

“Because they just don’t want to”: dairy products, consumer preferences, and the nutritional transition in Spain in the 1950s and early 1960s *

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Prior to the mid-1960s, dairy products –one of the main carriers of the so-called nutritional transition– were not a major element in the Spanish diet. Through an analysis of the obstacles to the expansion of dairy consumption in the 1950s and early 1960s, this article argues that consumer preferences, and not only low consumer incomes or a poorly developed dairy chain, were important. Even though Spanish consumers were not hostile towards dairy products (at a time of intense propaganda efforts by physicians, agribusinesses and the State), their preferences were selective. As the cases of raw milk, powdered milk and cheese show, consumers’ lack of enthusiasm about the characteristics of much of the dairy produce that was actually available to them hampered the expansion of consumption at a time when their economic situation was improving clearly. This suggests that the progress of the nutritional transition was not a necessary outcome of changes in consumer income and food production, but depended on an appropriate fitting of such changes with the evolution of consumer preferences.

Diet change in the modern West has been often described in terms of a “nutritional transition”.¹ In the mid-nineteenth century, the Western diet was poor and monotonous: intakes of energy and nutrients were low and resulted mostly from a narrow range of cereals and other basic grains. From then on there was a transition towards diets featuring abundant intakes and an increasing role for livestock-origin foods, such as meat, dairy products and eggs. This transition culminated in the decades after the Second World War, when the content of food-related anxieties began to shift from scarcity to excess.

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The prevailing views of the nutritional transition tend to present it as a process that unfolded in a gradual way as industrialization progressed. According to the influential analysis by historical geographer David Grigg, for instance, modern economic growth would have led to higher household incomes, which in turn would have allowed consumers to regularly buy both larger quantities of food products and a wider range of them. The relevance of income as an explanatory variable would be further confirmed by the fact that early industrializing countries and the upper classes were clearly ahead of late industrializers and the lower classes in this transition to a new diet.² Another influential account, by historical sociologists Harriet Friedmann and Philip McMichael, links diet changes to a broader process of social reproduction of the food system. According to this, the gradual industrialization of food production, made possible by the increasing power that large processing companies came to exert upon farmers, was crucial for the transformation of diets.³ In both cases, the nutritional transition flows from the progress of what agri-food economist Louis Malassis, in his theoretical analysis of food consumption, calls demand capacity (in the first case) and supply capacity (in the second case).⁴

This article proposes a different view – one in which the progress of the nutritional transition depends on the combination of these factors with the evolution of consumer preferences. Rather than opposing the prevailing views of the nutritional transition, the article tries to encompass them in a broader framework. Changes in household income and the food system exerted an influence on diets, but they did so within a domain that was defined by consumer preferences, and more specifically by the qualitative perceptions that consumers had of the particular varieties of food product available to them in the market. Therefore, the nutritional transition was less linear and teleological a process than is commonly suggested. Its progress actually depended on the degree of coherence that at any point in time existed between consumers' economic possibilities and consumers' wishes.

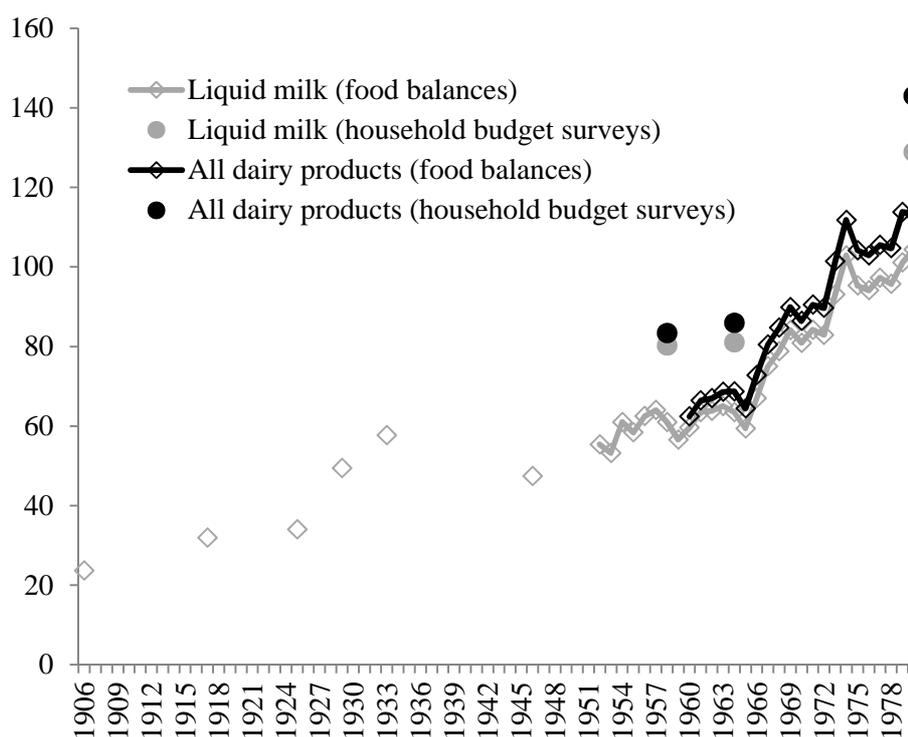
The article illustrates this argument through a case in which such coherence was relatively low and, therefore, the nutritional transition progressed less than it would have been expected considering the evolution of demand capacity and supply capacity. The case is dairy products (a product group unanimously considered as one of the carriers of nutritional transition) in Spain in the 1950s and early 1960s. The analysis uses some quantitative material constructed from official statistical sources, but is based mostly on qualitative material taken from newspapers and professional dairy journals.

This qualitative material, which offers useful information about consumer perceptions, is not free from bias. Journalists, for instance, were subject to censorship and other restrictions to press freedom under the dictatorship headed by General Francisco Franco, and therefore their testimony could be biased in favor of State policies. All in all, the fact that there was a plurality of internally inconsistent objectives and anxieties within Franco's State (and, as a result of that, major clashes among competing political networks) contributes to reducing this bias significantly, as we will see.

Spain was in the early 1960s one of the Western countries in which the consumption of dairy products was lowest. Dairy consumption was about three times lower than in the United Kingdom or the United States, and also lower than in other Mediterranean countries such as Italy or Greece.⁵ Liquid milk was not as unimportant as it had been prior to the late nineteenth century, but it still had not become an item of regular, widespread consumption. The consumption of dairy products other than milk was not widespread either. Cheese, butter and preserved milk (powdered milk and condensed milk, in particular) were known by consumers, but they occupied marginal spaces within most people's diet. A similar thing happened with products that had been introduced in the Spanish market more recently, such as yoghurt (by then, basically a product that people with intestinal problems bought at pharmacies) or ice cream.⁶ According to the medical view that was dominant both at that time and (albeit in a more contested way) today, this low level of dairy consumption made most Spaniards suffer from permanent calcium deficit.⁷

Not only was dairy consumption low, but also slow-growing. In the early decades of the twentieth century, and especially after around 1920, the consumption of liquid milk had been growing at a remarkable rate, but the Civil War of 1936-1939 halted this trend (figure 1). Even though postwar statistics are not fully reliable, it seems clear that milk consumption did not increase significantly in the 1940s; in fact, it may have even decreased.⁸ And when consumption grew again in the 1950s and early 1960s, it did so at a very slow pace. Nor did the role played by other dairy products in the Spanish diet increase greatly. In fact, in the case of the most important other-than-milk product, cheese, consumption remained stagnant. Only after the mid-1960s would the consumption of dairy products, and of liquid milk particular, become massive. The intensity of dairy consumption growth in Spain after 1965 is striking even for Western standards, but also raises the question of why the diffusion of dairy consumption made so little progress prior to that date.⁹

Figure 1. Consumption of milk and dairy products in Spain (kilograms per person and year)



Sources: food balances: 1906-1933: I. Hernández Adell, “La difusión de un nuevo alimento: producción y consumo de leche en España 1865-1936” (PhD diss, Universitat Autònoma de Barcelona, 2012), 190; 1946: F. Muñoz Pradas, “Población y consumo. Una reconstrucción de las poblaciones consumidoras de leche en España, 1925-1981” (UHE working paper 2009-6, Universitat Autònoma de Barcelona), 27; 1952-1959: C. Barciela, “El sector agrario desde 1936”, in *Estadísticas históricas de España, siglos XIX-XX*, ed. A. Carreras (Madrid: Fundación Banco Exterior, 1989), 159; 1960-1980: Ministerio de Agricultura, *La agricultura española en 1968* (Madrid: Ministerio de Agricultura, 1968); Ministerio de Agricultura, *La agricultura española en 1972* (Madrid: Ministerio de Agricultura, 1972); Ministerio de Agricultura, *La agricultura española en 1975* (Madrid: Ministerio de Agricultura, 1975); Ministerio de Agricultura, *La agricultura española en 1977* (Madrid: Ministerio de Agricultura, 1977); and Ministerio de Agricultura, Pesca y Alimentación, *Anuario de estadística agraria, 1983* (Madrid: Ministerio de Agricultura, Pesca y Alimentación, 1983); household budget surveys: Instituto Nacional de Estadística (henceforth, INE), *Encuesta sobre cuentas familiares, marzo 1958* (Madrid: INE, 1959); INE, *Encuesta de presupuestos familiares (marzo 1964-marzo 1965)* (Madrid: INE, 1965-69); and INE, *Encuesta de presupuestos familiares 1980-1981* (Madrid: INE, 1983-85).

A part of the answer is, of course, that prior to the mid-1960s Spain suffered from problems of both demand capacity and supply capacity. As a result of economic backwardness and social inequality, most Spanish households earned an income that was low by Western standards. This made it difficult for many consumers to become regular buyers of relatively expensive foods such as dairy products and, more generally, to transition away from their traditional diet. There were large differences in dairy consumption between upper and lower classes, and dairy consumption was in fact a marker of social status. In addition, the performance of Spain’s dairy chain was weak.

In most regions, the progress of dairy farming was strongly constrained by scarce and irregular rainfall, which made it costly and difficult to ensure feeding for the cows. There was not a strong processing industry either, in spite of some emerging business initiatives in the 1920s and early 1930s. As a result, dairy consumption was much higher in the tiny strip of Atlantic climate regions in the north of the country (where much of Spain's dairy farming was concentrated) than anywhere else. These long-standing problems had been further aggravated by the impact of the Civil War and the economic failure of the newly-established Franco regime in the 1940s. Under heavily interventionist, corporatist economic policies, most consumers' disposable income fell and much of the moderate progress that had been taking place in the dairy chain before the war vanished.¹⁰

These problems, however, were not as unsurmountable as it might seem. Furthermore, in some cases they were soon to fade away. When it came to supply capacity, there were dairy products other than cow's liquid milk that could have acted as substitutes of the latter. Contrary to cow's liquid milk, the production of goat's liquid milk or cheese (which in Spain was made mostly from ewe's and goat's, rather than cow's, milk) was not constrained by aridity and rainfall shortages. Even in the area of cow's milk, the latter could be transformed into powdered or condensed milk in order to take inter-regional trade much further than could be the case with a commodity as delicate as liquid milk. And, when it comes to demand capacity, household economies started in the 1950s to benefit from the start of a new macroeconomic cycle that would feature accelerated and unprecedented growth until the mid-1970s.¹¹ As a result, regularly buying dairy products became a more feasible target for households. Consumers' purchasing power for dairy products increased clearly, even if supply-side problems occasionally caused relative prices to rise (as it actually happened in the case of liquid milk in the late 1950s and early 1960s).¹²

Why, then, did Spain's consumption of dairy products remain so low well into the 1960s? From a statistical point of view, the answer is clear: consumers were actually not very prone to use their increase in purchasing power to buy more dairy produce. The responsiveness of liquid milk consumption to positive variations in (price-adjusted) purchasing power was low (table 1) – at least, lower than before the Civil War or after 1965.¹³ In the case of cheese, responsiveness was virtually zero. In other words, consumer preferences do not seem to have been strongly oriented towards dairy products. This is consistent with the view held by many dairy entrepreneurs at the time.

For instance, Manuel Ramos, the director of one of the most important processing companies in the country, wondered in the mid-1950s why Spanish consumers remained so far away from the nutritional advice of drinking at least half a liter of milk a day. His answer was: “It is food habits, rather than Spain’s low average income level, that will for a long time prevent the achievement of such a goal”.¹⁴ He then went on to develop the argument that Spanish consumers did not consume more dairy produce not because their income was low or because the dairy chain was producing too little, but “because they just do not want to”.¹⁵

Table 1. *Responsiveness of consumption to changes in income and prices, 1958-1964*

	Liquid milk	Cheese
Change in consumption ^a	0.2 – 0.7 ^d	0.1
Change in price-adjusted purchasing power ^b	1.8	5.4
Responsiveness factor ^c	0.10 – 0.38 ^d	0.01

Notes: ^a Annual compound rate of change in consumption (%); ^b Annual compound rate of change in real disposable income re-deflated by the relative price of liquid milk/cheese; ^c Ratio of change in consumption to change in price-adjusted purchasing power; ^d Lower-bound estimates come from household budget surveys, whereas upper-bound estimates come from merging evidence from household budget surveys and food balances; the former are more reliable.

Sources: consumption: INE, *Encuesta sobre cuentas familiares, marzo 1958* (Madrid: INE, 1959), and INE, *Encuesta de presupuestos familiares (marzo 1964-marzo 1965)* (Madrid: INE, 1965-69); price-adjusted purchasing power: A. Carreras, L. Prados de la Escosura and J. R. Rosés, “Renta y riqueza”, in *Estadísticas históricas de España, siglos XIX-XX*, eds. A. Carreras and X. Tafunell (Bilbao: Fundación BBVA, 2005), 1372; INE, *Encuesta sobre cuentas familiares*; INE, *Encuesta de presupuestos familiares*; INE, www.ine.es (“Índice de Precios al Consumo”, base 1983 [only cities]).

But, why did they not want to? Spanish consumers were not lactophobes, to use the term coined by anthropologist Marvin Harris.¹⁶ Lactose intolerance had not yet been discovered by food scientists, but given the slow rate of genetic change the information available for more recent periods provides a reliable picture of the situation in the 1950s and 1960s. What we know about this issue today is that, even though Spain’s rate of lactose intolerance is higher than that in other Western countries, it is a low rate when assessed on a broader, global scale.¹⁷

Nor were consumers unaware of what historian Deborah Valenze calls “the gospel of milk”.¹⁸ In the 1950s and 1960s most consumers accepted the central message that the by then dominant “newer nutrition” paradigm was sending about milk: that milk was a complete, healthy food that should be consumed regularly in large quantities.¹⁹

This message was aimed at demolishing milk's traditional image as a food to be consumed only by specific age groups, such as children and the elderly, and by populations going through an illness of some kind. By the start of the period, this traditional image was already much weaker than about half a century earlier. Since the late nineteenth century, an increasing number of physicians and local institutions were becoming involved in prescription, promotion and propaganda activities in order to spread the gospel of milk among ever wider segments of society.²⁰ It is true that by the start of our period their task had not been completed yet, and the gospel of milk coexisted with persistent traditional images of milk as a food for specific situations and groups. Additionally, and contrary to other Western countries with a stronger dairy tradition, the consumption of (only) milk in public places carried with it a negative social sanction for consumers, especially if they were male.²¹ During our period, however, whatever resistance that had managed to survive to the early twentieth-century wave of newer nutrition prescriptions was washed away after the efforts by physicians and dairy companies were joined by the central State.

Spanish physicians remained unambiguously favorable to regular milk consumption as an extremely valuable source of high-quality proteins and calcium.²² The promotional campaigns launched by newly emerging processing companies made their own contribution to spreading the message by means of slogans such as "Milk... a liquid that makes you strong", "Your intense life requires milk consumption" or "Half a liter of milk every day equals to health at a good price".²³ Moreover, these campaigns were now targeting a mass audience, rather than (as it had been the case in the early twentieth century) to children or other specific groups.²⁴ What the State did was, similarly to other Western countries since the 1930s, to accept the gospel of milk as a creed of its own and amplify its resonance by implementing centralized mechanisms for the promotion of milk consumption.²⁵ The National Dairy Committee (*Comité Nacional Lechero*), basically a corporatist organization built from the top down, took the lead in the organization of exhibitions, fairs, meetings, festivals and a wide array of other propaganda activities. Another corporatist organization, the National Livestock Farming Union (*Sindicato Nacional de Ganadería*), and the Ministry of Agriculture undertook parallel efforts ranging from the production of expensive cinematographic propaganda to enthusiastic statements about milk drinking by important politicians.²⁶

These propaganda efforts benefited from two elements that had been absent in the earlier part of the twentieth century. First, while in earlier times the gospel of milk

spread basically through local publications and the everyday professional activity of physicians, it now also spread through the increasingly influential, politically controlled mass media. And, second, State-backed propaganda benefited from the increasing international articulation of national dairy organizations and associations. For members of the Spanish National Dairy Committee, who belonged to a peripheral country lacking a strong dairy culture, participating in events such as the annual congress of the International Dairy Federation was a much treasured source of ideas, references and thrust.²⁷

A good illustration of both novelties is given by the events organized by the National Dairy Committee for the first International Milk Day on June 6, 1958. This was an initiative coming from the International Dairy Federation, but, except for the necessary acceptance of the commonly agreed slogan “Milk is health”, each national agency was free to decide which events were most suitable to their country’s particular situation and organize them. In Spain, the National Dairy Committee followed an ambitious communication strategy involving not only more or less traditional outlets such as special issues in professional journals or billboards to be placed in visible parts of the country’s main cities, but also access to abundant radio and television time, as well as to publishing space in the main national and regional newspapers.²⁸ The alliance of physicians, dairy processors and the State was very symbolically revealed by the roundtable that was broadcast that day in the country’s single television channel (the State-owned, politically-controlled *Televisión Española*). At the roundtable, two spokesmen of dairy organizations vindicated the country’s need for a stronger processing industry, while one pediatrician ensured that “All that is done in order to foster the dairy industry ... is to be most useful in relation to child health”. He recommended all children and teenagers in the country drink as much as one liter of milk per day and suggested to do so by substituting the water they were drinking with their meals for milk.²⁹

We lack direct evidence of changes in consumer preferences resulting from these insistent messages, such as diaries or biographies reporting personal conversions to the gospel of milk. However, the school essays presented to the contest that the National Dairy Committee organized for the second International Milk Day in 1959 provide an involuntary compilation of the diverse arguments that children and teenagers were absorbing from physicians, producers and the State. The winning essay, for instance, was a Decalogue in which a 14-year-old student summarized the reasons why he was a

milk drinker. Health-related motivations were dominant (“It is a complete food”, “When I am ill, it is good for healing”, “It is rich in vitamins”). In a way that would not be surprising to scholars of Chinese or Indian foodways today, they were joined by associations of milk consumption and personal health to national progress (“Milk consumption promotes the national economy”, “Having milk every day I will become a man who is strong and useful to his Nation”).³⁰

It is telling that some observers found the milk propaganda too successful, meaning that increasing consumer awareness of the health benefits of milk consumption was making the shortcomings of Spain’s dairy chain (and Franco’s dairy policy) more visible and relevant to the public eye. In the crucial case of Madrid, which was both the main focal point of propaganda (being as it was the country’s capital city) and a large urban area where dairy processing was still a rather undeveloped sector, an anonymous columnist in a widely circulated newspaper argued after the first International Milk Day in 1958 that “many and very attractive billboards spreading the excellences of milk as a food have been placed ... [but] rather than milk propaganda what Madrid needs is milk itself”.³¹ He then went on to present a number of supply-side problems that could obviously not be solved by propaganda. Even Franco’s policymakers came to embrace the view that their task was to ensure a regular supply of good-quality milk for a population that had clearly incorporated milk to their set of basic aspirations.³²

But, if consumers were (borrowing again from Harris) lactophiles, why then did they not make more use of their augmented purchasing power in order to increase their consumption of milk? Basically, because they were selective lactophiles, and this time their assessment of the particular varieties of milk that were available to them in the market was rather unenthusiastic. During the 1950s and early 1960s, the very slow progress made by Spain’s dairy industrialization implied that raw milk retained a market share of around 90 per cent.³³ For consumers, this was problematic for a number of reasons.

First there was the risk of suffering the economic consequences of fraud. The chain for the commercialization of raw milk was very opaque and full of information asymmetries, which made the practice of adding water to the milk widespread among farmers and traders.³⁴ An independent observer estimated that in Madrid in the early 1950s some 10 per cent of the consumption of (what consumers had bought as) milk was actually water.³⁵ The only means that consumers had to make sure that the milk they were buying had not been adulterated was to require that the cow was milked

before them.³⁶ But this was not feasible in most cases: in urban areas, in particular, much milk reached consumers through independent traders disconnected from farm production and/or came from farms that were simply too far away from consumers. The State, for its part, lacked a systematically organized infrastructure in order to detect and punish fraudulent behavior.³⁷

Second, fraud could also entail health consequences when milk, a delicate product in need of careful handling, reached consumers in a deteriorated state.³⁸ This could result, for instance, from the passing of too long a period between milking and commercialization. And, third, even the consumption of raw milk in good condition could be a source of health problems if it was not properly used by consumers. In order to eliminate potentially harmful bacteria and microbes, consumers had to get raw milk boiled right before drinking it. Some testimonies suggest, however, that this sort of domestic pasteurization was not always done and, perhaps more commonly, that it was not always done in the right way. Retiring the milk from the fire before it had reached boiling temperature, for instance, was a usual mistake. As a result of these different potential sources of risk, intoxication due to raw milk consumption was not rare. Commenting on two serious cases that took place almost at the same time in 1960 in two of the country's largest cities (Madrid and Málaga, Andalusia), the editors of the country's leading professional dairy journal wrote about "the never-ending and regrettable news of every summer, which arises in those populations where the sale of milk takes place in an anarchic way and without real guarantees".³⁹

These problems with raw milk had always been there, but those related to fraud must have gotten worse after the raw milk market acquired characteristics of a black market.⁴⁰ Before 1952, selling raw milk for human consumption had been perfectly legal. After 1952, on the contrary, dairy legislation turned it into an illegal or para-legal activity in most of the country's cities. In all large and middle-sized cities, the State implemented an active policy set to promote the production and consumption of pasteurized milk. In order to support newly-established processing companies and avoid the health risks related to raw milk, the new legislation passed in 1952 included the prohibition of selling raw milk for human consumption.⁴¹ Prohibition was conditional to the new processing companies being really able to provide pasteurized milk in sufficient quantity, which created a grey area in the interpretation of the law by the local authorities who were in charge of enforcement. This allowed for the continuation of the

raw milk trade, but under more uncertain legal conditions that made its traditional problems of consumer reliability worse.

Summarizing a view that was widespread among participants in the dairy chain and other observers, Miguel Echegaray, the president of the Institute of Agronomic Research, wrote in the late 1950s that, “[as long as] dairy products, mainly milk, are sold in the adulterated and fraudulent versions that are so common today, it will be hard for consumers to feel inclined to buying them”.⁴² Furthermore, the fact that the nutritional advice provided by the State (and, of course, by processing companies) systematically alluded to processed milk when exposing the virtues of milk as a product may have also contributed to consumer preferences not adopting a strongly favorable orientation towards raw milk.⁴³

Selective preferences also prevented economically feasible alternatives to cow’s liquid milk from emerging as significant substitutes for the latter. Preserved milk, goat’s milk and cheese were three alternatives the production of which was better adapted to Spain’s environmental conditions than that of cow’s liquid milk. Of all three it was preserved milk that consumers used more commonly as an alternative. Especially in those cities where the production of pasteurized milk was not making sufficiently rapid progress, many consumers understood preserved milk as a more desirable alternative than raw milk. For instance, consumers were able to reconstitute liquid milk by mixing powdered milk with boiling water in their homes. The taste was not always satisfactory, and health risks could appear if polluted water was used for reconstitution. But, at least, the milk element in the mix was reliable from both economic and health perspectives.

Furthermore, this practice allowed consumers to adjust the proportions of powdered milk and water in order to, for instance, face situations of economic stress. What in the raw milk chain was a fraud, in the powdered milk chain could result from conscious consumer choice. As an anonymous commentator writing for a national newspaper in 1964 explained, “Anything rather than to keep on paying ... for a liter of dirty water ... Many Madrid housewives have made the decision to buy cans of condensed milk or powdered milk and add more or less water to it depending on the situation of the household budget. This way the family knows they are drinking milk and water, but at least it is clear water from the tap”.⁴⁴ Consumption of powdered milk was also stimulated by the central role played by this product in the State’s school milk program that was implemented in 1959. Resulting from an agreement between the Franco regime and the United Nations Children’s Fund (UNICEF), the program was

originally based on the channelization of U.S. surplus powdered milk into Spanish schools.⁴⁵

This does not mean, however, that the average consumer perceived preserved milk as an alternative that was truly comparable to liquid milk. It was liquid milk, and increasingly so its processed variety, that most consumers identified as real milk, while preserved milk was perceived more as a complement than as an integral substitute. Even the policymakers of the Franco regime eventually came to accept during the 1950s that imports of U.S. powdered milk or nationally produced powdered or condensed milk could not solve what they were forced to call “the milk problem”. As Minister of Commerce Alberto Ullastres admitted in a speech delivered in 1960, “it is not the same, because you do not accept it the same, that [milk] is provided in powdered form”.⁴⁶ According to Ullastres, only processing companies were in a position to provide Spanish consumers with “real milk”.⁴⁷

Nor was goat’s milk considered an acceptable substitute by politicians or consumers. The consumption of goat’s milk had been traditionally used as an alternative in some of the south-eastern, extremely arid provinces of the country, but this was rather exceptional. Not even in the rest of non-Atlantic provinces (with relatively undeveloped dairy farming sectors) was it a usual practice. By the mid-1960s, the market share of goat’s milk was already lower than it had been before the Civil War. Although statistics for a precise calculation are lacking, it seems that the responsiveness factor of the consumption of goat’s milk (as defined in table 1 above) had started to become negative. It was the start of a trend that would lead to its almost complete demise in the following fifteen or twenty years.⁴⁸

Finally, consumer preferences were not strongly oriented towards cheese either. One basic problem here was the absence of a more rooted consumer culture, so that, for instance, there was not a specific time traditionally reserved for cheese consumption (as it was the case in those countries where it was part of midday lunch’s dessert).⁴⁹ Nor were consumers familiar with the many different varieties of cheese that were produced in a country where agri-climatic conditions were so heterogeneous. Probably because of the shortcomings of producers’ commercialization strategies, the cheese culture of many consumers was restricted to the local variety in their area and the *manchego* cheese, a mature, hard cheese made from ewe’s milk in the interior region south of Madrid.⁵⁰

In fact, the apparent lack of consumer enthusiasm was not always related to cheese as a food but to the kinds of cheese that were actually available. One important

problem here was lack of standardization. The technological level prevailing in Spain's cheese industry was very low: most cheese was produced by very small firms (or even by farm families) using rudimentary, semi-artisanal production methods. Cheese quality was then very heterogeneous, not only among the different producers but also among the different batches undertaken by one given producer. In consequence, consumers were often disappointed about the quality of the cheese they had purchased. The resulting atmosphere of uncertainty was an obstacle for the expansion of cheese consumption.⁵¹ An additional source of consumer disappointment was verifying that their cheese had been mixed with non-dairy fats such as margarine, a practice that remained common among some producers even after its legal prohibition in 1958.⁵² One of the most prominent analysts of Spain's dairy chain at the time, agronomist Santiago Matallana criticized those producers for "not realizing that they are making their current profits by discrediting a product that consumers wanted but are now increasingly rejecting as they become aware of the poor quality of much of what can be found in the market".⁵³

If dairy products remained relatively unimportant in the Spanish diet by the mid-1960s, it was not only because of long-standing structural problems related to economic backwardness or the poor performance of the country's dairy chain. It was also because of consumer preferences. Consumer preferences were not hostile towards dairy products, but they were selective. In the 1950s and early 1960s, consumers were ever more distant from the traditional image of milk as a product for the consumption of children, the elderly or sick people, but this does not mean that they enthusiastically accepted any kind of dairy produce. For different reasons, raw milk (including goat's milk), preserved milk and cheese suffered from quality problems that hampered consumption growth even at a time when the purchasing power of consumers was starting to grow rapidly. Only after the mid-1960s, when Spain's dairy chain became able to produce processed milk on a large scale, would consumers complete their shift away from a dairy-poor diet.

Our case suggests that the development of the nutritional transition was not as smooth as is often considered. The progress of the nutritional transition required not only changes in demand capacity and supply capacity, but also an appropriate fitting of such changes with the evolution of consumer preferences. Changes in demand and supply capacity created income and price effects that had an influence on the economic possibilities of consumers, but such influence operated within the space delimited by the

qualitative perceptions that consumers had about the different products that were actually available to them in the market. From this perspective, the “quality turn” may be less a specific feature of so-called late modernity (as in its original formulation by David Goodman and Michael Redclift) than a recurrent element in every historical restructuring of food consumption patterns.⁵⁴ The current turn away from industrial food provisioning and into organic production, alternative agri-food networks and short food supply chains may be a new version of historical quality turns.⁵⁵ These latter turns may well have characteristics that are different from, or even opposed to, those of the current turn, but it seems likely that they are similarly important for explaining the historical evolution of the Western diet during the bygone era of the nutritional transition.

Notes

¹ The term was introduced by nutritionist Barry Popkin in the early 1990s; B. M. Popkin, “Nutritional patterns and transitions”, *Population and Development Review* 19 (1993). Much of its essence, however, had already been anticipated by historian Maurice Aymard in the 1970s; M. Aymard, “Pour une histoire de l’alimentation: quelques remarques de méthode”, *Annales: Économies, Sociétés, Civilisations* 30 (1975).

² D. Grigg, “The nutritional transition in Western Europe”, *Journal of Historical Geography* 22 (1995). See also Popkin, “Nutritional patterns and transitions”, and L. Malassis, *Les trois âges de l’alimentaire: essai sur une histoire sociale de l’alimentation et de l’agriculture, 2. L’âge agro-industriel* (Paris: Cujas, 1997), 165-225.

³ H. Friedmann and P. McMichael, “Agriculture and the state system: the rise and decline of national agricultures, 1870 to the present”, *Sociologia Ruralis* 29 (1989).

⁴ Malassis, *Les trois âges de l’alimentaire*, 167-168.

⁵ Calculated from Faostat (www.faostat.fao.org, “Food balances”).

⁶ “Información”, *Revista Española de Lechería* 42 (1961): 205-210; A. Lacasa, “Evolución del consumo de leche y productos lácteos en España (hábitos, actitudes y tendencias)”, *Industrias Lácteas Españolas* 35-36 (1982); G. Varela, O. Moreiras, Á. Carbajal and M. Campo, *Encuesta de presupuestos familiares 1990-91: estudio nacional de nutrición y alimentación, 1991* (Madrid: Instituto Nacional de Estadística, 1995), ch. 3.

⁷ R. Casares, “La alimentación española”, *Revista Española de Lechería* 29 (1958); X. Cussó, “Alimentació, mortalitat i desenvolupament: evolució i disparitats regionals a Espanya des de 1860” (PhD diss, Universitat Autònoma de Barcelona, 2001), ch. 7; H. Spencer, “Calcium”, in *The Cambridge world history of food*, eds. K. F. Kiple and K. C. Ornelas (Cambridge: Cambridge University Press, 2000).

⁸ R. Domínguez and L. de la Puente, “Ganadería e industrialización láctea. El complejo ganadero-industrial en Cantabria en el siglo XX”, in *Economía alimentaria en España durante el siglo XX* (Madrid: Ministerio de Medio Ambiente, Medio Rural y Marino, 2009).

⁹ For a more detailed analysis of long-run trends in the consumption of dairy products in Spain, see F. Collantes, “Dairy products and shifts in Western models of food consumption since 1950: a Spanish perspective”, *Rural History* 26 (2015).

¹⁰ L. Prados de la Escosura, *El progreso económico de España (1850-2000)* (Bilbao: Fundación BBVA, 2003); L. Prados de la Escosura, “Inequality, poverty and the Kuznets curve in Spain (1850-2000)”, *European Review of Economic History* 12 (2008); R. Nicolau and J. Pujol, “Variaciones regionales de los precios de consumo y de las dietas en España, en los inicios de la transición demográfica”, *Revista de Historia Económica* 24 (2006); A. Langreo, *Historia de la industria láctea en España: una aplicación a Asturias* (Madrid: Ministerio de Agricultura, Pesca y Alimentación, 1995); R. Domínguez, “La industria láctea en España 1830-1985”, in *Las industrias agroalimentarias en Italia y España durante los siglos XIX y XX* (Alicante: Universidad de Alicante, 2003).

¹¹ A. Carreras, L. Prados de la Escosura and J. R. Rosés, “Renta y riqueza”, in *Estadísticas históricas de España, siglos XIX-XX*, eds. A. Carreras and X. Tafunell (Bilbao: Fundación BBVA, 2005); Prados de la Escosura, *El progreso económico de España (1850-2000)*.

¹² Between 1958 and 1964, the nominal price of liquid milk increased at a mean annual rate of 9.9 per cent, that is, 3.4 percentage points faster than the general price index; calculated from Instituto Nacional de Estadística (henceforth, INE), *Encuesta sobre cuentas familiares, marzo 1958* (Madrid: INE, 1959); INE, *Encuesta de presupuestos familiares (marzo 1964-marzo 1965)* (Madrid: INE, 1965-69); INE, www.ine.es (“Índice de Precios al Consumo”, base 1983).

¹³ See I. Hernández Adell, “La difusión de un nuevo alimento: producción y consumo de leche en España 1865-1936” (PhD diss, Universitat Autònoma de Barcelona, 2012), ch. 4, for the pre-war period, and Collantes, “Dairy products and shifts in Western models of food consumption since 1950”, for the 1965-1980 period.

¹⁴ M. Ramos, “Producción y consumo de la leche”, *Revista Española de Lechería* 15 (1955): 39.

¹⁵ Ramos, “Producción y consumo de la leche”: 41.

¹⁶ M. Harris, *Good to eat: riddles of food and culture* (New York: Simon and Schuster, 1985), ch. 6.

¹⁷ K. D. Patterson, “Lactose intolerance”, in *The Cambridge world history of food*, eds. K. F. Kiple and K. C. Ornelas (Cambridge: Cambridge University Press, 2000).

¹⁸ D. Valenze, *Milk: a local and global history* (New Haven: Yale University Press, 2011), 206.

¹⁹ Valenze, *Milk: a local and global history*, ch. 12; C. Biltekoff, “Critical nutrition studies”, in *The Oxford handbook of food history* (New York: Oxford University Press, 2012).

²⁰ J. Pujol, R. Nicolau and I. Hernández, “El consumo de leche fresca en Cataluña entre mediados del siglo XIX y 1935: la difusión de un nuevo alimento”, *Historia Agraria* 42 (2007); R. Nicolau, J. Pujol and I. Hernández, “Milk, social acceptance of a new food in Europe: Catalonia, 19th-20th centuries”, *Dynamis* 30 (2010).

²¹ Ramos, “Producción y consumo de la leche”; T. Insa, “Producción y consumo de leche en España”, *Revista Española de Lechería* 45 (1962); F. Nebreda, “Situación financiera y económica que, con carácter general, presentan las industrias lecheras españolas”, *Revista Española de Lechería* 57 (1965); “Leche es salud”, *Revista Española de Lechería* 30 (1958): 195-201.

²² A. Ballabriga, “La importancia de los productos dietéticos en la industria”, *Revista Española de Lechería* 33 (1959); F. Vivanco, J. M. Palacios, A. García and C. López, *Alimentación y nutrición* (Madrid: Dirección General de Sanidad, 1976).

²³ “Información”, *Revista Española de Lechería* 27 (1958): 51. See also F. Nebreda, “Influencia de las Centrales lecheras de Vizcaya en la producción, el comercio y abastecimiento de leche”, *Revista Española de Lechería* 34 (1959).

²⁴ On the first part of the twentieth century, see Hernández Adell, “La diffusion de un nuevo alimento”, ch. 6.

²⁵ On other Western countries, see C. Martiin, “Swedish milk, a Swedish duty: dairy marketing in the 1920s and 1930s”, *Rural History* 21 (2010); P. Moser and B. Brodbeck, *Du lait pour tous: portrait en images, documents et analyses de l'économie et de la politique laitières en Suisse au 20^e siècle* (Baden: Hier+Jetzt, 2007); M. DuPuis, *Nature's perfect food: how milk became America's drink* (New York: New York University Press, 2002), ch. 5; A. Wiley, *Re-imagining milk: cultural and biological perspectives* (New York: Routledge, 2011), ch. 2; and H. Velten, *Milk: a global history* (London: Reaktion Books, 2010), ch. 4.

²⁶ “Información”, *Revista Española de Lechería* 33 (1959): 149-154; “Información”, *Revista Española de Lechería* 35 (1960): 45-49.

²⁷ “Recomendaciones del XIV Congreso Internacional de la Leche”, *Revista Española de Lechería* 22 (1956): 223-225; “Resoluciones del Seminario de Brighton”, *Revista Española de Lechería* 60 (1966): 111-113; “El XVII Congreso Internacional de Lechería de Munich”, *Revista Española de Lechería* 61 (1966): 161-168.

²⁸ “Información”, *Revista Española de Lechería* 27 (1958): 49-53; “Información”, *Revista Española de Lechería* 28 (1958): 105-109; “Información”, *Revista Española de Lechería* 29 (1958): 157-163.

²⁹ “Leche es salud”, *Revista Española de Lechería* 30 (1958): 196, 201.

³⁰ J. Lozano, “¿Por qué bebo leche?”, *Revista Española de Lechería* 32 (1959): 55-56. On China and India, see Wiley, *Re-imagining milk*, ch. 5.

³¹ “Jornada platónica”, *La Vanguardia Española*, June 7, 1958, p. 11.

³² “Información”, *Revista Española de Lechería* 38 (1960): 206.

³³ This figure is a rough estimate derived from the evolution of processed milk production between 1952 and 1965 according to R. Domínguez, “La industria láctea en España 1830-1985”, 486.

³⁴ “Información”, *Revista Española de Lechería* 38 (1960): 205-206; J. M. Irujo and J. Llona, “Pago de la leche por su riqueza grasa y calidad bacteriológica”, *Revista Española de Lechería* 52 (1964): 87-96.

³⁵ See A. Langreo, *Historia de la industria láctea en España*, 145. Other observers provided information that suggests that this percentage may have been even higher; see V. Calcedo, “Crisis, evolución y cambio en la ganadería de vacuno de leche de la España húmeda (1950 al 2000)”, in *La vocación ganadera del norte de España: del modelo tradicional a los desafíos del mercado mundial*, ed. R. Domínguez (Madrid: Ministerio de Agricultura, Pesca y Alimentación, 1997), 245.

³⁶ Lacasa, “Evolución del consumo de leche y productos lácteos en España”, 57.

³⁷ “Información”, *Revista Española de Lechería* 34 (1959): 205; “Información”, *Revista Española de Lechería* 35 (1960): 45-49; “La leche y la Asamblea Nacional Ganadera”, *Revista Española de Lechería* 48 (1963): 61-65; S. Matallana, “Algunos comentarios sobre la Asamblea Nacional Ganadera”, *Revista Española de Lechería* 49 (1963): 133-137.

³⁸ As a popular saying warned, “Cheap milk, milk that kills”; Lacasa, “Evolución del consumo de leche y productos lácteos en España”, 57.

³⁹ “Información”, *Revista Española de Lechería* 37 (1960): 157.

⁴⁰ On problems of this sort in the first decades of the twentieth century, see Hernández Adell, “La difusión de un nuevo alimento”, ch. 6.

⁴¹ “Decreto de 18 de abril de 1952 sobre la creación de Centrales Lecheras en municipios de más de 25.000 habitantes”, *Boletín Oficial del Estado*, April 18, 1952.

⁴² M. Echegaray, “Opiniones sobre la leche”, *Revista Española de Lechería*, 29 (1958): 141. See a very similar argument by a former Minister of Agriculture: C. Rein, “Opiniones sobre la leche”, *Revista Española de Lechería* 29 (1958): 142.

⁴³ C. Díaz Méndez and C. Gómez Benito, “Nutrition and the Mediterranean diet. A historical and sociological analysis of the concept of a ‘healthy diet’ in Spanish society”, *Food Policy* 35 (2010); “Información”, *Revista Española de Lechería* 37 (1960): 157-159.

⁴⁴ “El problema del abastecimiento de leche sigue sin resolver”, *La Vanguardia Española*, August 18, 1964, p. 6.

⁴⁵ Langreo, *Historia de la industria láctea en España*, 143-178. On the American side of this story, see K. Smith-Howard, *Pure and modern milk: an environmental history since 1900* (New York: Oxford University Press, 2014), ch. 3.

⁴⁶ “Información”, *Revista Española de Lechería* 38 (1960): 206.

⁴⁷ “Información”, *Revista Española de Lechería* 38 (1960): 206.

⁴⁸ For further details, see F. Collantes, “La evolución del consumo de productos lácteos en España, 1952-2007”, *Revista de Historia Industrial* 55 (2014): 116-119.

⁴⁹ M. Arroyo, “La industria quesera en Asturias”, *Industrias Lácteas Españolas* 43 (1982): 23-26; Varela, Moreiras, Carbajal and Campo, *Encuesta de presupuestos familiares 1990-91*, ch. 3.

⁵⁰ M. Sanz, “El circuito del queso”, *Distribución y Consumo* 6 (1992): 98-101; B. Plaja, “Estudio sobre la industrialización de la leche en España”, *Revista Española de Lechería* 56 (1965): 62-72; J. Artega, “Ni aperitivo ni postre: el español consume sólo 4 kilos de queso al año”, *Industrias Lácteas Españolas* 35-36 (1982): 43.

⁵¹ “Información”, *Revista Española de Lechería* 27 (1958): 52-53; C. Compairé, “Estudio del queso del Cebrero”, *Revista Española de Lechería* 61 (1966): 139-160. These problems of consumer culture and lack of trust actually persisted for one or two more decades; see T. García Trabadelo, “Las importaciones de quesos”, *Industrias Lácteas Españolas* 21 (1980): 11; Sanz, “El circuito del queso”; and “Un buen queso, señor”, *Industrias Lácteas Españolas* 40 (1982): 9.

⁵² “Información”, *Revista Española de Lechería* 39 (1961): 52; Matallana, “Algunos comentarios sobre la Asamblea Nacional Ganadera”, 136-137; Langreo, *Historia de la industria láctea en España*, 143-178.

⁵³ Matallana, “Algunos comentarios sobre la Asamblea Nacional Ganadera”, 136-137.

⁵⁴ D. Goodman and M. Redclift, “Modernisation and the international food system: re-articulation or resistance”, in *Land, shops and kitchens: technology and the food chain in twentieth-century Europe*, eds. C. Sarasúa, P. Scholliers and L. Van Molle (Turnhout: Brepols, 2005).

⁵⁵ For a related attempt to historicize quality turns, see A. H. van Otterloo, “Fast food and slow food. The fastening food chain and recurrent countertrends in Europe and the Netherlands (1890-1990)”, in *Land, shops and kitchens: technology and the food chain in twentieth-century Europe*, eds. C. Sarasúa, P. Scholliers and L. Van Molle (Turnhout: Brepols, 2005). See also A. Stanziani, *Histoire de la qualité alimentaire: France XIX^e-XX^e siècles* (Liber: Seuil, 2005), and P. Atkins, *Liquid materialities: a history of milk, science and the law* (Farnham: Ashgate, 2010), on food quality as a consensual, rather than purely scientific, matter.