

XIV International Economic History Congress, Helsinki, 2006

Session 9: Food quality: practices and rules

Food quality in London, 1870-1938

Derek J. Oddy

The metropolitan food market

London's growth in the nineteenth and twentieth centuries made it the biggest urban centre in Europe and the prime example of a conurbation absorbing many small nearby communities as it spread. Its population grew from under 4M in 1871 to 7.26M on the eve of the First World War. From 1931 onwards London contained over 8M people and covered more than 700 square miles (1,800km²) in area. Throughout this expansionary phase, London had no single administrative unit of local government¹ so that there was no standard approach to food adulteration or to problems of public hygiene. With the population growing at over 8 per cent per year, the demand for food always exceeded what could be supplied by markets and retail shops. Even the spread of railways, which allowed food to be brought into the city from further away than before, could not ensure an adequate supply of good quality fresh food. Unlike most towns in Britain, London had no central retail food market, such as a market hall. Its three great wholesale markets, Smithfield (meat), Billingsgate (fish) and Covent Garden (fruit and vegetables) were longstanding suppliers of London's retailers, though they also served many areas beyond the metropolis and functioned increasingly as national markets as the nineteenth century progressed.² A number of local retail food markets in London had been in existence for two centuries or more but they were cleared away as their site values rose.³ Table 1 shows that they were replaced by public buildings, railway stations, roads and

¹ The London County Council (LCC) administered central and inner areas of London from 1889 to 1965.

² Schmiechen, J. and Carls, K., *The British Market Hall: A Social and Architectural History*, New Haven, Yale University Press, 1999, xi-xii.

³ Tames, R., *Feeding London: A Taste of history*, Historical Publications, 2003, pp.73-78. The place of publication is London unless otherwise indicated.

Table 1: The destruction of local food markets in London in the nineteenth century

Name of food market	Operating from	Date cleared away	Reason
Fleet market (earlier known as Stocks market)	Post Great Fire (1666)	1829	Development of Farringdon Street
Clare market	1657	1870s	Building the Royal Courts of Justice and the Kingsway-Aldwych road development
Hungerford market	1682	1862	Charing Cross station
Newport market	1686	1880s	Construction of Shaftesbury Avenue
Newgate market	Before the Great Fire	1869	Construction of Smithfield Central Meat Market
Oxford market	1720s	1876	Building apartments
Grosvenor market		c.1890	Davies street extension
Spitalfields market	1682	1980s	

Source: Based on Tames, R., *Feeding London*, Part III.

commercial premises, leaving Londoners in central districts to buy food from street traders, such as costermongers, who were not covered by food legislation. This weakened local authority control over retail sales and increased the possibility that food might be contaminated or adulterated.

The commercialization of London's food supply

As Britain's largest port, London was a centre for processing imported food materials. Its food industries included brewing, distilling, milling, baking, sugar refining, edible oil processing, can-making and the ice trade. Refrigeration for food preservation was developed before the First World War⁴ but, apart from meat, little use was made of ice, chemical preservatives being widely employed instead. The industrialization of food production changed some foods more than others but in general quality was determined by the number of commercial processes introduced as the food chain between producer and consumer lengthened. Bread was an exception: its commercialization was linked to a

⁴ See Oddy, D.J., *From Plain Fare to Fusion Food: British Diet from the 1890s to the 1990s*, Woodbridge, Boydell, 2003, pp.17-19.

change in raw material rather than technology. North American roller-milled flour became general by the 1890s, causing problems for bakers used to soft English flour. In poorer areas, London bread was notable for the poor quality flour used; it was also frequently short weight when sold.⁵ By the early twentieth century the residual nature of much flour brought the comment, not that London bread was bland and tasteless but rather that “the flour used being of such low quality ... the bread was strong and rank flavoured”. In working-class districts “the loaves were often sour and contained some marvellous holes”. Wet, poorly risen, flavourless loaves were common complaints, and in the warmer months, outbreaks of “rope” — a bacterial infection of bread (*Bacillus mesentericus*) — occurred frequently up to 1914.⁶ Such bread was usually disposed of through ‘under-cutters’ and street vendors in poor districts. By the twentieth century, factory-made bread was sold by Nevill’s, the Aerated Bread Company (ABC), J. Lyons & Co., and the Co-operatives to the middle classes and in the suburbs. Other baked goods also changed: biscuit production had been successfully mechanized in the mid-nineteenth century, and large-scale production of slab cake, which the retail chains sold cheaply, began in the 1890s. By 1914, home baking in London had almost disappeared and bread, cakes and biscuits were predominantly “shop goods”.⁷

London relied mostly on foreign meat supplied by chains of frozen-meat retailers from the 1890s onwards.⁸ Slaughterhouses declined as the source of fresh meat: in 1889, the LCC licensed 692 private slaughterhouses, but numbers fell to 273 in 1908 and 150 after the First World War.⁹ During the 1890s, chilled and frozen meat was said to have taken up “a commanding position in Smithfield supplies”¹⁰ as cold-storage capacity expanded.

⁵ *Bakers’ Record*, 1888, 18 Feb. p.6; 3 March, p.4; *Baker and Confectioner*, 30 July 1907, p.113. A 2lb (900g) loaf might be up to 7ozs (200g) below its proper weight.

⁶ *Baker and Confectioner*, 1909, 47; *Baker’s Quarterly Magazine*, June-September 1906, 70.

⁷ *Baker and Confectioner*, 1914, 569.

⁸ *Departmental Committee on Combinations in the Meat Trade*, British Parliamentary Papers (PP) 1909, (Cd.4643) XV, para.7; see also the *Report of the Select Committee on Marking Foreign Meat*, PP 1893-94, XII.

⁹ *Meat Trades Journal*, 4 August 1910, p.144; LCC, *Annual Report of the Council, 1920, Vol. III Public Health*.

¹⁰ Critchell, J.T and Raymond, J., *A History of the Frozen Meat Trade*, 1912, Constable, p.191.

The rush to form ice companies in London increased cold-storage capacity from 300,000 carcass units (of 56lbs or 25.4kg) in 1888 to 2.73M units in 1908.¹¹ Most West-End butchers had refrigerators by the early 1890s but meat sold by street hawkers and in open-air markets continued to be the mainstay of working-class districts.¹² Despite refrigeration, Smithfield's 'clearing out' sales late on Saturday attracted "thousands of the poorer classes from all parts of London".

Few other perishable commodities were affected by refrigeration. Traditionally, Billingsgate had received its fish supplies from vessels unloading on the river Thames but during the second half of the nineteenth century fish began reaching Billingsgate via railway stations. This transformation of the supply system did not depend on refrigeration, since attempts to freeze fish before 1914 were unsuccessful. Apart from some high-class fish shops (often in the proximity of railway stations to facilitate purchases for suburban homes) fish, especially herrings or mackerel, was sold by hawkers or from market stalls. Unfamiliar fish — "trawl refuse" — was filleted or sold by fried-fish shops. It was not until the interwar years that Macfisheries was established as a multiple retailer of fish.

Low-temperature storage had almost no impact on the egg and poultry trade before the interwar years. Until 1914, storage under naturally cool conditions, as in cellars, was used to hold back poultry from the market for a day or so during periods of plentiful supply. Cold storage of eggs was still experimental and results were uncertain and frequently unsatisfactory. Even in the 1920s, only a minute proportion of English eggs were cold stored.¹³ Instead, there was extensive use of chemical preservatives, such as

¹¹ See Leighton, G.R. and Douglas, L.M., *The Meat Industry and Meat Inspection*, 1910, Vol. II, pp.446-8. David, E., *Harvest of the Cold Months*, Joseph, 1994, p.55. Between 1880 and 1900, 60 artificial ice companies were formed. United Carlo Gatti, Stevenson & Slater Ltd was probably the largest ice producer.

¹² *Report from the Select Committee on Marking Foreign Meat*, PP 1893-94, XII, Question 3148; Leighton, and Douglas, *The Meat Industry*, Vol. III, p.476.

¹³ Ministry of Agriculture and Fisheries, *Report on Egg Marketing in England and Wales*, 1926, p.118, suggests only 3M were cold stored out of a total production in Britain of over 1,500M eggs per year.

waterglass, borax, or even formalin, to extend shelf life.¹⁴ This explains the seasonal demand in London for preserved eggs between Michaelmas and Christmas. Preserved eggs retained their popularity for some years, even after the First World War. Kept in dry salt it was said that eggs “do fairly even for boiling up to six or eight months”.¹⁵

Despite the availability of refrigeration, milk supplies reaching London were generally not cooled, as the railway companies lacked suitable wagons. Most milk reaching inner London in 1903 was untreated and already 12 to 18 hours old when it completed its journey. Since some was later re-sold by wholesalers to small shopkeepers, much milk on sale was over 24 hours old. Preservatives, notably formalin, were found in milk on a wide scale, particularly at the weekend when demand was greatest.¹⁶ In 1901, a committee of the Board of Agriculture reported that 50 per cent of London’s dairymen used preservatives in milk.¹⁷ As the distance milk travelled to market increased, pasteurization and sterilization s became popular, though “not with the primary object of destroying any disease germs which might be present, but to postpone souring and so add a few hours to its life”.¹⁸ Even in the early twentieth century, when wholesale contractors were buying milk from farms between 50 and 150 miles from London, pasteurization and sterilization were assumed to be sufficient to preserve milk beyond the farm gate.

Butter was also unaffected by refrigeration — except when it was being adulterated. Supplies were highly seasonal: English farm butter was available in summer followed by heavily salted Irish butter in the winter.¹⁹ The high price of fresh butter made it a ready target for adulteration by the addition of water, though mixing with animal fats was

¹⁴ See *Report of the Departmental Committee on Preservatives and Colouring Matter in Food*, PP 1901 (Cd.833) XXXIV. Waterglass is a sodium silicate solution.

¹⁵ *Report on Egg Marketing*, 1926, p.120.

¹⁶ Newman, G., *Report on the Milk Supply of Finsbury*, Finsbury Borough Council, 1903, pp.8, 34-5.

¹⁷ *Report of the Departmental Committee on Preservatives and Colouring Matter in Food*, PP 1901 (Cd.833) XXXIV, para.18.

¹⁸ *Second Interim Report of the Committee on the Production and Distribution of Milk*, PP 1917-18 (Cd.8886) XVI, para. 23; *Report of the Travelling Commission of Enquiry into the cost of Production of Milk*, PP 1919 (Cmd.233) XXV, 435, para.14.

¹⁹ *Report from the Select Committee on Food Products Adulteration, 1894-6*, PP 1896. IX, QQ.721, 723 and Q.2219.

widespread until prohibited by the Margarine Act, 1887. Imports of cheap ‘colonial’ butter increased from the 1880s onwards, bringing down prices and limiting the popularity of margarine.²⁰ London customers preferred both butter and margarine to be highly coloured but not as salty as in the industrial midlands and north. By the 1890s, London cheese was almost entirely imported and predominantly Cheddar in style. The market for English regional cheeses, such as Cheshire, Wensleydale or Stilton, had declined except in hotels, clubs or restaurants.²¹

Although fruit was exceptionally perishable, an international trade was developing before 1914. From the 1890s onwards, Californian peaches and pears began arriving in London in ships fitted with cool chambers but the greatest benefit was to the trade in apples. This was the one fruit in general consumption which benefited from cold storage. Other fruit, like bananas, ripened on the voyage, though a subsidized refrigerated service from Jamaica began in 1901.²² As imports increased, prices fell, and the popularity of bananas grew rapidly once they came within working-class horizons.

In the years before the outbreak of war in 1914, town food in Britain was not universally poor in quality: rather it had acquired a characteristic division based largely on income which was clearly illustrated in London; the better-off consumers bought fresh and locally supplied food but amongst the working classes, much of what was eaten was cheaper, imported food which, due to problems of preservation, was of variable quality²³

The regulation of quality

Food supplies became increasingly subject to regulation from the early years of the twentieth century. The professional development of public analysts in the last quarter of

²⁰ Cohen, Ruth L., *The History of Milk Prices*, Oxford, University of Oxford Institute for Research into Agricultural Economics, 1936, p.29; Wilson, C.H., *The History of Unilever*, Cassell, 1954, Vol. II, p.38.

²¹ Linlithgow Committee, *Interim Report on Milk*, para.169.

²² Davies, P.N., *Fyffes and the Banana: Musa Sapientum: A Centenary History 1888-1988*, Athlone Press, 1990, pp.71-7, and ch.6.

²³ See Oddy, *Plain Fare to Fusion Food*, ch.3 ‘Nutrition, Environment and Health before 1914’.

the nineteenth century gave governments the confidence to investigate food production in a more systematic manner than was possible under the Sale of Food and Drugs Act, 1875.²⁴ Later legislation in 1899 required all areas of Britain to have medical officers of health and public analysts in post. Their impact before 1914 was limited to trying to avoid the grosser forms of contamination of food and food premises and the nature of their work can be followed in the pages of *The British Food Journal* from its foundation in 1899.²⁵ Its circulation made it almost an in-house journal for those regulating the food trades. It contained law reports of offences under the 1875 and 1899 Sale of Food and Drugs Acts and other legislation, such as the Margarine Act, 1887, which provided case reports of interest for its readers. High prices for dairy produce had encouraged the production of butter substitutes, often known by shopkeepers as ‘compound’ or ‘bosch butter’. In 1896 the Select Committee on Food Products Adulteration concluded that “of late years much butter has been put upon the market which contains a proportion of water greatly in excess of that which would naturally be found in it, the difference having been fraudulently added to increase the weight”.²⁶ Analysts agreed that “well made fresh butter usually contains about 12 per cent and salt butter about 14 per cent water” and the buyer “should not therefore be served with perhaps one-fifth of the total weight of his purchase of water”. Excessive amounts of water occurred “by stirring the fused butter with water; and cooling the mixture very rapidly”.²⁷ Milk-blended butter probably contained in excess of 25 per cent water. Its popularity was assured by a High Court decision in 1902 in favour of Messrs Pearks, Gunston and Tee, which ruled that it was not covered by the 1887 Margarine Act. The public analysts achieved a remedy in the 1907 Margarine Act, which set an upper limit of 24 per cent water content for milk-blended butter and 16 per cent for butter and margarine.

²⁴ The Adulteration of Foods Act, 1860 and the Adulteration of Food, Drink, and Drugs Act, 1872 were permissive legislation and limited in effectiveness.

²⁵ The Society of Public Analysts, formed in London in 1874, published its journal *The Analyst* from 1876 onwards. For the analysts’ work, see Oddy, D.J., ‘Food quality in London and the rise of the public analyst, 1870-1939’, International Commission for Research into European Food History, Ninth Symposium, Berlin, 2005, also Collins, E.J.T. and Oddy, D.J., *The Centenary of the British Food Journal, 1899-1999 – changing issues in food safety regulation and nutrition*, *British Food Journal*, vol. 100, No. 10/11, Bradford, MCB University Press, 1998.

²⁶ *S.C. on Food Products Adulteration*, PP 1896, IX. 508.

²⁷ *Grocery*, February 1902, p.106; Hehner, O. and Angell, A., *Butter: its Analysis and Adulteration*, 2nd edn, Churchill, 1877, pp.8-9.

In 1901, “pure butter” analyzed in Hackney consisted of 94 per cent “foreign fat” (principally cotton-seed oil). In the following year a Pimlico firm’s butter was found to be 83 per cent foreign fat and three Hackney grocers were convicted for selling butter which was over 90 per cent margarine.²⁸ Prosecutions at both retail and wholesale level continued unabated until 1914, with margarine frequently being directly substituted for butter without any attempt at blending. Some adulteration of milk also persisted up to the First World War. By 1908, “heavy adulteration”, that is the direct addition of water, was said to have practically disappeared and to have been replaced by ‘toning’, a process through which the major London contractors reduced the quality of the milk to the minimum standard required by the 1901 regulations.²⁹ The addition of separated milk to whole milk became commonplace, while unsweetened condensed milk was “often added to cow’s milk when a sudden call is made for an increased quantity”. Obtaining convictions became increasingly difficult:

The detection of adulteration is becoming more and more difficult, and is due, in the first place, to the astuteness of the vendors of the adulterated articles, and in the second to the more highly scientific means now practised.

Nevertheless, one public analyst felt: “it would be difficult to induce a herd of cows properly fed and in healthy condition, to yield milk of so low a quality as would correspond to the minimum standard.”³⁰

Food retailing

Against a background of changing technology and quality, retailing became increasingly complex. By 1914, the London market comprised four sectors. At its base, the street traders and ‘under-cutters’ sold poor quality food frequently stale and often adulterated. Above them, the ‘full price’ trade fell into three categories. There were the retail co-operative societies backed by the Co-operative Wholesale Society (CWS), the multiples

²⁸ *Grocery*, 1902, January, p.69, April, p.289, May, p.373.

²⁹ *Thirty-Eighth A.R. of the L.G.B.*, PP 1909 (Cd. 4786 XXVIII, lxxxvii-lxxxviii).

³⁰ *Forty-Second A.R. of the L.G.B.*, PP 1913 (Cd. 6982) XXXI, lxvi.

both in general foodstuffs (for example, Lipton's and the Home and Colonial Stores) and specialist trades, such as meat (Dewhurst's) and bread (Nevill's), and the independent retailers ranging from Fortnum and Mason's in Piccadilly to small corner shops. These last were predominant by their very numbers, their claims to personal service, and their practice of delivering goods ordered by customers to their homes. For better-off customers, retailers provided a growing range of new products during the late nineteenth century. 'Table Delicacies and Dainties' packed in glass bottles, jars and moulds with 'hermetically sealed' lids or screw caps provided the novelties of the late Victorian and Edwardian tables of the middle classes. Branded potted meats, sardines, herring roes, prawns, peeled shrimps and meat pastes, fish pastes and jams enlivened tea and supper tables or picnic hampers. Soups, pâtés, salad creams and chutney frequently echoed Britain's Imperial role – Royal Naval Chutney, Col. Skinner's Chutney, and Major Gray's Sweet Sliced Mango Chutney. Lemon squash or lime juice cordial, Gordon & Dilworth's Tomato Catsup or "Sweet Pickled or Spiced Fruits" and Pan Yan Pickle could be bought from the major London stores and suburban provision merchants alike.³¹

Such new products challenged the shopkeeper's traditional merchandizing skills which lay in cutting, slicing, weighing, and packing food exactly to the customer's order. The threat came from the standardization and pre-packaging of commodities such as sugar, tea, margarine and imported canned goods. This transferred quality control from the retailer to the wholesaler and gave the wholesaler the incentive to use branded labels to differentiate his products. Well before the end of the nineteenth century, branded goods were subject to extensive advertising in newspapers, on billboards in London's streets, and on the platforms of railway stations. As food technology for the manufacture of cakes, biscuits, breakfast cereals, pies, patent foods of varying kinds and soft drinks developed, brand-name products were created in which the manufacturer's or wholesaler's price became more significant than the skills of the retail shopkeeper's counter hands.

³¹ See *Yesterday's Shopping, Gamage's General Catalogue 1914*, Ware, Wordsworth, 1994, pp.75-8.

London's multiple retailers expanded throughout the interwar years both in the number of their shops and the range of their products. Sainsbury's, with 123 branches in 1919, expanded at the rate of three shops per year, particularly in new suburban areas of London created by the extension of the underground railway. Tesco, begun as a street stall in Hackney with Jack Cohen's demobilization gratuity of £30, had over 100 shops in London and the Home Counties by 1939.³² However, the spread of Lipton's, Home and Colonial and other multiple retailers in London never matched the presence of the 'Co-ops' in working-class districts: the Royal Arsenal and the South Suburban societies south of the Thames and the London Co-operative Society, with 110,000 members, north of the river.³³

Public analysts continued to put pressure on retailers to reform their practices throughout the interwar period, particularly in those trades, such as fishmongers and butchers, where the traditional "open shop" without windows was still in use. The early food standards' legislation had been directed against the independent food retailer, particularly the small-scale trader. The proprietors of back-street and corner shops, market stallholders and retail dairymen found themselves before London's magistrates for various offences generally associated with attempts to extend the amount or marketable life of various commodities. However, while the public analysts mounted a campaign against open shops during the 1920s, the grocery trade was increasingly characterized by the standardization and pre-packaging of commodities formerly sold loose. As advertisements for branded food products began to appear in cinemas and on commercial radio stations, the small shopkeeper had to accept that his most important attribute was to provide the variety of competing brands that consumers might demand in response to the food manufacturers' advertisements.

³² Tames, *Feeding London*, p.99.

³³ Birchall, J., *Co-op the people's business*, Manchester, Manchester University Press, 1994, pp.121, 124.

Commercial catering

From the late 1880s there was a marked increase in catering facilities as growing numbers of Londoners travelled such distances to work that it became impossible for them to return home for a midday meal. Chains of dining rooms began to be established. The temperance catering movement had been in difficulties in the 1880s but out of it grew two London firms whose main business lay in providing standardized midday meals of limited variety. Lockharts operated 50 coffee rooms by 1893, whilst Pearce and Plenty ran 20 dining rooms with the motto “Quality, Economy, Despatch”. These were the fast-food outlets of the 1890s but other chains began to emerge, some of which operated better-class restaurants. Mass catering was provided by the ABC which operated 60 cafés in the early 1890s and the Express Dairy’s ‘milk and bun’ shops. Lyons’ first teashop opened in 1894 and, as others followed, rapidly grew into a standardized chain providing light refreshments. Their quality and cleanliness made them popular with women shopping or working as typists. In response, Pearce and Plenty developed The British Tea Table, and Lockharts their Ideal Restaurants. Lyons’ success led the company to sell its tea and cakes over the counter in its teashops and extend its trade into restaurants in the West End and the City.

By the 1920s, Lyons had 250 teashops and three multi-floored Corner Houses in central London, each of which could seat up to 3,000 people.³⁴ Office workers took quick lunches at Lyons, ABC or Express Dairy teashops, but it was also possible to eat breakfast or high tea in Lyons’ shops. The speed and efficiency of operations led Lyons’ waitresses to be known as “nippys”. Standardized meals were supplied from a centralized base at Cadby Hall in Hammersmith, west London. Cost and portion control meant that a lunch of roast beef and two vegetables was available for 10d (£0.04). At this price profits were almost negligible, and the profitability of Lyons’ teashops declined during the 1930s. By 1939 food manufacturing of tea, coffee, bread, cakes, ice cream and groceries was more important to the firm’s profits than teashops.

³⁴ Richardson, D.J., ‘J. Lyons and Co. Ltd: caterers and food manufacturers, 1894-1939’, in Oddy, D.J. and Miller, D.S. (eds), *The Making of the Modern British Diet*, Croom Helm, 1976, pp.161-172.

Food technology in the interwar years

London was a major market for food supplements and aids to digestion in the nineteenth century. The publicity accompanying the discovery of vitamins stimulated the demand for such items as malt extract, cod-liver oil and dried milk. However, during the 1920s, Allen & Hanbury of Bethnal Green, a major producer of dietary supplements, faced competition in the milk-food sector as Joseph Nathan & Co. expanded their dried skimmed-milk business. Nathan's had introduced a dried-milk baby food in 1908 under the name Glaxo, the "Food that Builds Bonnie Babies",³⁵ and by 1921 the sales of Glaxo totalled £1.5M. In 1924, Nathan's began to promote Glaxo as "The Sunshine Baby Food". It contained, they claimed, "sunshine vitamin D to build strong bones and teeth". They also introduced Ostelin, the first vitamin concentrate produced commercially in Britain. Allen & Hanbury responded by adding supplements to their "Allenbury's Food for Infants" and "Allenbury's Malted Rusks" and advertised them as "fully protective against rickets and allied disorders". As the milk-food business declined, new vitamin syntheses enabled Allen & Hanbury to offset their declining fortunes by introducing Haliborange in 1934. This removed the fishy taste of cod-liver oil and created a dietary supplement containing vitamins A, C, and D.³⁶

Food manufacturers³⁷ and caterers engaged in the London food market developed business techniques associated with mass production as part of their new food technology. Standardization through close attention to portion control and cost reduction was important for firms such as Lyons which were diversifying from the growing catering business into the new leisure market. Catering for large events, like the British Empire Exhibition at Wembley in 1924 visited by 17M people, demonstrated the scale of Lyons' operations. Mass production made ice cream the first frozen food to enter working-class homes following Wall's invention of the "Stop-me-and-buy-one" tricycle

³⁵ Tweedale, G., *At the Sign of the Plough: Allen and Hanbury and the British pharmaceutical industry, 1715-1990*, John Murray, 1990, p.145.

³⁶ Tweedale, *Allen and Hanbury*, pp.148, 151-3.

³⁷ Only H. J. Heinz, Quaker Oats and Wall's set up plants in London suburbs.

early in the 1920s.³⁸ For ordinary people, the growth of entertainment outside the home in the interwar years, particularly cinemas, led to the expansion of ice-cream sales once Wall's began to supply refrigerators on hire to cinemas and sweet shops.

Chilled food became fashionable in London. The initial success of the first Black and White milk bar in Fleet Street led Charles Forte to open the Meadow Milk Bar in Regent Street in 1935, and Woolworth to install its first milk bar in its new Oxford Street store. London acquired Moo Cow Milk Bars, Laughing Cow Milk Bar, and City Milk Bars. At the outbreak of war in 1939, there were 14 Black and White milk bars and five of Forte's milk bars in London and south-east England.³⁹ Yet London's tradition of small scale production remained: Charles Forte's staff made soups, ice cream, cut sandwiches and baked the cakes which supplied all his branches from the basement of a warehouse in Percy Street, in London's West End.

By 1925, when new regulations covering milk, meat, imported foods and the use of - preservatives and colouring matter came into force, adulteration in London and the 40 largest provincial towns was down to 5.5 per cent of items sampled.⁴⁰ Milk remained a problem. Samples arriving by rail or road in 1919 and 1920 revealed that approximately 6 per cent came from cows infected with bovine tuberculosis. The proportion infected rose to 9.1 per cent in 1930, and was still 7 per cent in 1937 and 1938.⁴¹ Moreover, outbreaks of food poisoning in London in the late 1930s, caused mainly by meat (94), fish (53) and tinned fish and paste (32), indicated that the system of food inspection was not perfect.⁴²

³⁸ Wilson, *Unilever*, Vol. I, p.274-5. Tricycles were fitted with an insulated box in front of the rider chilled by dry ice (solid CO₂).

³⁹ Forte, C., *Forte: the Autobiography of Charles Forte*, Sidgwick & Jackson, 1986, pp.30-40; Milk Marketing Board, Public Record Office, JV7/116.

⁴⁰ In the rest of England and Wales it was 7.7 per cent. *Seventh Annual Report of the Ministry of Health, 1925-26*, 1926, p.33.

⁴¹ LCC, *Annual Reports of the County Medical Officer of Health, 1920, 1930, 1938*.

⁴² LCC, *Report of the County Medical Officer of Health for the year 1938*, p.7.

Conclusion

London's growth created problems which required its food supply to be organized on an industrial scale to deal with produce from all over the British Isles and beyond the seas. Some small-scale local food production persisted in London throughout the late nineteenth and early twentieth centuries and attempts to increase or extend the shelf-life of perishable products were the cause of adulteration in poverty-stricken areas. Widening the supply area raised technical problems of food quality for which legislation before 1899 was inadequate and lacked measurable standards. Public analysts therefore found it difficult to obtain convictions for adulteration, though their work was instrumental in enabling quality standards to be included in twentieth-century legislation. Low-temperature technology was important for some perishable foods but the lack of domestic refrigerators made the buying of food ready for use, in small quantities, normal in London. By the interwar years the spread of multiple retailers, pre-packaged foodstuffs and mass commercial catering set the quality standards for consumers, including novelties like ice-cream, milk bars and soda fountains. However, the persistence of adulteration and the continued occurrence of food poisoning indicated that, whatever the levels of Londoners' incomes, the quality of the food supply of Europe's largest city was never entirely secure and remained vulnerable to commercial and health hazards.