

## Chapter 3

# **A Tale of Two Cities: a Comparison of Food Supply in London and Paris in the 1850s**

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### **Introduction**

London and Paris were the two largest centres of consumption in mid-nineteenth century Europe. London was the capital of an ever-extending global Empire and financial hub of the United Kingdom's industrial revolution. A rapidly growing city in the first half of the nineteenth century (2.4 million in 1851), she relied upon her food wholesalers, retailers and transport managers to keep her metabolism in a state of positive balance. For a considerable period of time, London's demand had been a stimulation to increasingly specialized food producers all over the nation, and beyond, but the introduction of steam-powered railways and ships added the possibility of moving perishable items such as fish and meat quickly over longer distances without loss of quality, and her nodal accessibility in the new transport network yielded a greater volume and variety of foodstuffs than available in other cities of equivalent status. Paris was smaller (1.2 million) and drew the bulk of her provisions from a shorter radius but the growth of the French railway system, focused on the capital city, opened up supplies beyond the Île de France.<sup>1</sup>

Interestingly, it was in the 1850s, at the point when the railways were facilitating the import of a greater variety of raw materials, that writing about urban food supplies entered a new phase. In Britain there were a number of well-known attempts to quantify food production and consumption, as part of a self-conscious drive to take stock of national economic progress.<sup>2</sup> Then in 1856, coincidentally in both cities in the same year, there were detailed books published on the specifics of food supply. George Dodd's *The Food of London* was innovative but it makes frequent reference to the problems of quantifying individual commodities consumed in that city. Armand Husson, in his *Les*

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<sup>1</sup> Clark and Lepetit suggest that Paris was a city intermediate between two extremes: on the one hand cities such as London and Lisbon, which had broad hinterlands and a positive spread effect, and, on the other hand, cities such as Naples, which were parasitic and somewhat negative in their impact.

<sup>2</sup> Porter, 1851; McCulloch, 1849, 1854.

*Consommations de Paris*, had no such difficulty: he wrote a path-breaking volume that is a treasure trove of information for the food historian.<sup>3</sup> He was fortunate to have access to the official *octroi* records and he also drew upon other sources, such as key informants in the police department and the market authorities. The bureaucratic inclinations of the Second Empire worked to his advantage, and Husson seems to have exploited his own position as a state official to extract data.<sup>4</sup> In fact his book has the feel of a semi-official publication and would no doubt have been gratefully received by city authorities constantly worried about food shortages and the potential for food riots. One of the most impressive aspects of Husson's work is his critical reflection on the quality and completeness of his information.

The purpose of the present paper is to provide an outline comparison of London and Paris in the middle of the nineteenth century, an outline that will emphasize the supply side of what Andrew Wynter called the urban 'commissariat'.<sup>5</sup> The argument is illustrated with original data from the 1850s.

### **Sites of Production: the Tyranny of Nature?**

Out-of-season products have been a feature of diets in London and Paris for centuries. In the 1850s both cities had flourishing markets for early horticultural products for wealthy tables – at a cost, of course, always at a cost for the conquest of nature.

For Paris, we can identify three phases in the season. First, there was a substantial industry of *primeur* fruits and vegetables growing around the city, and even within the city walls. The growers, generally known as *marâchers*, developed one of the most productive horticultural systems ever seen.<sup>6</sup> This reached its peak in the 1850s and 1860s and survived intact until the early part of the twentieth century.<sup>7</sup> Between three and six fruit, salad and vegetable crops were taken annually from each plot, made possible by a build up of fertility in the soil and the control of temperature. The 1,800 or so market

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<sup>3</sup> Porter, 1847, 588 had earlier complained, for London, that 'it is impossible to estimate, with anything approaching to exactness, the consumption of the metropolis'.

<sup>4</sup> He was Directeur de l'Assistance Publique, which included running hospitals.

<sup>5</sup> [Wynter] 1854.

<sup>6</sup> Courtois, 1858; Stanhill, 1977.

<sup>7</sup> In the early twentieth century urban transport switched from horse power to the internal combustion engine and the market gardeners lost their cheap and plentiful supply of manure.

gardens were highly labour-intensive, employing 9,000 gardeners on 1,400 ha of land, much of it within the city walls. Applications of manure ranged from 300–1,000 tonnes per ha on holdings that, on average, were 25 per cent covered in glass (84 per cent frames and the remainder under 2.2 million bell-shaped cloches), both implying a significant investment of capital.<sup>8</sup> Further wind and frost protection was provided by two metre high windbreaks (mostly walls) and straw mats. In some cases there were greenhouses heated with stoves or steam boilers and using the principle of the thermosiphon to pipe warm water close to the roots of their most precious plants. The return was up to 100 tonnes of produce per hectare, by comparison with 74 tonnes on the most intensive English equivalent market gardens.<sup>9</sup>

In the greenhouses, pineapples, grapes, peaches, cherries, raspberries and figs were raised, with peri-urban locations such as Montreuil, Meudon and Versailles particularly famous for the appearance and tastiness of their produce. In the frames and cloches, strawberries and asparagus were ‘forced’, along with a wide range of other vegetable and salad crops. In order to reap the maximum premium on what were called ‘high early products’, the *marâchers* forced those species that were susceptible to modifications in their season and that were in demand in the luxury market. Thus, strawberries were available by 15 February, grapes by 25 March. Green asparagus started in October and continued as an early product until the end of March, white asparagus from November to early April, and French beans from 10 February to 30 March.

Success was not guaranteed. In the second edition of Husson’s book, he notes that the forced culture of peas had recently been abandoned by *primeurists*, along with cucumbers, cauliflowers, lettuce, chicory, carrots and radishes. They seem to have been ruthless in their assessment of profitability and, of course, these crops could always be substituted with others. There was less flexibility when a medium-term investment had been made in fruit trees, and so such crops were discarded by peri-urban horticulture, which became as adaptable as it could possibly be.

Second in the season, there were consignments by railway from the south of France, where climatic factors gave growers a comparative advantage. Husson’s book

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<sup>8</sup> Start up costs for a market garden were Fr28,400 in 1869, with working costs of Fr16,810. These figures had increased by 1900 to Fr60,000 and Fr30,000 respectively. Ponce, 1869; Phlipponneau, 1956.

<sup>9</sup> Kropotkin, 1899.

came at a crucial time in the transport revolution in parts of rural France and he recounts the influence this had in encouraging greater consumption, increasing the variety of produce marketed in Paris, and, also, in its spatial impact of restructuring the portfolio of consignments of fruit and vegetables.

The season's third phase was dominated by the non-*primeur* crops of the market gardeners beyond the suburbs but still within 10 km of Paris, operating sometimes without much investment in frames, cloches or manure.<sup>10</sup> The open field growing season was of course shorter and ripening times later than the south of France, but these growers were nevertheless able to drive their competitors out of the market during the height of the season in northern France. This was because of their relatively low transport costs and lower likelihood of spoilage in transit, but also on quality grounds. Thus Perpignan peaches, although tender and good-looking, unfortunately had adherent cores and were not equal in smoothness of texture to those of Montreuil.

Producers around London never adopted on a large scale the most intensive methods of what came to be called 'French gardening'. Nevertheless, Malcolm Thick has shown that high output market gardening has a long history near the city.<sup>11</sup> He describes the use of large glass bell cloches as early as the late seventeenth century and focused particularly on the Neat House gardens in Pimlico, where micro-climate modification by glass allowed the production of out-of-season melons and asparagus. The main factor was the addition of large quantities of horse and cow manure from the streets, stables and cow-houses of central London. This dung was used cleverly in creating specially constructed hotbeds that heated the soil for delicate crops. The Neat House gardens were built over in the 1830s but other commercial horticulture continued within easy range of the centre of London, with added accessibility provided by the railways and an improved road system.

The major growers of fruits and vegetables around both Paris and London sent their produce to the wholesale markets. The systems at Les Halles and Covent Garden were similar. Both had a limited number of tenants with large businesses sourcing supplies from near and far. In Paris, Husson's data indicate that business was divided roughly

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<sup>10</sup> The two principal districts were at the confluence of the Seine and the Marne, to the south, and in the north from Bobigny to Saint Denis.

<sup>11</sup> Thick, 1998.

equally between, on the one hand, commission agents who made private deals through established channels to wholesalers, and, on the other hand, auctions (*à la criée*).<sup>12</sup> In both cases the sales were made on behalf of growers and the agents did not at any stage own the goods. Much had to be taken on trust and a great deal depended on the skills and contact networks of the agents, as well as on the vagaries of the weather and day-to-day fluctuations in prices.

Both London and Paris also had minor specialist food wholesale markets. In Paris, the market of the Mail, near the Île St Louis on the Quai de l'Hotel de Ville, supplied low grade fruit to itinerant retailers and to manufacturers of jams and preserves. This amounted to about five per cent of the total, against 57 per cent passing through Les Halles, 18 per cent received by commission agents outside Les Halles, eight per cent taken from growers by wholesale merchants, and 13 per cent that was pitched at the *quartier* street markets in various parts of the city.<sup>13</sup>

Milk was another commodity that was initially produced close to both cities. In Paris it was never liable to the *octroi* and Husson therefore had to rely upon various surveys and estimates in his description. The impact of the railways from the outset was widespread in the Île de France, mediated by contractors touring the countryside offering guaranteed returns, buying up all of the milk coming from a farmer's cattle sheds, and forwarding it to the nearest station. Paris became dependent earlier than London upon such milk brought by rail, replacing an initial enthusiasm for using rapid road transport. The radius of regular supply quickly stretched to over 100 km, especially northward on the lines to Amiens and Rouen.<sup>14</sup>

In his 1875 edition, Husson notes that milk consumption had fallen in the previous twenty years from 103 to 60 litres per capita. There are two possible reasons for this.<sup>15</sup> First, Haussmann's annexation of the suburbs in 1860 doubled the city's area and increased its population by 400,000, but these new citizens were relatively poor and their dietary profile would undoubtedly have affected the average for the metropolitan area as

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<sup>12</sup> Most fruit (and beans and potatoes) was sold by commission agents but more vegetables, especially bulk lots of cabbage and watercress went to auction.

<sup>13</sup> Husson, 1856, 1875.

<sup>14</sup> Eventually the milkshed stretched to the specialist dairying areas of Normandy, the pays d'Auge and le Bessin. This was facilitated by the development of special railway wagons. Jenkins, 1879.

<sup>15</sup> There is a third possible explanation, that the estimates are inaccurate. This is more likely for the 1856 figure because further information became available after that date.

a whole. Since milk had a high income elasticity of demand, it would not be at all surprising if its consumption per capita for the city as a whole therefore immediately fell. Second, the technical limitations of moving milk by rail were substantial and may well have made it difficult to source sufficient supply. In common with Britain, there was a lack of proper cooling facilities, along with inadequate rolling stock and inconvenient timetabling.<sup>16</sup> Either way, it seems that there was a need for an increase in supply from near at hand and in Paris the number of stall-fed cows in the city grew, with 6,850 still kept by 490 cow-keepers as late as 1887.<sup>17</sup> This was the opposite trend to London, where regulation with a sanitary intent increased the costs of city milk producers and eventually forced them out of business. The London milk trade solved the problem of supply by drawing on consignments from ever-distant railway stations, helped by the use from the 1880s of chemical preservatives to prevent the visible deterioration of the milk in transit.<sup>18</sup>

With regard to meat, the regulation of beef, mutton and veal butchers in Paris undoubtedly had an impact upon the retail environment and probably on consumption. The abolition of registration and price controls in 1858 led to a tripling in the number of butchers shops from 501 in 1856 to 1,805 in 1875, with a further 417 operating in street markets. By comparison, the pork butchers (*charcutiers*), who had not been restricted in the same way, increased more in line with the expansion of population, from 422 to 654.

The red meat butchers drew their supplies from wholesale markets, rather like their colleagues in London, but before 1858 they were expected to slaughter their purchases themselves, and the concept of a dead meat market was yet to develop in the same way as at Smithfield, Newgate and Leadenhall. One fascinating difference between the cities lay in the extraordinary nature of the supply of hams to Paris. This was facilitated by the institution of the ham fair, held for three days every year at Easter, when ham dealers came from all over the country and sold up to 300,000 kg in this short period.<sup>19</sup>

### **Feeding Modernity: London and Paris in the 1850s**

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<sup>16</sup> Atkins, 1978.

<sup>17</sup> Gaubeaux, 1887.

<sup>18</sup> Atkins, 1991.

<sup>19</sup> Husson, 1856, 1875.

Although Paris in the 1850s was somewhat smaller than London, to Walter Benjamin she was nevertheless ‘the capital of the nineteenth century’, and to David Harvey the ‘capital of modernity’.<sup>20</sup> This was because the coup d’état of 1851 was an important historical threshold. Not only did it lead to the Second Empire and elevate Napoleon III to absolute power, but also the 1850s and 1860s saw the release of a creative energy that restructured large portions of the central city on modernist lines of rational order. The planning genius behind this make-over was Georges-Eugène Haussmann, Prefect from 1853 to 1870. In addition to designing the new boulevards and sewers, for which he is renowned, he also turned his mind to the food supply of the city. Existing facilities had long been considered inadequate and a start had even been made on a new central market. Both Napoleon and Haussmann disliked the design of this building and considered it to be insufficiently emblematic of their brave new world. The architect, Victor Baltard, was instructed to demolish it and to start again under the supervision of Haussmann himself. The result was a series of six pavilions built between 1854 and 1857, with four more 1866–68, housing a substantial portion of the city’s wholesale trades in meat, fish, fruit and vegetables and creating the world’s largest covered food market. At 84,000 square metres, it had ten times the space available than before and was supplied with water and gas lamps to facilitate night working.<sup>21</sup>

The redevelopment of Les Halles did not depend upon consensus or goodwill. First, to contemporary eyes the sheer scale of the market buildings and their path-breaking architecture made them as uncomfortable in the townscape as the Centre Pompidou has been more recently in a neighbouring *arrondissement*. Second, the demolition of some slum properties was not an accidental side effect, but rather an attempt to fulfill one of Haussmann’s gentrifying objectives.<sup>22</sup> In a sense, therefore, it was political. It was also ideological in that both Les Halles and, later, La Villette, the vast slaughterhouse and meat market opened in 1867, neatly meshed with Haussmann’s new ideas of urban order and represented ‘a new perception of the operation of urban space’.<sup>23</sup>

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<sup>20</sup> Benjamin, 1970; Harvey, 2003.

<sup>21</sup> Chemla, 1994.

<sup>22</sup> Johnson, 2004.

<sup>23</sup> Chemla, 1994, 39.

The significance of Les Halles is perhaps best captured in contemporary novels, notably Emile Zola's *Le Ventre de Paris*.<sup>24</sup> William Berg argues that Zola's are 'visual' novels that are closely related to painterly techniques and to later filmic styles in the evocation of storylines.<sup>25</sup> Thus in *Le Ventre de Paris*, literally 'the belly of Paris', he uses Les Halles as a 'set', and the description is somewhat like a still life, with both superficial and deeper meanings.<sup>26</sup> The market represents the fat of the land, the luxurious excess of the bourgeois lifestyle, juxtaposed with its urban context, one of the poorest parts of the city, and Zola stresses the phantasmagoria of the market as a gas-lit Aladdin's cave of exotic wonders: sights, smells, sounds. It represents at the same time the stuff of life and the rapid onset of decay in delicate foods; it therefore encompasses both *nourriture* and *pourriture*.

Although London was clearly different in political terms, with no experiment equivalent to the national socialist style of Napoleon and no overarching city planning to match the vision of Haussmann, nevertheless modernity was making its mark. It is not coincidental, for instance, that the mid-century saw general dissatisfaction with the state of the wholesale food markets. A good example is the 'new' Smithfield meat market, which opened in 1861, not long after the slaughtering function had been transferred (1855) to the new Metropolitan cattle market in Islington. According to Patrick Joyce, this relegation of animal death to the suburbs was a part of a need to make it invisible and anonymous in an age that was increasingly squeamish about the industrialization of blood-letting.<sup>27</sup>

There were major differences between London and Paris. First, the bold planning that has characterised French urban politics, right down to the present day, delivered in Les Halles and La Villette the world's two largest food markets. By comparison, London's wholesaling functions were both more specialized and dispersed. In addition to Smithfield, there were markets devoted to fish, fruit and vegetables, potatoes, poultry, wheat and tea, along with some for mixed goods. In addition, there were a number of

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<sup>24</sup> Originally published in 1873, translated in 1996.

<sup>25</sup> Berg, 1992.

<sup>26</sup> Tunstall, 2004.

<sup>27</sup> Joyce, 2003.

commodities that did not pass through markets at all, notably various grocery provisions, eggs and milk.

Second, in Paris there were still restrictions on butchers and bakers as providers of the basic foodstuffs, particularly with regard to controlling prices and therefore defusing potential civil unrest.<sup>28</sup> The city had a long history of popular uprisings and the authorities were nervous that food riots about high prices might have wider political consequences. According to Husson (1856), there were only 600 authorized bakers and their prices were fixed each fortnight according to the price of flour.<sup>29</sup> In 1854 there was even a decree obliging all bakers to deposit flour equivalent to 90 days production in the municipal stores. Eventually, in 1863, licensing and price controls were replaced by a tax on flour and the bakery trade quickly adapted to a market reality much more like that of London. The similar regulation of butchers was abolished in 1858, so the Second Empire was a period of fundamental change in the state's involvement in metropolitan food supplies.

## **On the Streets**

'Oh, herring red, thou art good with 'tatoes or with bread'.<sup>30</sup>

A nineteenth century *flâneur* of foodscapes would have exercised all available senses. His sense of taste would have been somewhat challenged by the basic foods available to most of the urban population but, as Rebecca Spang has shown, in Paris at least, modern gastronomic culture was taking shape through the invention of the restaurant.<sup>31</sup> Our *flâneur* would certainly have smelled the numerous pig-styes close to the centre of London, seen tens of thousands of cattle driven to market through the streets, and perhaps have slipped in the blood that oozed from the many small slaughterhouses. In a

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<sup>28</sup> The equivalent Assize of Bread had been abolished for prices in London in 1709 and for standard weights in 1822.

<sup>29</sup> Husson, 1856.

<sup>30</sup> Wright, 1867.

<sup>31</sup> Spang, 2000.

performative sense he might also have experienced the surround-sound street theatre of open markets and the shrill cries of itinerant costermongers and milkmaids.<sup>32</sup>

In London, retailing of basic foodstuffs seems to have been more of a street phenomenon than in its rival city.<sup>33</sup> Journalist Henry Mayhew was the master of describing the charivari of street life and particularly the many characters who were involved. According to the information he collected in 1849 and 1850, there were 3,900 food stalls in 37 street markets, and a further 7,800 itinerants, mainly selling fish, fruit and vegetables. Most of these ‘costermongers’ bought their wares in bulk early in the morning at the wholesale markets and then worked the most profitable pitches around central London. Their numbers had increased even faster than the general population of the city, no doubt in response to the problems of many immigrants in finding anything other than casual work. Over 70 per cent of wet fish was sold in this way, especially cheaper species such as herrings (100,000 tonnes p.a.)<sup>34</sup>, and other food groups were similarly channelled: watercress (46 per cent), game (45 per cent), vegetables (33 per cent), dried and salted fish (26 per cent), poultry (25 per cent), and shell fish (23 per cent). With fruit and vegetables, the chief line was imported potatoes, dwarfing all other products by an order of magnitude, and also cabbage, onions, potatoes, turnips, apples, pears, and gooseberries, all home-grown. Bread and meat were not conveniently sold from barrows in all weathers and so continued to be the monopoly of fixed shops and their delivery boys. In addition to these raw commodities, Mayhew’s street sellers also sold processed food and drink for the refreshment of passing customers. There were piemen, sellers of ham sandwiches and cakes and, depending on the season, of hot or cold drinks and snacks (Table 1).

Because of Mayhew’s reputation as a journalist of the gothic poverty on London’s streets, the serious intent of his work has often been undervalued. However, according to Eileen Yeo, his systematic, empirical social investigations bear comparison with later

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<sup>32</sup> Mayhew, 1851.

<sup>33</sup> Some care is required here. Husson makes little mention of costermongers but they certainly existed. The famous ‘cries of London’, a centuries-old genre of painting and print-making depicting street vendors, had in fact been copied from a Parisian idea in the early sixteenth century. Shesgreen, 2002.

<sup>34</sup> There was trade for fixed-shop fishmongers but only 477 were listed in the *Post Office London Directory* for 1860.

field workers such as Charles Booth and Seebohm Rowntree.<sup>35</sup> He worked in a team of collaborators and collected data through interviews of key informants and the use of questionnaires.<sup>36</sup> Some of his data, for instance wholesale market sales, can be at least partially corroborated from independent sources, and the information on street sellers of food is both detailed and suitably nuanced with comments on overlapping sales of individual products and on the casual and seasonal nature of such occupations. There are obvious faults, for instance occasional errors in the column and row sums of his statistical tables, but overall the Mayhew surveys are valuable raw material for a study of London's foodscape in the mid-nineteenth century.

By comparison, in Paris the street had a shifting significance from the 1850s. As the urban texture was opened out by Haussmann, revealing vistas that had never existed before, so the streetscape was reassessed by everyone. Cafés quickly multiplied on the brightly lit new boulevards and English writers visiting Paris often commented on a decrease in bourgeois domesticity in favour of public sociability in cafés.<sup>37</sup> The balance between private and public space was therefore very different from London. There was also a much denser population in Paris, up to five times more per building, which generated greater spending power per hectare in the city centre and favoured the multiplication of fixed shops rather than street markets.

## **Conclusion**

In such a short paper it is difficult to do justice to the complexities of the food supply systems in London and Paris. Nevertheless, we have identified a number of interesting points that require further comparative analysis.

First, the political imperatives and planning imaginations in the two cities were different. While London continued with its well-established *laissez-faire* attitude, exemplified by a lack of the collection of official statistics, Paris under the Second Empire was in the grip of a top-down authoritarian mentality that provided new

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<sup>35</sup> Yeo, 1971, 55.

<sup>36</sup> Yeo, 1971, 61-4.

<sup>37</sup> Haine, 1996; Marcus, 1999. By 1909 there were 30,000 cafés in Paris but only 5,900 in London, a city twice the size.

marketing facilities, the lifting of controls on butchers and bakers, and an official interest in the minutiae of food provision.

Second, while the transport revolution seems to have affected both cities by the 1850s, there were important differences. The Parisian diet continued to rely upon fruits, vegetables and milk produced within the city limits to a greater degree and for much longer than was the case for London. This was partly due to indirect encouragement by the city authorities and partly to technicalities of production, which for a number of reasons were more intensive in Paris.

Third, retailing systems were different in the 1850s. One might understandably be tempted by a stage model that indicates earlier innovation in shop retailing in Paris, as instanced by the arcades in the early nineteenth century and later by department stores, but the reality is that there were other factors. For instance, in London a vast influx of migrants was responsible for an army of desperate people seeking casual employment on the streets of the city, and, since there was no equivalent to Haussmann's revanchist campaign to 'cleanse' the city centre of the poor, street vendors were able to establish a niche in the food economy similar in importance to the street vendors found nowadays in third world cities.

Finally, the evidence suggests dietary differences between the two cities. There is insufficient household budget data to comment on the food consumption of individuals, or even of particular social groups, but Appendices 1–3 do provide indicative city-level comparative data. Thus, the London diet was more reliant upon heavy vegetables (potatoes, cabbage, onions) for its calories, and Paris on bread. The Parisian consumer had a much broader spectrum of fruits and vegetables to choose from but less fish. The availability of meats, dairy produce and alcohol seems to have been similar in the two cities, although, as expected, there was a clear difference in the preference for wine or for beer.

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Table 3.1 The street sellers of food in London, 1851

Food item	Sellers	Value (£)	Food item	Sellers	Value (£)
Wet fish	11,000	1,177,000	Pickled whelks	150	5,000
Dry fish		127,000	Lemonade, sherbet	700	4,900
Shell fish		156,650	Pea soup	150	4,050
Fruit and nuts		332,400	Pies	50	3,000
Dry fruit		1,000	Cakes and tarts	150	2,350
Vegetables		292,200	Ham sandwiches	60	1,800
Game		80,000	Water	60	780
Coffee and tea	300	31,200	Cheap cakes	30	450
Hot eels	240	19,448	Curds and whey	100	412
Poultry		14,800	Milk	28	344
Ginger beer	900	14,660	Rice milk	75	320
Baked potatoes	200	14,000	Hot cross buns	500	300
Watercress	500	13,949	Boiled meat and currant puddings	6	270
Meat	150	12,450	Plum duff	6	250
Fried fish	300	11,400	Hot green peas	4	250
Sweets	200	10,000	Elder wine	50	200
Bread	25	9,000	Cough drops	6	130
Gingerbread nuts	150	6,630	Peppermint water	4	125
Muffins and crumpets	500	6,000	Ice creams	20	42
Sheep's trotters	300	6,000			
			Total	16,918	2,360,760

*Source:* Mayhew, 1851.

*Notes:*

1. Does not include doorstep delivery
2. Many of these trades were temporary or seasonal, e.g. hot cross buns for Easter; muffins and crumpets, baked potatoes, cough drops, elder wine, and rice milk all in winter; ginger beer, lemonade, ice cream, curds and whey all in summer.
3. Mayhew counted 3,000 selling 'eatables and drinkables', 4-5,000 in winter.

Appendix 3.1 A detailed comparison of the consumption of fruit and vegetables.

	London, 1851	Paris, 1856	Paris, 1869-73		London, 1851	Paris, 1856	Paris, 1869-73	
<b>Vegetables</b>				Burnet		0.019	0.017	
Potatoes	212.657	22.597	24.708	Chervil		0.188	0.227	
Cabbage	34.452	17.787	22.723	Chives		0.019	0.024	
Turnip	20.496	3.361	14.981	Garlic		0.456	0.724	
Onions	16.296	2.625	5.481	Purslane		0.056	0.041	
Cauliflowers	13.609	2.148	23.005	Parsley	0.113	0.114	0.176	
Carrots	3.453	17.840	21.344	Salsify		0.225	0.238	
Green peas	1.654	3.540	9.428	Sorrel		6.563	8.384	
Watercress	0.000	0.503	1.798	Tarragon		0.028	0.046	
Salads	0.937	5.234	13.586	Thyme		0.005	0.010	
Rhubarb	0.817	0.000	0.000					
Cucumbers	0.805	0.104	0.648	<b>Fruit</b>				
Green haricots	0.645	2.943	2.801	Raisins		8.276	0.000	0.891
Beans	0.504	0.192	0.084	Apples		7.798	97.481	9.163
Red radish	0.413	0.375	0.432	Pears		4.006	130.406	5.475
Celery	0.349	1.250	1.350	Oranges	4.355	0.000	1.482	
Spring onions	0.249	0.076	0.065	Currants and gooseberries	3.826	7.509	0.697	
Marrow	0.119	0.000	0.000	Plums	2.412	102.267	2.303	
Asparagus	0.112	4.861	4.860	Lemons	0.652	0.000	0.271	
Leeks	0.000	10.938	12.366	Figs	0.466	2.847	0.540	
White haricots, in pod	0.000	2.553	5.116	Cherries	0.450	12.398	5.400	
Pumpkins	0.000	2.292	0.864	Prunes	0.322	0.000	0.659	
Artichokes	0.000	2.053	2.633	Strawberries	0.308	8.125	2.700	
Chicory	0.000	1.901	2.808	Grapes	0.255	3.906	2.970	
Parsnips	0.000	1.077	5.265	Fresh pineapple	0.038	0.001	0.002	
White haricots, shelled	0.000	0.843	0.232	Mulberries	0.025	0.000	0.000	
Melons	0.000	0.677	4.050	Raspberries	0.007	1.172	0.367	
Beetroot	0.000	0.625	1.485	Apricots	0.000	3.633	0.799	
Mushrooms	0.000	0.415	0.583	Medlars and service berries	0.000	0.130	0.041	
Black radish	0.000	0.380	0.513	Peaches	0.000	0.080	0.443	
Spinach	0.000	0.342	0.648	Olives	0.000	0.000	0.054	
Tomatoes	0.000	0.313	0.454	Dates	0.000	0.000	0.014	
Gherkins	0.000	0.156	0.314	Pistoles	0.000	0.000	0.009	
Brussels sprouts	0.000	0.112	0.739					
Cardoons	0.000	0.078	0.068	<b>Nuts</b>				
Shallots	0.000	0.031	0.060	Other nuts	3.320	0.569	0.637	
Rape	0.000	0.010	0.011	Almonds	0.290	0.004	0.187	
				Chestnuts and sweet chestnuts	0.282	0.564	2.700	
Aubergines	0.000	0.010	0.103	Coconuts	0.181	0.000	0.000	
Long pepper	0.000	0.003	0.005	Hazel nuts	0.108	0.004	0.092	
<b>Herbs</b>								
Bay leaves	?	0.076	0.189					

Sources: Mayhew, 1851; Wynter, 1854; Dodd, 1856; Husson, 1856, 1875.

Appendix 3.2 Comparison of consumption in main food groups (kg. per capita per annum unless otherwise stated)

	London, 1850s	Paris, early/ mid 1850s	Paris, late 1860s/ early 1870s
Bread	148.777 <sup>1</sup> ; 117.921 <sup>2</sup>	180.168	157.846
Red meat, offal	} 95.7071 <sup>9</sup> ; 22.000 <sup>3</sup> ; 136.000 <sup>4</sup> ; 81.648 <sup>10</sup>	62.586	63.824
Pigmeat		10.267	12.227
Poultry and game		9.841	12.74
Horse meat		0.000	0.682
Fish	62.549 <sup>5</sup> ; 90.85 <sup>6</sup>	12.765	14.628
Butter	4.887 ; 7.712 <sup>1</sup> ; 5.182 <sup>3</sup>	9.680	7.737
Cheese	6.050 <sup>5</sup> ; 7.712 <sup>1</sup>	4.816	5.028
Eggs	?	8.250	7.750
Pastries	?	4.753	2.815
Paté, rice, starch	?	3.790	3.640
Sugar	?	7.120	8.000
Confectionery	?	0.568	0.712
Jam and raisiné	?	0.873	0.814
Ice cream	?	0.510	0.450
Honey	?	0.228	0.316
Coffee	?	2.848	3.240
Chicory	?	0.316	0.324
Chocolate	?	0.949	1.512
Tea	?	0.037	0.032
Early season fruits	?	0.005	0.001
Seasonal fruits	19.868 <sup>7</sup>	225.333	31.768
Oranges, lemons	3.329 <sup>7</sup>	1.977	1.753
Fresh pineapple	?	0.001	0.002
Dried fruits	8.160 <sup>7</sup>	3.752	2.277
Tinned pineapple	?	0.009	0.009
Olives	?	0.052	0.054
Early season vegetables	} 63.956 <sup>1</sup> ; 150.213 <sup>7</sup>	0.015	0.030
Seasonal vegetables		127.154	204.402
Dried vegetables		8.214	8.116
Pickled, tinned, bottled veg		1.614	1.566
Truffles	?	0.024	0.18
Salt	?	5.656	6.968
Mustard	?	0.236	0.270
Pepper, spices, vanilla	?	0.132	0.77
Wine (litres)	15.159 <sup>5</sup>	113.26	210.817
Beer (litres)	167.913 <sup>5</sup> ; 139.705 <sup>1</sup>	13.29	12.885
Cider (litres)	?	2.46	1.828
Spirits (litres)	25.65 <sup>5</sup>	12.08	9.018
Milk (litres)	95.407 <sup>1</sup> ; 39.74-42.22 <sup>8</sup>	103.76	60.348
Liqueurs (litres)	?	1.20	2.190
Candied fruits in brandy (litres)	?	0.32	0.21
Syrup (litres)	?	0.59	0.64
Oil (litres)	?	1.90	2.602
Vinegar (litres)	?	1.94	2.251

Sources: Paris estimates all from Husson, 1856, 1875. For London: 1. Porter, 1852; 2. McCulloch, 1849; 3. McCulloch, 1854; 4. Mayhew, 1849; 5. Mogg, 1844; 6. Mayhew, 1851; 7. Atkins, 1985; 8. Atkins, 1977; 9. Dodd, 1856; 10. Poole, 1852.