

PROCEEDINGS OF THE NUTRITION SOCIETY

ONE HUNDRED AND EIGHTEENTH SCIENTIFIC MEETING
QUEEN ELIZABETH COLLEGE, CAMPDEN HILL ROAD, LONDON, W.8

11 JULY 1958

THE HUMAN FACTOR IN GROUP FEEDING

Chairman : PROFESSOR JOHN YUDKIN, *Department of Nutrition and Dietetics,*
Queen Elizabeth College, Campden Hill Road, London, W.8

Alexis Soyer (1809–1858)—an historical note on his contributions in applied nutrition

By F. LE GROS CLARK, 35 *Llanvanor Road, London, N.W.2*

It has seemed to me that the most appropriate way of presenting a paper on this subject would be to divide it into three uneven parts. Let me, therefore, first make a brief introductory reference to the work of Alexis Soyer, then indicate his chronological place in the applied nutrition of his time, and finally enlarge upon the many contributions he made towards reforming the catering and culinary practices of the Country.

Alexis Soyer was not only the most famous of the London chefs of his day, he was also at the height of his influence at a time when the modern science of nutrition was beginning to assume its permanent form; and to some extent he made himself its best 'publicity officer'. He was a man of almost unlimited energies and eccentricities, who enjoyed displaying his knowledge and his culinary skill much as a conjuror likes no doubt to startle his public. He was thus an ideal man for the task of applying such knowledge as then existed in the feeding of large groups, especially in adverse circumstances. He directed his energies in turn to famine relief in Ireland, to establishing soup kitchens for the unemployed in London, and finally to the reform of hospital and army catering and cookery in the Crimea. Where the borderland came between his harmless vanities and his strong social conscience is perhaps of little importance. The fact remains that he embodied the imaginative applications of his art on the grand scale. He returned from the Crimea with his health seriously impaired, and less than 2 years later he died, whether as a consequence or not remains uncertain.

After his death, Florence Nightingale wrote 'His death is a great disaster. Others have studied cooking for the purposes of gormandising, some for show, but none but he for the purpose of cooking large quantities of food in the most nutritious manner for great numbers of men. He has no successor.' Nevertheless, his influence was lasting; and it has thus seemed fitting in 1958 to associate his memory with a symposium on applied nutrition.

The following dates trace briefly the relation of Soyer's life to a period of history that was characterized by an increasing scientific and social interest in the problems of human nutrition.

- 1809: Birth of Alexis Soyer, 14 October, at Meaux, near Paris.
- 1831: Soyer moves from Paris to London.
- 1833: Publication of *Experiments and Observations on the Gastric Juice, and the Physiology of Digestion* by W. Beaumont.
- 1837: Soyer becomes Chef to the Reform Club.
- 1840: Dr Lyon Playfair, who had studied under Justus von Liebig, communicates a paper on the function of foods to the Section of Chemistry, British Association (Glasgow). Liebig's own work is subsequently translated and published in Britain. At the same British Association meeting the Section of Medicine voted £200 for a study on the chemistry of digestion.
- 1845-6: Irish potato famine.
- 1846: Publication of Soyer's *The Gastronomic Regenerator*.
- 1847: Soyer initiates soup kitchens in London for poor relief and proceeds to Ireland to superintend soup kitchens for famine relief.
- 1847-50: Scandals about spoilage of canned meat as provided to the Navy.
- 1849: Publication of Soyer's *The Modern Housewife*.
- 1850: Soyer resigns from his position at the Reform Club.
- 1851: The *Lancet* commences publication of reports on the prevalent adulteration of common foods (Dr Arthur Hassall and Henry Letheby).
- 1852: Report of a Government Inquiry on Canned Food for the Navy produces public disquiet on the subject.
- 1853: Lyon Playfair reviews the existing knowledge of food requirements in a lecture before the Royal Institution.
- 1854: Outbreak of the Crimean War.
- 1855: Letter to *The Times* in January suggests that Soyer should assist in reforming cooking practices in the field. Soyer volunteers to proceed to the East at his own expense. He goes first to Scutari and works with Miss Nightingale in the reform of hospital catering and food preparation, subsequently (May) to the Crimea to deal with Army cooking.
- 1855: A 'food exhibition' is shown at the South Kensington Museum, then first established after the Great Exhibition of 1851. This popular educational display contains sections on food chemistry, the prevalent adulteration practices and the diet of the Armed Forces.
- 1856: Soyer leaves the Crimea, first for Scutari again, and later through Europe for London. In London the collected work on food adulteration by Hassall and Letheby (published 1855) initiates the campaign that led in 1860 to the passing of the first comprehensive Pure Food Act.
- 1857: Letheby in a lecture before the Royal Society of Arts uses the modern system of presenting food analyses. Publication of Soyer's *Instructions to Military Hospital Cooks*. Dr Edward Smith publishes his numerous

observations on the effects of different conditions of life on human energy requirements.

1858: Death of Alexis Soyer in London on 5 August.

The year in which a man happens to die, like the year of his birth, is usually a matter of very slight historical interest. We all know that the *Origin of Species* was published in 1859. How many of us recall that Charles Darwin died in 1882? With Alexis Soyer it was rather different. His sudden and untimely death in the August of 1858 interrupted a career that was just beginning to make its greatest contribution to applied nutrition. If he had lived like Florence Nightingale for 90 years, he might have left an unforgettable mark on our practice in many fields. Even as it is, the work he did and the standards he set seem to me to have been of lasting importance.

To explain what I mean I need only refer briefly to what he achieved after his return to London from the Crimea in 1857. He had 15 months still to live; and, from whatever cause, his health remained poor throughout the period. Towards the close of 1857 he was co-opted by the new Barracks and Hospitals Sub-Commission, so that he might organize schools of regimental and hospital cookery, plan the kitchens and draw up schemes for general diets. He produced a book on *Instructions to Military Hospital Cooks* (Soyer, 1857a), that was adopted by all military hospitals. He was then asked to compose a small book of recipes for the use of poor emigrants on board ship; and a copy of this book was given by the Government Emigration Commissioners to each mess of eight adults. Soyer went further; he invented special tea-pots and baking dishes suitable for such sea-going conditions. He lectured on military dietetics at the United Services Institute. He became a member of the Government Committee established to select a cooking wagon for armies on the march; and it was his own design that ultimately had to be chosen. He proceeded to invent a preserving and canning process. He recorded his Crimean experiences in his *Soyer's Culinary Campaign* (Soyer, 1857b). In the July of 1858 he was demonstrating his new kitchen designs at Wellington Barracks before an assemblage of high-ranking officers. He was asked to follow this success by preparing a dinner for a whole battalion of the Guards. But within a week he was dead.

We may perhaps assume that the year 1847 had been the turning point of Soyer's career. He was still at that time the Chef of the Reform Club, the recognized master of his great mystery in the kitchens of London. But he was plainly seeking for new worlds to conquer; and as himself very much a man of the people, he naturally responded to the social needs of the moment. The slums of London were crowded with unemployed and impoverished families; and in Ireland the aftermath of the potato famine was leaving its trail of hunger and destitution. Soyer's first experimental soup kitchen was apparently opened in Leicester Square; and in the March of 1847 he went to Dublin on the invitation of the Lord Lieutenant of Ireland. He there superintended soup recipes in hospitals and workhouses and organized the building of a new model kitchen. The soup in the new kitchen was prepared in a steam boiler with a 300 gal. pan and an oven heated by the same fire. Eight iron pans on wheels held the ingredients; and they were cooked by steam from the

boiler. A hundred people were fed at a time along wooden tables, bowls being let into the tables and spoons attached to them by chains. Carts and barrows with fires beneath the containers took quantities of the soup to other distributing centres. Soyer (1847) in the meanwhile published a book of fifty pages entitled *Charitable Cookery or the Poor Man's Regenerator*.

Returning to London after a Dublin dinner given in his honour, he set to work with his soup kitchens in Spitalfields and later once again in Leicester Square. Subscriptions were slow in coming in; they scarcely, it seems, matched his own temperamental generosity. But for at least 3 or 4 years the soup kitchens remained in operation. Precisely why Soyer resigned from the Reform Club in 1850 has never been made clear. The reasons given seem of trivial significance. There came a space of over 3 years in which his restless mind found no outlet that can have been consistently satisfying. He carried on his charitable kitchens at intervals, organizing balls and employing other methods for raising the funds. In 1853, for example, he designed a City Soup Kitchen in Farringdon Street with a capacity of 8000–10,000 soup meals a day. His books still continued to sell. His *The Modern Housewife* (Soyer, 1850) had reached 30,000 copies by 1852. But this book had been directed largely to the middle-class woman; and it is obvious from the last edition of it that his mind was beginning to dwell, as he says, upon the needs of the 'artisan, mechanic and cottager'. In 1854 he published *Soyer's Shilling Cookery* (Soyer, 1854). It was simple, economical and thoroughly successful. Within a year 110,000 copies had been printed; and in 10 years half a million had been sold.

Of the Crimean campaign it has been said that it was the last and in some ways the most macabre of the medieval wars. It left behind it a few impressive military legends; and it set in motion a number of overdue reforms in army organization, in hospitals and in hospital and army catering. How Alexis Soyer was himself drawn into this maelstrom of disease, heroism and mismanagement has been graphically told both in his own words and by many of his contemporaries.

In the January of 1855, that miserable mid-winter of exposure and disease that followed the engagements of Balaclava and Inkerman, a letter appeared in *The Times*, purporting to be from a soldier at the front. It begged Soyer to advise the men how to use their rations. On 2 February Soyer suddenly came to the decision to go to the front at his own expense. He stipulated only that the Government should grant him full powers of action 'according to my own knowledge and experience in such matters'. It was a moment at which the Government had been seriously shaken by the revelations of *The Times* correspondent in the Crimea; and Soyer's offer was accepted with relief. Immediately he designed the portable cooking stove, that has ever since been in its basic form an essential article of camp equipment. His model was adopted by the War Office.

Until the close of April 1855 Soyer was with Miss Nightingale at the hospitals in Scutari, reorganizing the methods of food preparation and distribution. The task was a formidable one. There were thousands of patients. Kitchens were ill-equipped and inconvenient; the cooks were unskilled and the arrangements for supply chaotic. The only cooking apparatus in one large hospital consisted of eight usable copper

boilers; these had to supply many thousand patients with three meals a day. In a week or two Soyer had managed to re-organize the system of issuing rations, to have the coppers re-tinned and to build a charcoal stove and oven. The store room and larder were partitioned off. Above all perhaps, the staffing system of the kitchens was revolutionized; where thirty-four untrained soldiers had previously been detailed for the work, the job was far better done under Soyer's control by two civilian cooks and six military orderlies.

On 2 May Soyer sailed with Miss Nightingale for the Crimea. There was a protracted conflict with purveyors, engineers and the military authorities to have hospital kitchens built or reconstructed. His plans were readily approved by the High Command; it was quite another matter to secure the necessary materials and labour against the evasions of harassed and conservative subordinates. By August the new methods were in a tolerably good working condition; and Soyer could turn his talents to the introduction of his new stoves into army cooking. The supply of his stoves did, in fact, reach the front in August; and there for a short period the first consignment inexplicably disappeared. It was subsequently discovered that the Highland Brigade had appropriated the stoves and that the men were already using them for cooking their day's dinner. The saving of fuel and labour is said to have been startling in the extreme. Under the old system of cooking in small camp kettles over enormous open fires one battalion had used 1760 lb. of wood a day for each fire, and sixteen cooks; the transition to the Soyer stoves reduced the fuel used to 47 lb. and the cooks to no more than two.

In November *The Times* correspondent, who had hitherto compared the feeding of the British troops very unfavourably with that of the French, could write that the British army was 'fed as no army was ever fed before'; and he added that the men were 'unmeasurably better off than their allies'. 'The hospital kitchens', he commented, 'are certainly worth seeing, and Mr Soyer has by the introduction of his stoves and of an improved system of menage contributed to render them efficient'. In the face of the sickness against which he was physically struggling, Soyer supervised in person the training of the troops in the use of his stoves as they arrived. For by that time his health was undermined; and whatever the cause of his final collapse in 1858, it is clear that the last 3 years of his life were chequered with bouts of debilitating and prostrating illness.

The man whose public career I have thus briefly traced was both a master of his craft and an embodiment of service to his fellow men. If he also had his panache, what self-respecting cook does not share this amiable quality? We may without adulation pay our passing tribute in 1958 to the memory of one of the most original of the great practitioners of applied nutrition.

I need only add that in recent years Alexis Soyer has found his able biographer in Mrs Helen Morris (1938), to whose *Portrait of a Chef* I have naturally been much indebted.

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Alexis Soyer and the Crimean War

By SIR ZACHARY COPE, 170 *Chiltern Court, Baker Street, London, N.W.1*

The three best natural doctors have for ages been known to be Doctor Quiet, Doctor Merryman and Doctor Diet. Doctor Quiet is seldom found amidst soldiers during a campaign, and Doctor Merryman does not practice on the battlefield. If the soldier is to be kept fit on active service he must depend chiefly upon Doctor Diet. Napoleon emphasized this fact when he said that an army marched upon its stomach; he took good care that his armies should feed upon the plentiful food of the land which he was invading. When, as in the invasion of Russia, the inhabitants destroyed all remaining food as they retreated, the invading army simply perished.

In the Crimean War the authorities at home and in the field either did not understand this principle or neglected to see that it was practised. Since for the first time in history there were accredited reporters who sent back vivid pictures of the breakdown of the commissariat, there was a public outcry in the newspapers at home. The harrowing descriptions printed in *The Times* caused Florence Nightingale to volunteer for service with the Army in October 1854. On 16 January 1855 a letter appeared in *The Times* written by a 'Crimean' from 'before Sebastopol' in which an appeal was made for 'a receipt or two of how to concoct into a palatable shape the eternal ration of pork and biscuit which is issued to us'; the writer said that there was a public character—Alexis Soyer—who might thus do them a good turn. Six days later Soyer sent to *The Times* a series of recipes which could be used with the rations ordinarily served out. A week later Soyer wrote to the Government offering to go to Scutari and the Crimea at his own expense in order to help to improve the soldier's diet. Lord Panmure accepted his offer and gave him the necessary authority to make any changes that might be required. Soyer arrived at Scutari in March and he at once took counsel with Miss Nightingale, whose work in providing special diets for the sick soldiers earned his high approval. He soon made great improvements in feeding both the sick and the healthy.

To realize what he achieved one must know the conditions which he found on his arrival. His first work was at the Barracks Hospital, where there were over 2000 patients, many of them very sick men. Full diet (when it could be obtained) was adequate in food value, for it consisted of 1 lb. each of meat, bread, and potatoes,