

ABSTRACT

Eating issues in a time of crisis: re-thinking the new food trends and challenges in Spain

Background

Food systems have become a privileged sphere for explaining the past and present of peoples, and, analysed in their various dimensions, for thinking about the future. In a world of such extraordinary food disparity, it is necessary to ask what this reveals about current societies and what uncertainties and opportunities it entails.

Scope and approach

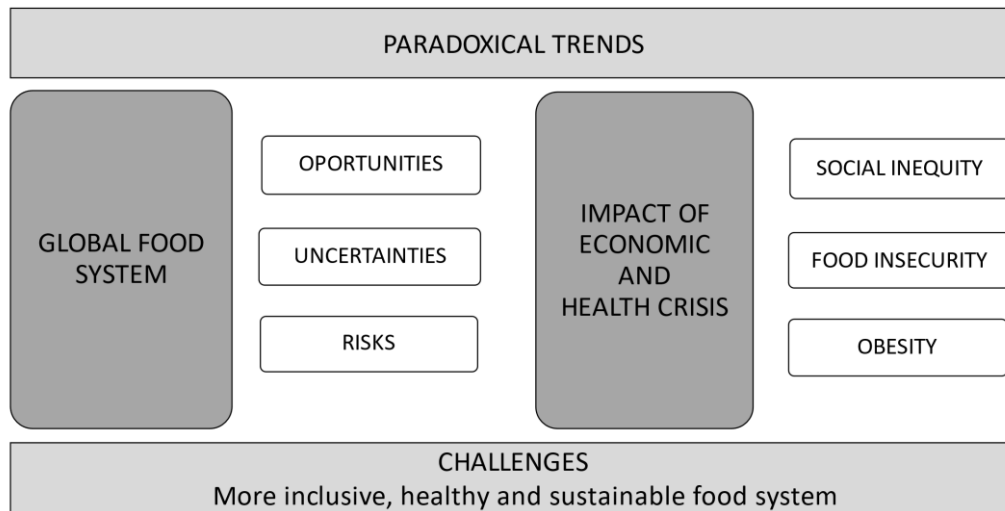
This commentary examines some paradoxes related to the global food system. When we consider where it is heading, multiple questions arise, for while this is apparently more productive than ever, it far from guarantees an inclusive, healthy and sustainable food supply for all. If, as is widely maintained, current food production is sufficient to feed the entire world population, we need to ask why food insecurity persists and, at the same time, why emerging diseases such as obesity have become a health problem on a global scale. Focusing on these growing trends in Spain, we discuss how they are linked to this system, their complex nature and possible ways of dealing with them.

Key findings and conclusion

The findings show how some of the positive trends engendered by the industrial food system, such as the progressive democratisation of food access and the reduction of social differences in food consumption, are now in retreat. The diagnosis we have presented on the increase in food insecurity and obesity alludes to profound changes in environments and lifestyles, but also to the social inequality produced by the impact of austerity policies. The paper postulates the need to transform structural factors in order to reverse these trends.

Key words: food system, obesity, food insecurity, social inequity, environment.

CHART 1. Analytical synthesis with socioeconomic and epidemiological data in Spain



Source: Author's own elaboration

1 **Eating issues in a time of crisis: re-thinking the new food trends and challenges in**
2 **Spain**

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10
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36
37 <GRAPHICAL ABSTRACT HERE>

39 **1. Introduction**

40 It is often said that we human beings *are what we eat*, either because the foods we
41 ingest provide our bodies with the biochemical substances and energy we need to
42 survive, or because consuming them also implies the absorption of their moral and
43 behavioural properties. We might well invert this famous aphorism and declare that we
44 also *eat what we are*, thereby assuming that food is conditioned in turn by our
45 biological and psychosocial nature (Caplan, 1997). We eat what agrees with us, we
46 consume foods that are attractive to our senses and give us pleasure; we fill our
47 shopping baskets with products to suit our pockets, we serve or are served meals
48 according to whether we are men or women, children or adults, rich or poor, and we
49 choose or reject food on the basis of our daily pressures and dietary, religious or
50 philosophical beliefs [*anonymised*]. In other words, however we choose to construct the
51 phrase, the import is similar since it alludes to the same question: food makes us human,
52 and our humanity expresses itself in our dietary practices. For that reason, it becomes a
53 privileged sphere for explaining the past and present of peoples, and, analysed in its
54 various dimensions, for thinking about the future. In a world of such extraordinary food
55 diversity and disparity, it is worth asking what this reveals about our societies and what
56 uncertainties it entails.

57 When we consider where the current food system is heading, multiple questions arise, for
58 while this is apparently more productive than ever, it far from guarantees a healthy and
59 sustainable food supply for all (Godfray et al., 2010). We are in a present marked by rapid
60 changes, moving towards an uncertain future, where it is not easy to predict how this
61 system will react or be modified in the face of phenomena such as climate change, an
62 ageing population, rapid urbanisation or the growth of social inequality (Tendall et al.,
63 2015). In view of the negative impact caused by the recent economic and health crisis,
64 we need to ask whether some of the positive trends engendered by the industrial food
65 system, such as the progressive democratisation of food and the reduction of social
66 differences in food consumption and security [*anonymised*], are now in retreat. Indeed,
67 today in many industrialised countries we see the paradoxical, intertwining trends of
68 recurring malnutrition and, at the same time, food waste. If, as is widely maintained,
69 current food production is sufficient to feed the entire world population, why does food
70 insecurity persist? Why are food shortages integral to the history of affluence and what
71 connection is there to the growth of emerging diseases such as obesity?

72 With the present article, we are going to focus on two phenomena that are becoming
73 increasingly common in Spain – growing food insecurity and the prevalence of obesity –,
74 discussing how they are linked to the current food system, their complex nature and
75 possible ways of dealing with them. We point out that some trends have emerged as a
76 result of the new ways of producing, distributing and consuming food, while others
77 have increased or become chronic. The diagnosis we have presented alludes to profound
78 changes in environments and lifestyles, but also to the social inequality produced by the
79 impact of austerity policies. The paper postulates the importance of transforming
80 structural factors in order to reverse these trends.

81

82 ***Paradoxes around the global food system***

83 The hegemonic food system, also termed *current food system* by McMichael (2009) or
84 *global food system* by Mintz (1996), follows lines of development, some paradoxical and
85 others complementary, that can be summarised in at least four main tendencies: the

86 homogenisation of consumption on a planetary scale, the persistence of socially
87 differential consumption, the consolidation of an increasingly personalized food supply
88 according to type of consumer (*post-Fordist*, as Warde (1997) put it), and lastly, the lack
89 of both sufficient security and safety in the food supply. In all of these, industrialisation
90 and delocalisation have had a decisive influence, fostering various processes.

91 On the one hand, in the industrialised countries and among particular social groups in
92 transition economies, widespread access to greater quantities and relatively lower cost food
93 products has been enhanced (Atkins and Bowler, 2001). In Spain, intensive agri-food
94 production, especially marked from the second half of the 20th century, has enabled, along
95 with the population's higher living standards, easier and more frequent access to foodstuffs
96 that barely decades before were inaccessible to most groups, excepting elites (Gonzalez-
97 Turmo 2008). The expansion of transport and distribution networks has sped up
98 delocalisation, so that a huge variety of products now reach even the most geographically
99 isolated areas, regardless of whether the place of production is near to that of consumption.
100 The new agricultural technologies have also put within reach a long list of foodstuffs
101 whose supply is maintained throughout the whole year independently of any seasonality.
102 In addition, there are service products that incorporate functions relating to conservation,
103 preparation and cooking, and are thus offered ready for consumption.

104 All these mechanisms make food more varied and diversified than in previous decades
105 (Contreras 2008). It has been pointed out that in this society, the exercise of choice
106 becomes a credible notion. Thus, people can easily source the diverse foodstuffs with
107 which to define their options as they choose among different menus and on the basis of
108 their relevant social and economic circumstances. This variety is viewed positively in
109 several senses. For one thing, because it prevents descent into a culinary monotony with
110 few attractions: today it is possible to eat differently from one day to the next, from one
111 meal to the next. And for another, because food diversity is supposedly healthier in
112 nutritional terms, contributing essential nutrients and thus reducing diseases such as
113 pellagra, which attacked the 19th-century Spanish populations with a maize-based diet, or
114 cretinism (Fernández, 2008). In fact, nobody today denies that the changes effected in diet
115 and sanitary conditions have contributed to the growth in life expectancy. In the case of
116 this country, this is one of the highest in the world, with an average of 83.1 years (INE,
117 2018).

118 On the other hand, industrialisation as technological process is regarded critically by broad
119 sectors of the Spanish population, and for different reasons (anonymised). The quest to
120 prolong the life of the products comes into question when one of its effects is a reduction
121 in flavour, or when the cultivation of certain varieties of crops, fruit and vegetables, ever
122 more appealing aesthetically, takes precedence because of their marketability and easy
123 conservation rather than for their organoleptic qualities or biological diversity. In fact, the
124 specialization in certain commodity crops such as corn, wheat or rice is restricting
125 production and access to a wider variety of healthy grains. Specifically, the progressive
126 loss of agricultural biodiversity is linked to the degradation of habitats as a consequence of
127 intensification and changes in land use, the overexploitation of resources, environmental
128 pollution or the effects of climate change in desertification (MAGRAMA, 2015).

129 If the industrial handling of foods is regarded with greater uncertainty, it is mainly because
130 of the doubts the process itself gives rise to. Paradoxically, it coincides with the increase in
131 hygiene regulations and quality policies introduced by Spanish governments and the
132 industrial sector in an attempt to guarantee the stability of the organoleptic and
133 microbiological qualities of the products throughout their life cycle (Mariné and Vidal,

134 2001). Indeed, one of the questions that has come to occupy a central position in the
135 structuring of the food system is the control and reduction of risks that might affect human
136 health. These risks can be related to chemical or microbiological contamination, as found
137 in meat and fish exposed to persistent organic pollutants, and, in the long term, to the
138 consequences of using the new technologies applied to food production and processing, or
139 to pathologies due to viruses, bacteria or prions (Poulain, 2017). Mistrust has grown with
140 successive food crises – toxic oil syndrome, mad cows, foot-and-mouth disease, swine
141 fever, olive-pomace oil, salmonellosis – as they so clearly expose both the limits of
142 productivist agricultural policies and the extraordinary reach of the globalised food system
143 and, as a result, of the local repercussions of its dysfunctions.

144

145 The resort to artificial fattening of poultry and livestock, pesticides in the crop fields,
146 antibiotics and hormones, chemical additives and supplementary ingredients, or to
147 biotech applications has cast doubt over the foodstuffs resulting from industrial
148 production, putting a question mark over the nutritional quality and safety of what is
149 offered in such quantity and variety. Because of the pandemic of antibiotic resistance,
150 WHO recommendations aim to preserve the efficacy of antibiotics important for human
151 medicine by reducing their unnecessary use in animals.¹ This questioning of the food
152 system has become more widespread with the introduction of genetically modified seeds in
153 industrial agriculture. Studies carried out in Spain reveal very hostile attitudes towards the
154 consumption of transgenic foods. They generally arouse distrust that is both pragmatic and
155 moral in origin (Cáceres et al., 2001; Costa-Font, 2008): transgenic food are seen as
156 “laboratory” products whose original essence has been transmuted and which do not offer
157 clear or immediate advantages over those that are not, but rather the opposite, given the
158 lack of any guarantee regarding potential risks to health and the environment.

159

160 Therefore, the benefit of abundant food is called into question when it is of doubtful
161 quality and when it becomes a potential vehicle for diseases and other harmful agents. The
162 same is true when there is awareness of the deplorable conditions of life suffered by the
163 animals and the depletion of ecosystems; or when it is made clear how much of the food
164 produced is thrown away or wasted. The COVID-19 pandemic has again highlighted the
165 fragility of the global food system. Despite supermarket food sales increasing in many
166 countries and "hunger queues" multiplying at food banks, some producers have been
167 forced to throw away milk and let vegetables rot because of falling demand and the
168 consequent drop in prices. We have a planet abundant in foods, but the complexities
169 associated with this system have not succeeded in making it as sustainable and healthy
170 as would be necessary. Conversely, it is related to “the global syndemic”, represented
171 by three pandemics –climate change, undernutrition and obesity – occurring in time and
172 place, interacting with each other to produce complex sequelae, and sharing common
173 underlying societal drivers (Swinburn et al. 2019).

174

175 **2. Food insecurity as a political issue**

176 Although it has been suggested that the homogenisation of food consumption is a feature
177 of contemporary societies, there is at least some contrasting evidence to the contrary
178 (anonymised). For one thing, there is the diversity of new culinary options resulting from
179 the meeting and intermingling of ingredients, techniques and utensils that has not ceased to
180 grow in contexts of migration. There is also the variety promoted both by an industry that
181 has made innovation its *raison d'être* – supermarket stocklists in many cities contain a

182 good 20,000 different food items – and by the efforts of local/regional producers to protect
183 and promote their products. Finally, there is the persistence of social inequality, which
184 makes food consumption significantly different not just between countries, but also
185 between social classes. In fact, far from diminishing, socially vertical heterogeneity has
186 increased over the last decade.

187 The impact of the austerity policies applied by many neoliberal governments following the
188 recent economic crisis shows the contradictions and limits of a food system as profuse in
189 its intensive mode of production as it is inefficient in its distribution. It attests to the duality
190 noted by Warde (1997), whereby if it is true that, on the one hand, production is more
191 flexible and individualised than ever, on the other, social class, the borders of which are
192 now more fluid than in previous ages (Subirats, 2012), continues to be the chief variable
193 accounting for differences. Food consumption patterns today among people with fewer
194 resources remain similar with regard to historically established ones: limited in variety,
195 quality and frequency. With this situation evident in a number of countries, one of the
196 main problems associated with this system is not only that caused by overproduction
197 and waste, but also that of guaranteeing everyone access to food.

198 The global economic crisis that began in 2008 has to this day had negative
199 consequences on food security across the world. Unfortunately, in the early 21st
200 century, the right to food is not guaranteed worldwide. The most recent estimate for
201 2019 shows that prior to the COVID-19 pandemic, almost 690 million people, or 8.9
202 percent of the global population, were undernourished (FAO, 2020). Although the
203 impact of this phenomenon has historically been greater in the poorest countries on the
204 planet, it must not be forgotten that food insufficiencies, closely related to social
205 inequality, unequal sharing of resources and precarious conditions of life, also affect a
206 great many people in the so-called “first-world countries” (Riches and Salvasti, 2014).

207 In this regard, it is necessary to avoid analysing the problem of food insecurity from an
208 ethnocentric perspective that forever locates expressions of hunger in peripheral
209 territories due to the belief that only there are the hungry or simply those unable to feed
210 themselves to be found (anonymised). In Europe, the current economic uncertainty has
211 translated into an increase in requests for food aid and in the activity of organisations
212 dedicated to giving out food such as food banks and the Red Cross (Caplan, 2016). An
213 illustrative example of such welfare provision is the programmes to buy food in the
214 national and international markets and redistribute it to people suffering the greatest
215 economic difficulty.

216
217 In Spain, according to the annual reports of the FAO et al. (2019, 2020), the number of
218 food insecure people has risen from 600,000 to 700,000 in just one year. Since 2008 the
219 quality of employment has worsened, with more temporary contracts and lower salaries
220 preventing many workers from escaping the poverty trap (Fernández, 2017): 16 percent
221 of working people are in a situation of social exclusion, two percentage points more
222 than in 2018 (FOESSA-Cáritas, 2019). According to the AROPEⁱⁱ index, the proportion
223 of population at risk of social exclusion grew from 23.3 percent in 2007 to 29.2 percent
224 in 2014, reaching more than 13 million people (Llanos Ortiz, 2019), many of whom
225 now depend on social assistance to cover their basic necessities (Cáritas Española,
226 2016). Today, we are witnessing yet another crisis, both in terms of health and the
227 economy, leading to a social emergency affecting the most vulnerable. In fact, since the
228 state of emergency was declared in March 2020 in response to the COVID-19
229 pandemic, requests for social assistance to Caritas have tripled, mostly to cover basic
230 needs, while large cities are registering increases of up to 50% in requests for food aid.

231 In Madrid, four out of every five calls to 010 (the citizens' assistance number) refer to
232 requests for food or living allowances. Barcelona has increased its food aid services by
233 30%, and in one single month 5,100 lunch aid cash cards were distributed among
234 disadvantaged families for students unable to attend school.

235 The most paradoxical question and one that demands attention in view of the
236 widespread nature of this phenomenon is that, in contrast to previous ages, today it
237 might be possible to feed the whole world. At the start of this new century, humanity
238 had 23% more food per person than 40 years ago (Moore Lappé, 2007). Over 20 years
239 ago, the FAO wrote a report indicating that the world, with its existing strength of
240 agricultural production, could easily feed more than 12 billion human beings; today that
241 figure is already 20 billion (Ziegler, 2000: 20). It is one thing, though, to be able to produce
242 food, and quite another to produce it with a given purpose. Many of the crops that were
243 originally destined for human consumption are today grown for certain forms of renewable
244 energy such as biofuels, and already make up 12% of the global grain harvest, 28% of
245 sugar cane and 14% of general oil (OCDE/FAO, 2018). It also happens that not all the
246 grain grown is for direct human consumption, but serves, apart from providing biofuels or
247 financial funds for the market, to make animal proteins. Global supplies are considerably
248 restricted and the environment put at risk when approximately 40% of the world's grain
249 and soya are allocated to livestock, with only a small fraction of the nutrients recovered in
250 the form of meat consumed mainly by the inhabitants of industrialised countries (FAO,
251 2015). Some studies even argue that the adoption of a more vegetarian diet at the global
252 level could reduce the problem of hunger and contribute to the sustainability of the system
253 (Sandström et al., 2018).

254

255 **3. Obesity as a global problem**

256 If the global food system does not appear to be sufficiently inclusive and sustainable
257 even in the short term, it does not appear to be healthy enough, either. Delocalisation
258 has helped the production methods, varieties of foods and patterns of consumption to
259 spread all over the world via an ever more intensive network and growing
260 socioeconomic and political independence (Pelto and Pelto, 1990). For most states, this
261 interdependence has made it impossible to define their own agricultural policies (and
262 thus their food sovereignty), leading to dependence on food imports from transnational
263 corporations, many of them industrially processed and not necessarily beneficial to
264 health (Larrea et. 2020). In this sense, the nutritional transition has been characterised
265 by an increase in consumption of foods rich in fats and simple caloric sugars, and also
266 those of animal origin, with a corresponding reduction in expenditure of energy due to
267 the sedentarisation caused by growing industrialisation and urbanisation. According to
268 many authors (Popkin et al. 2012), the interaction between economic and technological
269 changes and changes in diet and physical activity has already had important
270 consequences for the increase in overweight, obesity and associated illnesses such as
271 diabetes, cancer, undernutrition or cardiovascular problems. It is stated that global
272 economic development, and in particular the hegemony of the current food system, has
273 transformed obesity into a serious malnutrition problem with a global reach – referring
274 to it as “globesity” (Legetic, 2004). Other epidemiologists describe contemporary
275 societies as “obesogenic” or “toxic environments” (Swinburn et al., 1999).

276 On the basis of all these concerns, and the conviction that obesity is avoidable, 17 years
277 ago the WHO drew up the “Global Strategy on Diet, Physical Activity and Health”
278 (DPAS-WHO, 2004), a tool to guide its member states in their efforts to prevent chronic

279 illnesses through the promotion of healthy diets and physical activity. It is a
280 multifaceted strategy that considers the environment to be the main factor responsible
281 for the emergency of “obesogenic” societies. The anti-obesity messages launched
282 during the last decade have gone round the world in an effort to persuade populations to
283 eat vegetables at least five times a day and to do 30 minutes of exercise a day (in the
284 following, now 60 minutes). Such are the objectives of *El Movimiento Activo* (Active
285 Exercise) and *5 por día* (5 a day) in Spain; *Get Active/Let's Move* in the United States;
286 *Bouger plus* (Move more) and *Au moins 5 fruits et légumes par jour* (At least 5 fruit and
287 vegetables a day) in France; and *Chécate, mídete, muévete* (Check your weight, measure
288 your waist, get moving) and *Cinco al día* (Five a day) in Mexico. Many actions have
289 focused on the general public and children in particular, as it is thought that an
290 overweight minor becomes an obese adult (WHO, 2016). “Eat less, move more” is the
291 advice repeated all over by the health authorities and professionals.

292 However, in recent years, the international organisations have had to reorient their
293 actions after warning that the prevalence of obesity has continued to increase in tandem
294 with the implementation of these preventive policies [*anonymised*]. In documents
295 subsequent to DPAS (WHO, 2004), the WHO has stressed the importance of
296 microenvironmental factors that shape dietary patterns (employment, housing, social
297 inequality) and the macroenvironmental ones that influence food consumption (increase
298 in the food supply, decrease in the price of products, regulation of the food companies
299 and industrialisation of agriculture (WHO, 2012: 17). The current WHO European
300 Region Food and Nutrition Action Plan 2014-2020 (WHO-EU, 2013a) supports
301 universal access to healthy food, especially for the most vulnerable groups, as well as
302 gender equality as regards nutrition for all European citizens. It is no coincidence that
303 this document, like the “Vienna Declaration on Nutrition and Noncommunicable
304 Diseases in the Context of Health 2020” (WHO-EU, 2013b) was approved in 2013, at
305 the height of the economic recession and just when the difficulty of covering the basic
306 necessities among the very poorest was increasing significantly.

307 It has been suggested that the effects of this recent crisis have helped contribute to the
308 long-term increase in obesity (OECD, 2014). On average, one in six adults in EU
309 member states was obese in 2012, compared with one in eight in 2002. The data for
310 some countries shows a link between financial difficulty and obesity, meaning that
311 people suffering periods of economic difficulty are at greater risk. In Spain during the
312 recession, the prevalence increased most rapidly among the most disadvantaged classes,
313 reaching 23.7%, almost three times the percentage for people at the opposite end of the
314 social scale (8.9%). Ethnographic studies (*anonymised*) reveal substantial changes in
315 eating itineraries among people in financially precarious situations, decreasing
316 opportunities to regularly and autonomously obtain food, which has led to terms such as
317 “shortage”, “eating what you can and what you get” or “skipping meals” reappearing in
318 their everyday language.

319

320 Most of the preventive actions have failed not only to take into account the food
321 insecurity effects of the crisis, but also to adjust to the available epidemiological data
322 (Panetta & López-Valcárcel, 2016), particularly as it relates to social class and gender.
323 According to the Spanish National Health Survey (ENSE, 2011/12), the rate of obesity
324 in the adult population reached 17 percent, almost 1.5 percent higher than the figure
325 recorded in 2006 (ENSE, 2006). The most recent survey showed a fresh increase,
326 already up to 17.5 percent (ENSE, 2017) (Figure 1).

327

328 <FIGURE 1 HERE>

329

330 These surveys show that obesity affects all groups, but that it looms larger among
331 people with lower levels of education, especially women, and also among the
332 unemployed, the disabled, and domestic workers. According to the latest survey, obesity
333 and overweight increase in line with the socioeconomic condition of the head of the
334 family, with Group I having the highest income level and Group VI the lowest.
335 Although obesity affects 9.29 percent in Group I, the figure is more than double for
336 Group VI, affecting 22.37 percent of the population (Table 1). If we look at gender
337 differences, in the 2017 ENSE, obesity in the case of Group VI women (23.98 percent)
338 is more than three times the 7.26 percent of those in Group I.

339

340 <TABLE 1 HERE>

341

342 Moreover, an analysis of the course of obesity between 2006 and 2017 reveals a faster
343 increase among disadvantaged classes (Table 2). Whereas Group I even decreased by
344 0.99 percent, Groups V and VI saw a 3 percent increase over the same period.

345

346 <TABLE 2 HERE>

347

348 According to the most recent survey (ENSE, 2017), the same has occurred with physical
349 activity. Almost half (46.7 percent) of those on the lowest incomes have a sedentary
350 lifestyle, while the figure is 24.3 percent among those earning the most. Unemployed
351 people with a low educational level also do less sport.

352

353 In the light of these reports and figures, a double paradox informs the health and policy
354 agenda. On the one hand, the prevalence of obesity has increased to a surprising extent
355 alongside the application of more protocols for early diagnosis and clinical treatment, as
356 well as the implementation of a set of unprecedented preventive strategies. On the other
357 hand, it seems that the importance attributed to social determinants of health in the
358 working reports dissipates in the interventions. Very few obesity actions in Spain have
359 been specifically aimed at people with low socioeconomic status and these actions have
360 also used pedagogical tools oriented mainly towards changing behaviours without
361 transforming their living conditions (anonymized). For example, the objectives of the
362 POIBA community programme were to promote physical activity and healthy eating
363 through educational workshops and recreational activities involving the teachers, the
364 children and their families (Ariza et al., 2014). An assessment of the effectiveness of the
365 programme showed positive changes in eating habits, physical activity and obesity
366 levels in the short-term; however, these were considerably higher among children from
367 wealthier neighbourhoods and natives. In the case of primary care centres, most
368 physicians and nurses point out the difficulty of effecting change in eating habits, and
369 also of conducting any follow-up due to the short time they are accorded for each
370 patient. Their intervention is limited to providing healthy eating guidelines within a
371 clinical-therapeutic framework. Organizing, controlling, re-educating, structuring,
372 restricting and shifting are some of the typical actions they carry out which do not take
373 into account the social determinants of health (anonymized).

374

375

376 *Re-thinking food matters*

377 At present, it seems no easy task to reverse these two trends without specific policies
378 that transform some key drivers related to the global food system. The impact of the
379 recent economic and health crisis has exposed serious problems concerning food
380 production, distribution and consumption (FAO, 2020); especially those that have been
381 overlooked, for various reasons, by the authorities or experts in many countries. In the
382 industrialised societies, and particularly in the case of Spain, the effects that inequalities
383 have on health have not always been taken into account, and specifically, those that
384 manifest in matters of food.

385
386 From one perspective, food insecurity has been seen as a problem of people who cannot
387 cover their basic necessities, and so the distribution of food has been advocated as the
388 quickest and easiest solution. In this country, the increase in demand for food aid in the
389 face of growing precariousness has been met by buying food in international or state
390 markets and encouraging donations from private or public companies (Medina et al.
391 2016). These foods are distributed among the poorest through humanitarian
392 organisations – some of them supranational – and, particularly, through voluntary
393 helpers or low-paid workers. So far as the crisis has coincided with the application of
394 the first anti-waste policies, the coming into circulation of leftovers from restaurants,
395 catering companies and hotels has also meant the legitimisation of new social entities
396 focused on getting surplus to the disadvantaged. There is still no evidence that the
397 handing out of leftovers, often intermittent and short-term, is contributing to free and
398 regular access to adequate, healthy and culturally acceptable food (anonymised).

399
400 The map of food aid in Spain has spread and become even more fragmentary with the
401 negative impact of the COVID-19 pandemic, bolstering a “new charity economy”
402 responsible for distributing basic goods to people living in a precarious situation
403 (Riches and Salvasti, 2014). If this *boom* in charitable initiatives has been a key factor
404 in reducing emergencies, it embodies the triumph of a type of vertical and acritical
405 solidarity, since to donate or give away food is not to seek to change the causes of
406 poverty, but rather simply to relieve it. A danger of this charity food professionalisation
407 is the de-politicisation of various forms of hunger. Food aid helps to satisfy basic needs,
408 but at the same time it diverts social pressure on the state and makes the recipients of
409 these benefits more and more dependent on the resources provided by organisations
410 emerging within this emergency system. Evidence of this is that the majority of people
411 receiving food aid during the crisis have normalised their access to these services,
412 becoming habitual users of social canteens, so-called “solidarity supermarkets” and
413 food vouchers.

414 For its part, obesity has been seen as primarily a behavioural matter, derived from
415 unconscious or irrational attitudes on the part of those who suffer from it and/or their
416 lack of nutritional knowledge, and remediable through learning to eat better and move
417 more (NAOS, 2005). The diagnosis presented on the increase in obesity alludes to
418 profound changes in lifestyles, without mentioning those related to food insecurity. No-
419 one doubts that they have occurred in Spain, nor that they will continue to do so in
420 future. The important thing is to establish what direction they should go in. For
421 managers of health policy, we are facing a transnational disease that could be avoided,
422 in large part, by following a balanced diet and increasing physical activity. The
423 diagnosis of the problem, and the measures proposed to tackle it, would seem to be
424 correct if obesity were as widespread a phenomenon as is made out and if it were simply
425 a matter of adjusting the arithmetic between calories consumed and calories burned; but

426 they are uncertain or insufficiently precise if its global nature is relativised and nuance
427 is applied to particular cause-effect relationships.

428

429 To refer to the environment (obesogenic or toxic) when it comes to seeking what causes
430 and/or is responsible for certain health problems does not mean defining it as a kind of
431 abstract and complex nebula (and thus difficult to get to grips with), but rather grasping
432 it as a society's very organisation and as the product of dynamic and far-reaching
433 processes (Mintz, 1996). In spite of growing globalisation, obesity does not have equal
434 effects all over the world. Nor are all fat people ill and nor do all of us eat badly. The
435 incidence of obesity is very unequal, responding to intra- and intercultural differences.
436 In Spain, socioeconomic level, gender, age or ethnic origin constitute explanatory
437 variables. This is also the case with food insecurity – and not only because opportunities
438 to feed oneself and manage one's health differ greatly according to those variables, but
439 also because food practices depend on other micro- and macrostructural factors.

440

441 The diagnosis outlined here insists more on the variety or quantity of products
442 consumed than on the key reasons why some foods are or are not consumed. And so, if
443 the measures are aimed at modifying the foods or individual attitudes instead of the
444 structural drivers that give rise to food inequalities, is that not to rashly pre-empt the
445 answers or delay the solutions? The daily demands faced by many do not allow for a
446 better diet, at least not to the extent that the authorities and experts would like, because
447 to change diet it is necessary to change life – which, as many existing ethnographic and
448 sociological studies have shown, is not just always difficult, but can for certain people
449 become impossible.

450

451 Unfortunately, we know little of the impact of such difficulties on obesity and food
452 insecurity. We can try to combat obesity by promoting healthy and sustainable foods,
453 without of course affecting small producers or climate change. And at the same time,
454 authorities and economic agents can improve job opportunities and pay decent wages to
455 help avoid food aid becoming chronic. These factors explain, in part, why even with full
456 knowledge of the nutritional recommendations about what and how much to eat, certain
457 food practices seem far removed from an inclusive or optimal diet. The modes of eating
458 in Spain respond mainly to working conditions and the cost of living, the price and
459 typology of food supplies and to issues in the equitable division of domestic labour
460 (anonymised). These factors explain, in part, why even with full knowledge of the
461 nutritional recommendations about what and how much to eat, certain food practices
462 seem far removed from the optimal diet. To ignore all these relationships is almost
463 certainly to condemn political action to failure.

464

465 Authorities have an obligation to ask themselves why their strategies are not really fit
466 for their intended purpose, to obtain reliable studies on how people live, deal with and
467 solve daily challenges, and also both to encourage public participation and to include
468 the public's views in their proposals. It does little good for public reports to
469 acknowledge that overweight or food insecurity is highly related to social inequality if
470 austerity policies leave more and more people in poverty and at risk, while the need for
471 actions to change unhealthy and non-inclusive contexts or targeting vulnerable groups
472 goes unaddressed (anonymised). Therefore, what is most important now is to reconsider
473 the complex nature of human food and culture, and translate it into economic,
474 nutritional and social policies. The practices that are harmful to health or the
475 environment, and not just apparently so, also have to be taken as aspects of cultural life

476 conditioned by context. To do that, it is essential to work with a holistic approach to
477 how the global food system contributes and reinforces specific modes of inequality. At
478 present, this research should include a particular focus on territorial inequalities and the
479 impact of the COVID-19 economic and health crisis.

480

481 **References**

482 Atkins, P., Bowler, I. (2001). *Food in society: economy, culture, geography*. Arnold,
483 London.

484

485 Ariza, C. et al., 2014. La prevención de la obesidad infantil desde una perspectiva
486 comunitaria. *Atenc. Prim.* 47 (4), 246–255. [http://dx.doi.org/10.1016/j.](http://dx.doi.org/10.1016/j.aprim.2014.11.006)
487 [aprim.2014.11.006](http://dx.doi.org/10.1016/j.aprim.2014.11.006).

488

489 Cáceres, J. et al. (2001) Percepción de la biotecnología agroalimentaria en Europa.
490 *Ciencia, Medicina, Comunicación y Cultura*, num. XXI.

491

492 Campanera, M and Gracia-Arnaiz, M. (2021). [manuscript submitted for publication].
493 **Social Inequalities and Food Insecurity: Interventions at Primary Health Care in Spain** ,
494 Departament of Social Anthropology, Philosophy and Social Work, Universitat Rovira i
495 Virgili.

496

497 Caplan, P. (1997). *Food, health and identity*. London: Routledge.

498

499 Caplan, P. (2016). Big society or broken society?: Food banks in the UK. *Anthropology*
500 *Today*, 30(1): 5-9. doi.org/10.1111/1467-8322.12223

501

502 Contreras, J. (2008). ¿Un nuevo orden alimentario?. *Distribución y consumo*, 18 (97): 38-
503 45.

504

505 Costa-Font, M., Gil, J.M., Traill, W.B. (2008). Consumer acceptance, evaluation of and
506 attitudes towards genetically modified food: Review and implications for food policy.
507 *Food Policy*, 33, 99-111. DOI: 10.1016/j.foodpol.2007.07.002

508

509 FAO, FIDA, OMS, PMA y UNICEF. (2019). *El estado de la seguridad alimentaria y la*
510 *nutrición en el mundo 2019. Protegerse frente a la desaceleración y el debilitamiento*
511 *de la economía*. Roma, FAO.

512

513 FAO, FIDA, OMS, PMA y UNICEF. (2020). *El estado de la seguridad alimentaria y la*
514 *nutrición en el mundo 2020. Transformación de los sistemas alimentarios para que*
515 *promuevan dietas asequibles y saludables*. Roma, FAO.

516

517 FOESSA-Cáritas (2019) *VIII Informe sobre Exclusión y Desarrollo Social en España*.
518 Madrid: Cáritas.

519

520 Fernández, R. (2008). Creencia biocultural y profilaxis con productos yodados: El caso de
521 Escobinos (Asturias). In: Gracia-Arnaiz, M (ed). *Comemos como vivimos, Estudios de*
522 *alimentación y cultura en España*. Barcelona: Editorial Ariel (pp. 69-94).

523

524 Fernández, D. (2017). Los salarios en la recuperación española. *Cuadernos de*
525 *Información Económica*, 260: 1-12.

526 González-Turmo, I. (2008) Comida de pobre, pobre comida, In: Gracia-Arnaiz, M.
527 *Comemos como vivimos, Estudios de alimentación y cultura en España*. Editorial Ariel,
528 Barcelona (pp. 299-316).
529
530 Instituto Nacional de Estadística. (2018). *España en cifras*
531 2018. [https://www.ine.es/prodyser/espa_cifras/2018/files/assets/common/downloads/pub](https://www.ine.es/prodyser/espa_cifras/2018/files/assets/common/downloads/publication.pdf?uni=4f7e7b429c56ccbc4bf56b3e93ebc47b)
532 [lication.pdf?uni=4f7e7b429c56ccbc4bf56b3e93ebc47b](https://www.ine.es/prodyser/espa_cifras/2018/files/assets/common/downloads/publication.pdf?uni=4f7e7b429c56ccbc4bf56b3e93ebc47b)
533
534 Larrea-Killinger, C et al. (2020). Body Representations of Internal Pollution: The
535 Risk Perception of the Circulation of Environmental Contaminants in Pregnant and
536 Breastfeeding Women in Spain. *International Journal of Environmental Research and*
537 *Public Health*, 17, 6544. DOI: 10.3390/ijerph17186544.
538
539 Legetic, B. (2004). Globesidad, epidemia del siglo XXI. *Medwave*, 4(11): 2578. doi:
540 10.5867/medwave.2004.11.2578
541
542 Llanos Ortiz, J.C. (2017). *El estado de la pobreza seguimiento del indicador de riesgo*
543 *de pobreza y exclusión social en España 2008-2016*, Madrid: EAPN España.
544
545 MAGRAMA (2015). *Informe Nacional sobre el estado de la biodiversidad para la*
546 *alimentación y la agricultura*. Madrid: Ministerio de Agricultura, Alimentación y
547 Medio Ambiente.
548
549 Mariné, A. Vidal, MC (2001) Seguridad y riesgo de toxicidad en los alimentos: un
550 debate actual, *Arbor*, CLXVIII, 661: 43-63. DOI: 10.3989/arbor.2001.i661.822
551
552 McMichael, Ph. (2009). A food regime genealogy. *Journal of Peasant Studies* 36(1): 139-
553 169. DOI: 10.1080/03066150902820354
554
555 Medina, X., Aguilar, A. y Fornons, D. (2016). Alimentación, cultura y economía social.
556 Los efectos de la crisis socioeconómica en la alimentación en Cataluña (España).
557 *Sociedade e Cultura*. 18 (1): 55-64. DOI: 10.5216/sec.v18i1.40602.
558
559 Mintz, S. (1996). *Tasting Food, Tasting Freedom: Excursions into Eating, Culture, and*
560 *the Past*. Beacon Press, Boston.
561
562 Moore Lappé, F. (2007). *Getting A Grip: Clarity, Creativity and Courage in a World*
563 *Gone Mad*. Small Planet Media, San Francisco, CA. 186 pp.
564
565 OCDE/FAO (2018). *Perspectivas agrícolas 2018-2027*. [http://www.agri-](http://www.agri-outlook.org/Outlook_flyer_2018_ES.pdf)
566 [outlook.org/Outlook_flyer_2018_ES.pdf](http://www.agri-outlook.org/Outlook_flyer_2018_ES.pdf)
567
568 Organización para la Cooperación y el Desarrollo Económico (2014). Health at a
569 Glance: Europe 2014. OECD Publishing. [http://dx.doi.org/10.1787/health_glance_eur-](http://dx.doi.org/10.1787/health_glance_eur-2014-en)
570 [2014-en](http://dx.doi.org/10.1787/health_glance_eur-2014-en)>.
571
572 Panetta, J. López-Valcárcel, B. (2016). El gradiente social de la obesidad en España.
573 ¿Qué sabemos y qué deberíamos saber? *Icade*, 99: 45-68. DOI:
574 <https://doi.org/10.14422/icade.i99.y2016.002>
575

576 Pelto, H., Pelto, P.J (1990). *Dieta y deslocalización: cambios dietéticos desde 1750*. In:
577 Rotberg, R.I, Rabb, Th. (comp.). *El hambre en la historia*. Madrid: Ed. Siglo XXI.
578

579 Popkin BM, Adair, L. y Wen Ng, S. (2012). NOW AND THEN: The Global Nutrition
580 Transition: The Pandemic of Obesity in Developing Countries, *Nutr Rev.* 70 (1): 3–21.
581 DOI: 10.1111/j.1753-4887.2011.00456.x
582

583 Poulain, J.P. (2017). *Sociology of food*. London: Bloomsbury.
584

585 Riches, G., Silvasti, T. (eds.) (2014). *First World Hunger Revisited: Food Charity or*
586 *the Right to Food*. London: Palgrave Macmillan.
587

588 Sandström, V., Valin, H., Krisztin, T., Havlík, P., Herrero, M., Kastner, T. (2018). The
589 role of trade in the greenhouse gas footprints of EU diets. *Global Food Security* 19: 48-
590 55. <https://doi.org/10.1016/j.gfs.2018.08.007>
591

592 Subirats, M. (2012). *Barcelona: de la necesidad a la libertad. Las clases sociales en los*
593 *albores del siglo XXI*. Barcelona: Editorial UOC.
594

595 Swinburn, B., Egger, G., Raza, F. (1999). Dissecting obesogenic environments: the
596 development and application of a framework for identifying and prioritizing
597 environmental interventions for obesity. *Preventive Medicine* 29: 563-570. DOI:
598 10.1006/pmed.1999.0585.
599

600 Swinburn, B. A., Kraak, V. I., Allender, S., Atkins, V. J., Baker, P. I., Bogard, J. R.,
601 Brinsden, H., Calvillo, A., De Schutter, O., Devarajan, R., Ezzati, M., Friel, S., Goenka,
602 S., Hammond, R. A., Hastings, G., Hawkes, C., Herrero, M., Hovmand, P. S., Howden,
603 M., Jaacks, L. M., ... Dietz, W. H. (2019). The Global Syndemic of Obesity,
604 Undernutrition, and Climate Change: The Lancet Commission report. *Lancet (London,*
605 *England)*, 393(10173), 791–846. [https://doi.org/10.1016/S0140-6736\(18\)32822-8](https://doi.org/10.1016/S0140-6736(18)32822-8)
606

607 Tendall, D.M., Joerin, J., Kopainsky, B., Edwards, P., Shreck, A., Le, Q.B., Kruetli, P.,
608 Grant, M., Six, J. (2015). Food System Resilience: Defining the Concept. *Global Food*
609 *Security* 6: 17-23. <https://doi.org/10.1016/j.gfs.2015.08.001>
610

611 Warde, A. (1997). *Consumption, Food & Taste: Culinary Antinomies and Commodity*
612 *Culture*. London: Sage Publications.
613

614 World Health Organization (2004). *Global Strategy on Diet, Physical Activity and*
615 *Health* (DPAS). France: Library Cataloguing-in-Publication Data.
616

617 World Health Organization (2012). *Population-Based Approaches to Childhood Obesity*
618 *Prevention*. Geneva: WHO Library Cataloguing-in-Publication Data.
619

620 WHO-UE (2013a). *WHO European Region Food and Nutrition Action Plan 2014-2020*.
621 Copenhagen: WHO Regional Office for Europe.
622

623 WHO-UE (2013b). *Vienna Declaration on Nutrition and Noncommunicable Diseases in*
624 *the Context of Health 2020*. Copenhagen: WHO Regional Office for Europe.

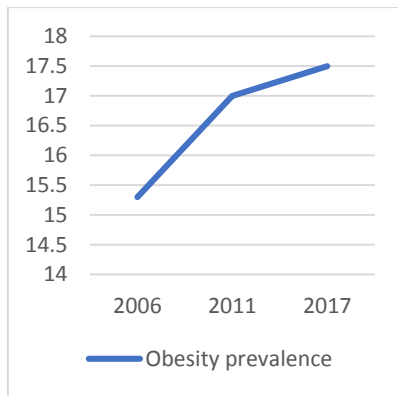
625 Ziegler, J. (2000). *El hambre en el mundo explicada a mi hijo*. Barcelona: Editorial
626 Muchnik.

627

628

ⁱ <https://www.who.int/en/news-room/fact-sheets/detail/antibiotic-resistance>

ⁱⁱ AROPE is an indicator developed by the European Union, which incorporates a multidimensional view of poverty and/or social exclusion to calculate the population at risk of poverty, with material deprivation or low employment intensity.

Figure 1. Obesity prevalence in Spain

Source: National Health Survey 2006, 2011/12, 2017 (Spain)

Table 2: Evolution of obesity prevalence by social class

		2006-2017
Both sexes	Total	2,06
	I	-0,99
	VI	3,00

Source: National Health Survey 2006, 2011/12, 2017 (Spain)

Table 1. Percentage of obesity according sex and social class of the reference person (Adults over 18 years old)

Both sexes	Total	17,43
	I	9,29
	VI	22,37
Men	Total	18,15
	I	11,31
	VI	20,42
Women	Total	16,74
	I	7,26
	VI	23,98

Source: National Health Survey 2017 (Spain)

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