Making a virtue of necessity: food education and gastronomy in the Spanish Civil War and post-war period (1936-1952)

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- Making a virtue of necessity: food education and gastronomy in the Spanish Civil
- **2** War and post-war period (1936-1952)

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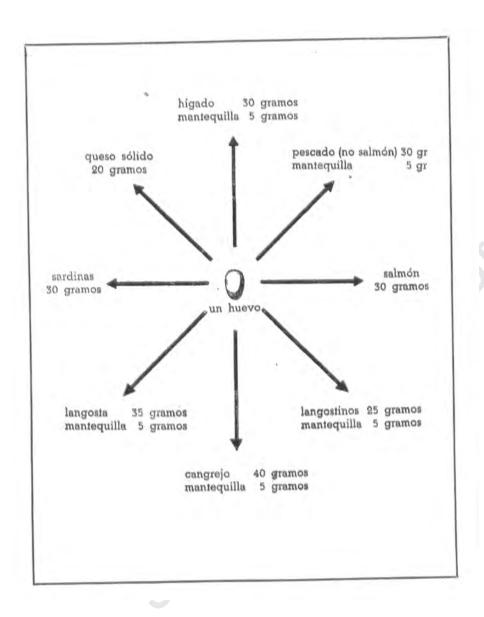
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3 Abstract

- 4 The nutritional status of the Spanish population deteriorated as the civil war progressed,
- 5 and particularly in the famine years that characterized the post-war period. In response
- 6 to this crisis, in 1937 the Government of the Second Republic created the National Food
- 7 Security Institute (Spanish name: *Instituto Nacional de Higiene de la Alimentación*).
- 8 The Government of Catalonia also tackled the food shortages created by the war. In
- 9 addition, other institutional and scientific scopes and from civil society, they developed
- a series of initiatives aimed at ensuring a diet that was "as healthy and effective as
- possible" within the constraints imposed first by the war and later by the hardship and
- scarcity of the autarkic period.
- To shed light on the scope and content of these initiatives, we analysed documents
- 14 related to the National Food Security Institute and the literature published by the
- 15 Government of Catalonia Propaganda Committee, as well as cookery and recipe books
- aimed at helping people prepare meals in times of war and/or food shortages. These
- publications explained how to make the most of the scant food resources available to
- the majority of the population and gave information on their nutritional value,
- 19 emphasising those with a high vitamin content. In many instances, they show that the
- 20 widespread hunger of those years proved to be boost of invention, spurring the
- 21 creativity of cooks and gourmets.







PERMANENCIA DE LAS COMIDAS



EN EL ESTÓMAGO

1 - 2 horas



100 - 200 gr. de agua pura 200 gr. de agua carbónica 100 - 200 gr. de leche hervida

200 gr. de caldo de carne solo 100 » de huevos hervidos

200 gr. de té solo 200 » café solo 200 » cacao solo 200 » cerveza

200 » vino flojo



2 - 3 horas



200 gr. de café con leche

200 » vino de Malaga

200 » vino húngaro de Ofen

300 - 500 gr. leche hervida

200 gr. de carpa hervida

200 » de besugo

200 » de bacalao

150 » de coliflor hervida

150 » de puré de patata

» de compota de cerezas 150

100 » de huevos crudos, bati-

dos, duros o en tortilla 100 » de embutido, crudo, de

carne de vaca

250 gr. sesos de vaca, hervidos

250 » de leche de vaca, hervida

70 » de pan blanco, tierno, duro, seco o con té

200 » cacao con leche

300 - 500 gr. de agua

300 - 500 » de cerveza

172 gr. de ostras crudas

200 » de merluza hervida

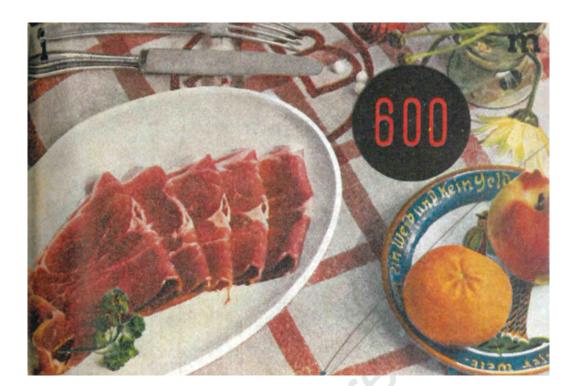
150 » de lechuga

150 » de patatas hervidas

150 » espárragos hervidos

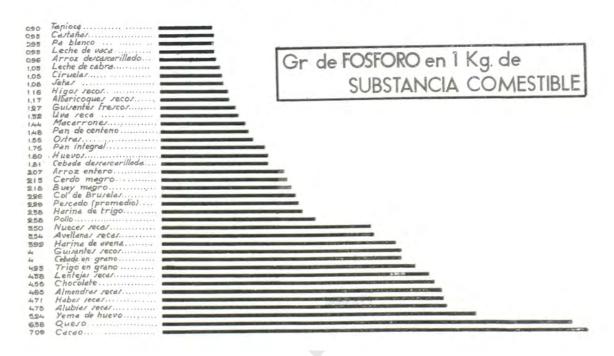
150 » cerezas crudas

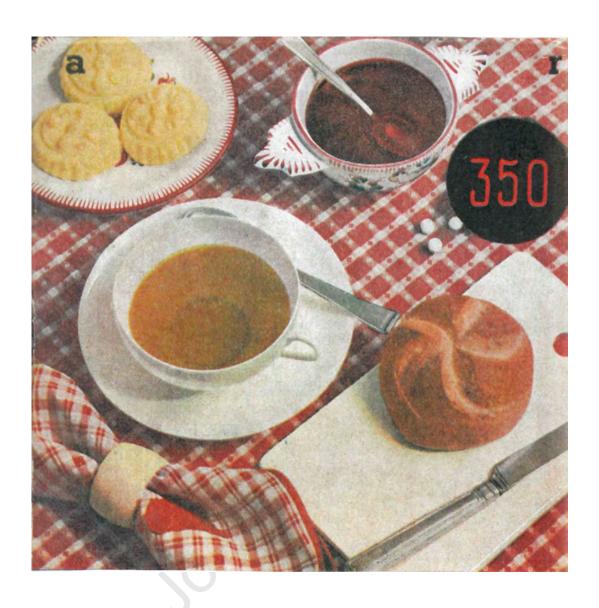
70 » rosquillas



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FOSFORO







FUNCIONES

Hace crecer
Alarga la vida
Da resist. contra las infec.
Hace digerir bien
Mantiene el vigor y la salud
Antixeroftálmica (contra las úlceras de los ojos)

Vegetales:

Animales: Aceite de hígado de bacalao

» » mero

Vegetales: Alfalfa, Bróculi. Rábanos. Lentejas. Espinacas.

Tomates, Berros.

Animales: Mantequilla. Queso. Nata. Leche. Huevos.

Vegetales: Albaricoque, Espárragos, Apio, Trigo, Alcachofa, Car-

do, Calabaza, Guisantes verdes. Pimiento verde, Guisante mollar, Habas frescas, Patacas, Chirivias, Zana-

horias, Naranjas, Melocotones, Ciruclas,

Animales: Glandulas (higado-riñón). Ostras, Leche.

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24 Key words

- 26 Malnutrition, Food and Nutrition Education, Science popularization,
- 27 Cooking/Gastronomy, Spain Civil War/War conflict, Spain 20th Century

28 Introduction

- 29 In response to the problems of hunger and malnutrition that surfaced during the First
- World War and the post-war period, the international agencies and organisations that
- 31 emerged under the auspices of the League of Nations made nutrition a major target of
- 32 their actions, although the international health movement had earlier marked an
- 33 important precedent by including the problem of the population's diet on its agenda
- 34 (Barona, 2012; Bernabeu-Mestre, Esplugues & Trescastro, 2015). Within this context of
- 35 international concern about the widespread problems of food and nutrition, there was
- 36 particular alarm for what could happen in a warlike context like the one that was
- unleashed after the coup of July 1936 and the beginning of the Spanish civil war.
- In December 1936, at the request of the Government of the Republic, the League of
- 39 Nations Council approved the formation of a health mission for Spain. Although the
- 40 initial objective was to assess the possibility for international action in the event of the
- 41 emergence of epidemic diseases, the report submitted by the Committee appointed for
- 42 this purpose also referred to the food problems that had begun to surface in Republican
- 43 Spain in early 1937 (Barona & Perdiguero, 2008: 115-126). Mention was made of the
- 44 predicament of refugees, particularly those welcomed in Catalonia, and most especially
- of the plight of the population in Madrid. According to the committee, although not

- tragic, the situation gave cause for serious concern. Hundreds of thousands of women or 46
- children still resident in Madrid needed to be evacuated as quickly as possible if they 47
- were not to suffer serious malnutrition (Rapport sur la misión sanitaire en Espagne, 48
- 1937: 91-99). 49
- The prolongation of civil war only compounded the fears of the International Health 50
- Committee, and the worsening nutritional status prompted the Ministry of Health and 51
- Public Instruction to enact a decree in April 1937 establishing the National Food 52
- Security Institute (Bernabeu et al., 2016:31). This was charged with the mission of 53
- reporting on the physiological status of the population based on medical, metabolic or 54
- similar accurate examinations; formulating a food rationing model, indicating how to 55
- overcome shortages and tailored as far as possible to seasonal produce and national food 56
- production; conducting a study on food supply, distribution and pricing; and 57
- establishing protocols for diagnosing vitamin deficiency in all public health centres and 58
- distributing vitamins to children and those severely affected by vitamin deficiency. 59
- 60 The work carried out by the National Food Security Institute was recorded by the doctor
- Grande Covián in his study entitled La alimentación en Madrid durante la guerra [Food 61
- in Madrid during the war] (Grande, 1939), in which he referred to the emergence of 62
- many cases of nutritional deficiencies between 1937 and 1938. Food shortages led to 63
- low weight, anaemia and latent symptoms of nutritional deficiency, while children 64
- evidenced a clear delay in physical development and greater vulnerability to childhood 65
- diseases. Some problems merited a more detailed study of their own, such as the 66
- vitamin deficiency known as "Madrid pellagra", or Grande Covián's own research on 67
- lactation and malnutrition (Grande, 1940; Del Cura & Huertas, 2007). 68
- Meanwhile, in an article of clear ideological content in the *Revista de Sanidad e Higiene* 69
- Pública [Journal of Public Health and Hygiene] in March 1940, Dr. Antonio Martín 70
- Calderín stated that: "During the recent war of liberation, the cruel experience of 71
- Marxist hunger to which the Spanish civilian population resident in the area dominated 72
- by these elements was subjected gave rise to cases of deficiency of great scientific 73
- interest [...] from the first quarter of 1937, and as food shortages steadily got worse, 74
- these deficiencies were exacerbated, triggering syndromes that are not commonly 75
- observed in clinical practice" (Calderín, 1940). As Isabel del Cura and Rafael Huertas 76
- 77 noted in their book on hunger in the post-war period (Del Cura & Huertas, 2007),
- symptoms of vitamin deficiency were first observed in 1936, but it was in 1937 when 78
- the number of cases began to rise. By 1938, vitamin deficiency had become the leading 79
- 80 deficiency-related disease.
- The most extensive research on malnutrition precipitated by the war was conducted in 81
- the early years of the post-war period. Of particular importance was the study 82
- commissioned by the Rockefeller Foundation (1941), which stated that "among the 83
- calamities inflicted by the war, and comparable to violent destruction and epidemics of 84
- infectious diseases, is the danger of malnutrition, which ranges from starvation to the 85
- 86 various clinical symptoms of a deficit of essential foods". It was in this context that two
- studies were launched in the early 1940s: one in Marseilles, aimed at gathering 87
- information on the then relative shortage of food in unoccupied France, and another in 88

- 89 Madrid, aimed at analysing the impact of food shortages during the Spanish Civil War
- on the Spanish population (Del Cura & Huertas, 2011).
- 91 Although the hunger and malnutrition identified by studies such as the one
- 92 commissioned by the Rockefeller Foundation did not apply to the entire Spanish
- 93 population, Isabel Castelló Botía's study of the death rate associated with malnutrition
- 94 in Spain from 1900-1974 shows that the general trend towards a decline in mortality
- 95 from causes such as hunger, chlorosis and vitamin deficiency was reversed during the
- 96 Spanish Civil War and the post-war period, and that deaths associated with vitamin
- 97 deficiency showed the greatest increase (Castelló-Botía, 2010).
- 98 Other indirect indicators also evidenced the deterioration nutritional status of the
- 99 Spanish population, such as the reduced incidence of diabetes and associated mortality
- 100 (Castelló-Botía, 2011). In the early 20th century, mortality due to diabetes in Spain had
- steadily risen, with a three-fold increase in the death rate from the beginning of the
- century until 1936 (from 3.59 deaths per 100,000 inhabitants in 1900 to 10.59 deaths
- per 100,000 inhabitants in 1937). This steady increase reflected socio-economic changes
- in Spain that had led to a diversification in nutrition. The day labourer class presented a
- poor nutritional status, with widespread problems —and even mortality— due to
- malnutrition and food hazards, but the high social class also exhibited symptoms of
- malnutrition due to excess. This reduction in mortality due to diabetes in the post-war
- period agrees with the findings of previous studies reporting a decrease in this type of
- pathology in situations of hardship and hunger (López Rey, 2015).
- Food education and gastronomy were notable among the resources deployed to tackle
- this situation. The aim of the present study was to analyse the educational literature
- published by public and private agencies and by related authors with food, nutrition,
- hygiene, cooking and gastronomy, all aimed at tackling the problems caused by food
- shortages.

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Materials and Methods

- Our analysis included cookery and recipe books as well as educational publications with
- titles such as food in times of war, wartime meals or the resourceful kitchen. These
- publications sought to help people prepare meals in times of war and/or food shortages.
- One of the sources analysed was the educational pamphlet entitled *La alimentación en*
- 120 tiempos de guerra. Problemas de alimentación que plantea la guerra [Food in times of
- war. Food shortages caused by the war], published in 1938 by the Government of
- 122 Catalonia Propaganda Committee and produced by the Superior School of Agriculture
- of the Generalitat. We also analysed the book Nuestra alimentación en tiempos de
- escasez [Our food in times of scarcity], published in 1937 by Dr. Jesús Noguer-Moré,
- one of the leading figures in health education in mid-20th century Spain and editor of
- the journal *Hygieia* (1935-1938) (Román, 2016). Although both publications shared the
- common aim of helping people deal with the food shortages triggered by the war and
- maintain a satisfactory nutritional status, they diverged with regard to their content and
- 129 educational discourse.

Results and discussions

- 131 Jesús Noguer-Moré emphasised the most valuable foodstuffs in times of shortage such
- as it happened during the Spanish Civil War and post-war period, providing nutritional
- information on each of them and advice on how to prepare, consume and preserve them.
- The Propaganda Committee's pamphlet stressed citizen responsibility and the need for
- the population to observe the authorities' guidelines and recommendations (Comissariat
- De Propaganda (Luigi Longo), 1938: 7):

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"The general public to whom this brochure is intended does not need to know about physiology or medicine. But what readers should know is that during war, only primitive nations have been afflicted by severe epidemics of xerophthalmia, rickets, anaemia, oedema, etc., and this must not be repeated. We must avoid this in our land, as it has been avoided in all other places where education, common sense and disciplined rationing have prevailed during war. Our dangers will vanish if we adhere strictly to the advice given here".

The metaphor of an engine was used to instil a basic idea, that of juggling available resources to ensure a "sensible diet that balances replacement parts (proteins), combustion (fats and sugars) and water, salts and vitamins" (Comissariat De Propaganda (Luigi Longo), 1938: 7-9): "If the assessed and reduced diet is well, there is no need to fear deficiency diseases (see Table 1). Hunger can be endured for months and months".

150 Table 1. Principal deficiency diseases

Disease	Deficit of micronutrients
Xerophthalmia	Vitamin A
Beriberi	Vitamin B
Scurvy	Vitamin C
Rickets	Vitamin D
Pellagra	Vitamin B ₂
Tetany	Calcium
Osteomalacia	Proteins, calcium, phosphorus
Goitre	Iodine
War oedema	Proteins, calories, fats
Anaemia	Iron

- 151 Source: Comissariat De Propaganda (Luigi Longo), (1938:8).
- The recommendation to strive to achieve a sensible, balanced diet was underpinned by
- basic advice such as that shown in Table 2, summarised by the idea of losing weight if
- need be, but never falling ill.

Table 2. Advice for coping with food shortages caused by the war

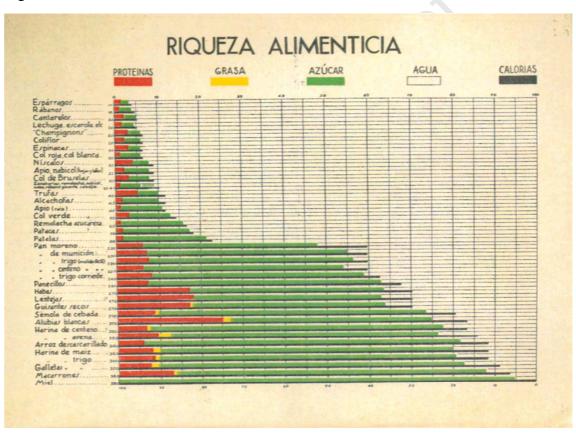
- Lose weight if necessary, but never fall sick
- Regard overeating as unhealthy
- Accept that feeling hungry after eating is healthy and has never killed anyone
- Understand that hunger can be endured for much longer if one knows how to prepare a balanced diet
- In response to food rationing: first obey, and then adapt portions to the established quantity
- Know how to calculate a portion

- Know how to substitute foodstuffs
- Know the early signs of deficiency diseases
- Source: Comissariat De Propaganda (Luigi Longo), (1938:9-10).

In order to help people put this advice into practice, the Government of Catalonia Propaganda Committee's pamphlet contained tables and diagrams clearly illustrating the proportion of protein, calories, vitamins, other basic food substances and micronutrients such as iron, phosphorus or calcium contained in foodstuffs. It also suggested diets adapted to food shortages to help plan meals according to the degree of scarcity and the age, physical activity, characteristics and clinical conditions of the people concerned (Comissariat De Propaganda (Luigi Longo), 1938: 14-60; Noguer-

people concerned (Comissariat De Propaganda (Luigi Longo Moré, 1937: 50-58) (See Figures 1, 2 and 3).

Figure 1. Food wealth



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Source: Comissariat De Propaganda (Luigi Longo), (1938:21).

168 Figure 2. Plan meal: breakfast



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Source: Comissariat De Propaganda (Luigi Longo), (1938:16).

171 Figure 3. Plan meal: night tea



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Source: Comissariat De Propaganda (Luigi Longo), (1938:18).

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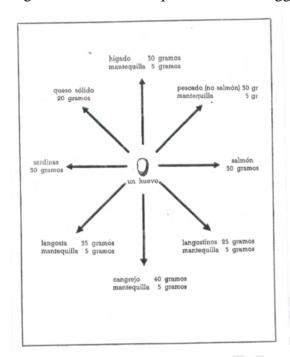
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This information was further supplemented by an appendix full of useful tips, including homemade equivalents, how to calculate "the calories we need" and determine "our appropriate weight", how to provide calories, especially in cases such as pregnancy or

- childhood, the problem of water (Comissariat De Propaganda (Luigi Longo), 1938: 65-
- 179 71) and even how long meals remain in the stomach, in order to indicate which were
- "most and least digestible" (Comissariat De Propaganda (Luigi Longo), 1938: 101-102)
- 181 (See Figures 4 and 5).

Figure 4. Homemade equivalents of the egg



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- Source: Comissariat De Propaganda (Luigi Longo), (1938:46).
- Figure 5. How long meals remain in the stomach

PERMANENCIA DE LAS COMIDAS



- Source: Comissariat De Propaganda (Luigi Longo), (1938:101).
- Should the initial symptoms of a deficiency disease appear despite following the advice
- and recommendations described above, the Government of Catalonia Propaganda
- 190 Committee's pamphlet picked up a "general tables of vitamin content according to
- 191 foodstuff" and "charts showing the grams of iron, haemoglobin, calcium and
- 192 phosphorus contained in each kilogram of edible substance" to help people treat the
- symptoms (Comissariat De Propaganda (Luigi Longo), 1938: 109-117) (See Figures 6
- 194 and 7).
- 195 Figure 6. Vitamin A, functions and foods containing it.



- 197 Source: Comissariat De Propaganda (Luigi Longo), (1938:29).
- 198 Figure 7. Grams of phosphorus for kilogram of food substance

FOSFORO



Source: Comissariat De Propaganda (Luigi Longo), (1938:73).

The pamphlet also established recommendations for rectifying unhealthy dietary habits such as excessive protein consumption, stating that 50 grams a day was sufficient and that exceeding this amount, even in times of abundance, was inadvisable (Comissariat De Propaganda (Luigi Longo), 1938:14):

"This [the overconsumption of proteins] is a widespread vice in all capitalist countries, which only leads to harm. Besides their toxicity, besides being unnecessary, it is uneconomical and physiologically counterproductive: uneconomical because protein-rich substances are always expensive, and physiologically counterproductive because the simple act of eating protein makes our bodies work harder, consuming more to do the same amount of work and expending more (biologists call this specific dynamic action)".

It is also attempted to rectify other habits that passed unnoticed in times of abundance but which became unacceptable in times of scarcity, such as "the crime of leaving oil on your plate" (Comissariat De Propaganda (Luigi Longo), 1938: 23): "dressing a salad or vegetables with oil doesn't only improve the taste, but also provides more calories than the rest of the salad put together".

Another element of widespread concern in the educational discourse of the two publications analysed here was the economic aspect, and more specifically, the optimisation of resources when purchasing food by prioritising those that for the same price provided a higher content of basic food substances and micronutrients. As can be seen in Table 3, for the same price —one peseta— one could purchase a highly variable amount of calories.

Table 3. Calories purchased with one peseta by type of food

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Food	Calories per peseta spent
Bread	2,500
Rice	2,357
Olive Oil	2,025
Sugar	1,312

Peanuts	1,300
Hazelnuts	915
Walnuts	890
Dried pulses	825
Potatoes	820
Honey	802
Milk	680
Almonds	666
Butter	540
Fruit	400
Greens (spinach/cabbage)	250
Cheese	240
Cod	224
Meat	198
Eggs	124

Source: Comissariat De Propaganda (Luigi Longo), (1938:22).

In the same vein of resource optimisation, the publications placed high value on foodstuffs considered to be of little prestige in times of plenty but which acquired enormous importance in periods of scarcity. Such was the case of olives, usually consumed unheedingly but which became especially valuable during food shortages due to their high calorie content. Besides drawing attention to their nutritional value, space was devoted to the different ways to preserve them and enhance their organoleptic and gastronomic properties by storing them in brine or seasoning them with oregano, thyme and other aromatic herbs (Noguer-Moré, 1937: 26).

The same was the case with nuts, including almonds, hazelnuts, chestnuts and peanuts, although these latter, botanically speaking, are classified as legumes. Nevertheless, peanuts were among the most popular foods during food shortages due to their high energy value, good digestibility and easy cultivation in the Mediterranean basin. As was explained, they could be eaten raw, roasted or boiled, in stews and nougat, and could even be used to make bread or milk (Noguer-Moré, 1937: 29-34). Legumes were classified as "food essential to the economy [...] given the ease with which our soil produces them [...] (beans, chickpeas, peas, green beans, lentils, etc.)" (Noguer-Moré, 1937: 42).

Another of the foodstuffs that acquired particular importance in times of scarcity was fruit, which was considered "essential in the human diet" and "exceptionally rich in vitamins", in addition —as with olives— to possessing excellent organoleptic and gastronomic properties associated with flavour, aroma and essences. Fruit was also suggested as being "extraordinarily useful as appetizers" (Noguer-Moré, 1937: 36-38).

In the chapter on energy foods, besides stating that sugar was "the best energy food we know", and of "extraordinary value for those who perform demanding physical work" (Noguer-Moré, 1937: 30-31), the consumption of honey was also promoted when it was necessary to "reduce sugar consumption due to its scarcity or price", while simultaneously encouraging its production, which was "an unsurpassed ease and economy" (Noguer-Moré, 1937: 45). Dried figs and fig bread were also advocated, as

- being very cheap energy products (Noguer-Moré, 1937: 36-38), as were raisins, because
- 255 they were so easily digested (Noguer-Moré, 1937: 47).
- 256 The claim of jams is very illustrative: "of great value in any war, given its economy,
- abundance and almost indefinite shelf life". Noguer-Moré particularly highlighted jam
- 258 made with ripe fruit from the strawberry tree, due to its abundance, the small amount of
- sugar required and its economy, as well as tomato jam due to its "wealth of vitamins"
- 260 (Noguer-Moré, 1937: 44).
- The list of foods to claim in times of shortage, was completed with tubers such as sweet
- potatoes, potatoes and tiger nuts. Readers were told that sweet potatoes could be used to
- 263 make bread and that potatoes formed "the carbohydrate par excellence for soldiers on
- 264 campaign, even being used to substitute bread during the European war". Tiger nuts
- were highlighted for their nutritional composition when dry, while also mentioning that
- they were usually consumed as milk (Noguer-Moré, 1937: 32-48).
- Frozen meat was also praised, because it "retained all of its vitamins" and "supply was
- relatively easy" thanks to importation (Noguer-Moré, 1937: 33-34), as was chocolate
- because it was considered "an excellent standby for soldiers on campaign, being of great
- 270 nutritional value, an effective stimulant and easy to conserve" (Noguer-Moré, 1937: 35).
- 271 Milk and its derivatives were recommended because they were of "immeasurable
- value", especially in times of scarcity, particularly condensed milk, due to its indefinite
- shelf life, powdered milk, which presented "the additional advantage of weighing less"
- and butter, while cheese with bread was termed "a complete food" (Noguer-Moré, 1937:
- 275 39-41). Canned products were stoutly defended, with claims that "they have the same
- 276 calorie content as fresh food and very often the same vitamin content" (Comissariat De
- 277 Propaganda (Luigi Longo), 1938: 64).
- 278 Special mention should be made of alcoholic beverages, viewed as stimulants because
- 279 they often endowed people with the capacity to undertake heavy work. However, when
- consumption was habitual, alcohol was considered a "bad food", and one of the "main
- agents of the degeneration of the species", as well as being expensive. An order of
- 282 preference for alcoholic beverages was given, with first place awarded to wine,
- followed by cider and beer (Noguer-Moré, 1937: 26-29). Noguer-Moré also mentioned
- grape juice as being a preferable alternative to wine because it could be drunk in greater
- 285 quantities: "Drinking a glass of grape juice every 10 to 15 minutes facilitates a
- surprising amount of physical labour" (Noguer-Moré, 1937: 46).
- The question of wine, and whether it was nutritious or toxic, was also discussed in the
- pamphlet published by the Government of Catalonia Propaganda Committee, which
- concluded that it was a food, albeit one that should be used in moderation (1.2 to 1.4 g
- 290 per kg body weight), since in small amounts it favoured digestion, possessed antiseptic
- properties and was easy to absorb. Echoing Noguer-Moré's recommendation in his
- book Alimentación en tiempos de escasez, the Propaganda Committee's pamphlet
- 293 encouraged consumption of grape juice because of its "caloric value and medicinal
- properties" (Comissariat De Propaganda (Luigi Longo), 1938: 106-107).
- As noted earlier, the necessity provoked by war and its aftermath he turned those years
- 296 into propitious times for creativity: "When resources are short and all we have to spare

- is time, the imagination is capable of performing wonders" (Diaz Yubero, 2003:461).
- 298 This is evidenced in the testimony that Noguer-Moré recorded in his monograph: "it
- 299 was possible to make omelette using the powdered egg yolk sold in shops, which was
- very palatable if something tasty (onion, tomato, garlic, etc.) was added" (Noguer-Moré,
- 301 1937: 38-39).
- 302 Another example of the creative response of cooks and gourmets to wartime and post-
- war food shortages is illustrated in the pamphlets entitled *Platos de guerra* [wartime
- meals], published in 1938 by a lawyer from Alicante, José Guardiola Ortíz (1872-1946),
- under the pseudonym of a rearguard cook (Bernabeu-Mestre, 2017; Bernabeu, Cortés &
- 306 Trescastro, 2017).
- 307 The first was a "recipe book for preserving and seasoning sardines: practical, simple
- 308 recipes for preparing this tasty and popular fish" (Guardiola, 1938a). As Guardiola
- 309 indicated in the prologue, sardines were very popular among the working classes
- because they were high quality but cheap, even under the difficult circumstances of civil
- 311 war: "their flesh is flavoursome, delicate and nutritious and until recently they were
- 312 cheap; even now, of the few kinds of fish sold at markets, they remain the most
- 313 affordable for poor people". Guardiola gave eight household recipes for preserving
- 314 sardines so that people could take advantage of the excess supply that sometimes
- 315 appeared at the markets. He also gave more than fifty appetising recipes that were
- 316 grouped according to the method used or the manner of serving them: roasted, fried,
- stuffed, baked, simmered, as the main flavouring ingredient in rice dishes and soups,
- poached, cold and hot (Bernabeu, Cortés & Trescastro, 2017: 15-16).
- 319 The second of the pamphlets was subtitled "a selected repertoire, with simple, practical
- 320 recipes adapted to current circumstances". In the notes that served as an introduction
- 321 (Guardiola, 1938b: 4-5), Guardiola recalled Brillant-Savarin, who claimed that a
- nation's destiny was dictated by its diet, and explained the purpose and nature of his
- initiative, adapted at all times to the food difficulties suffered by the population in 1938
- in the Republican rearguard.
- 325 According to Guardiola, "for ours [referring to the destiny mentioned by Brillant-
- 326 Savarin] to attain its rightful grandeur, we must all contribute where and how we can;
- and if we do not have an abundance of food to hand [...], we must ensure that what we
- do have is appetising and tasty, because well-seasoned food that stimulates the appetite
- 329 is more filling and nutritious". He also explained that "some of the recipes given here
- are of great value because they are faithful replicas of the dishes jotted down by busy
- 331 housewives in their notebooks; others are new and many describe in detail the correct
- way to prepare time-honoured, well-loved regional dishes that have been painstakingly
- refined over the centuries". After providing ten lists, "each with seven varied dishes
- from which, every day, readers can select those with seasonal ingredients available at
- the market", he concluded that most of the recipes were easy to prepare, even in places
- 336 close to combat zones.

Conclusion

- As we have seen, the texts on food education and gastronomy analysed here sought to
- alleviate the problems arising from food shortages and to optimise the few remaining

- resources available with the help of gastronomy. The aim was none other than to make a
- virtue of necessity, and even to harness the problem of scarcity to remedy conditions
- such as those linked to overeating or a poor diet, while simultaneously combatting
- myths and misconceptions, imparting scientific knowledge, improving dietary habits
- and promoting healthy eating.
- 345 This study has illustrated the discourses that informed educational and informational
- actions aimed at helping people make the most of the scant sources of food and nutrition
- available to the majority of the population during the Spanish Civil War and post-war
- 348 period. It has also shown how the necessity and hunger of those years inspired a
- 349 creative response in cooks and gourmets, who attempted to ensure that the scant food
- available could be eaten with gusto.
- 351 It is worth highlighting the current interest in the recovery of these works, putting them
- in value and having them present in the implementation of initiatives that promote food
- 353 education in contexts of scarcity, from the perspective of gastronomy, in order to
- prevent and remedy possible nutritional deficiencies.

355 Conflict of interest

356 The authors declare that there are no conflict of interest

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- **2** War and post-war period (1936-1952)

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- 5 The authors declare that there are no conflict of interest