 to 1850		56.4
More than 1850		60.9
On a diet		
Yes	49.3	50.8
No	54.0	54.3

(Source: INE, 2006, 2011-2012)

Table 10.4. The proportion of people who follow the recommended consumption of (three or more times a week).

	2006	**2011-12**
	Percentage	Percentage
Sex		
Male	37.7	35.5
Female	44.0	45.0
Age		
Under 30	27.6	26.2
From 30 to 44	37.0	33.4
From 45 to 59	45.6	40.3
From 60 to 74	49.3	46.9
Over 74	48.3	43.6
Size of community		
More than 500,000 inhabitants	43.4	46.5
Provincial capital	43.8	36.0
More than 100,000 inhabitants	45.9	41.7
From 50,001 to 100,000	38.2	37.3
From 20,001 to 50,000	38.8	34.1
From 10,001 to 20,000	41.9	36.7
Up to 10,000	40.0	37.2
Nationality		
Spanish	42.5	38.8
Foreign	26.7	27.6
Employment situation		
Working	37.8	36.6
Unemployed	35.8	30.9
Retired	46.7	44.3
Student	30.6	27.7
Homemaking	47.9	41.1
Social class of the main earner		
Directors and managers of establishments with 10 or more workers; professions associated with a graduate degree	43.6	43.1
Directors and managers of establishments with fewer than 10 workers; professions associated with university degrees	43.5	39.9
Administrative support and professionals	42.1	39.3
Skilled manual workers	39.7	37.7
Semi-skilled manual workers	40.5	35.9
Unskilled workers	39.5	37.0

BMI		
Normal	39.5	35.7
Overweight	43.1	39.6
Obese	43.0	39.4
On a diet		
Yes	47.3	46.2
No	40.6	37.1
Engaging in physical exercise		
Yes	43.7	39.6
No	38.4	35.8

(Source: INE, 2006, 2011-2012)

Table 10.5. The proportion of people who follow the recommended daily consumption of vegetables.

	2006	**2011-12**
	Percentage	Percentage
Sex		
Male	38.1	42.0
Female	48.9	57.2
Age		
Under 30	30.7	33.5
From 30 to 44	41.1	44.6
From 45 to 59	49.5	51.2
From 60 to 74	51.4	56.0
Over 74	48.5	51.9
Marital status		
Single	35.6	39.8
Married	48.1	51.3
Widowed	47.7	51.6
Separated or divorced	44.2	47.1
Educational level		
None	45.9	45.1
Primary education	41.9	47.0
General secondary education	45.0	46.8
Vocational training	39.9	47.6
University education	48.3	54.3
Employment situation		
Working	42.0	47.8
Unemployed	40.1	39.7
Retired	47.7	52.1
Student	27.5	32.8
Homemaking	51.9	54.4
Social class of the main earner		
Directors and managers of establishments with 10 or more workers; professions associated with a graduate degree	50.7	56.7
Directors and managers of establishments with fewer than 10 workers; professions associated with university degrees	47.0	51.7
Administrative support and professionals	45.9	49.6
Skilled manual workers	42.6	48.1
Semi-skilled manual workers	45.3	46.1
Unskilled workers	42.6	42.1
On a diet		
Yes	54.1	60.2

No	43.1	46.5
Engaging in physical exercise		
Yes	47.7	52.2
No	39.7	42.4

(Source: INE, 2006, 2011-2012)