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'Potatoes and the Pursuit of Happiness'¹

'Happiness is regular sex and potatoes', reads a postcard on my desk. *Do* potatoes makes us happy? Diet books warn that potatoes are a dangerously fattening food more likely to reduce than promote overall happiness and sexual fulfilment. 'There is nothing so tragic on earth as the sight of a fat man eating a potato', declared the slimming guru Vance Thompson in his 1914 classic *Eat and Grow Thin*. Medical investigations reach similar conclusions. Too many potatoes increase the risk of hypertension and other maladies. Dictionaries of urban slang associate potatoes with a range of unappealing qualities, from stupidity ('spud head') to shapelessness ('potato body'), none of which suggests the potato has much to offer in terms of happiness.²

Eighteenth-century observers perceived quite different qualities when they contemplated the tuber. The potato, declared the Italian agronomist Antonio Zanoni in 1767, was a source of 'happiness and opulence'. The Scottish physician William Buchan considered the potato 'a treasure' which would do more for Britain's wealth, happiness and stability than 'the increase of her trade, the flourishing of her manufactures, or the extension of her territory' (Zanoni 1767: 9; Buchan 1797:43). The eighteenth-century potato was, apparently, a source of happiness both personal and public.

[IMAGE: engraving of 'the marvellous potato' in Giovanni Battista Occhiolini, [*Memorie sopra il meraviglioso frutto americano chiamato volgarmente patata*](#) (Rome, 1784).]

This article interprets the extraordinary apotheosis of the potato in eighteenth-century Europe, which endowed it with an unwonted political visibility. From Finland to Spain, individuals and organisations encouraged potato consumption as a source of happiness particularly for working people. The pursuit of happiness is of course a familiar slogan of the Enlightenment. Many enlightened writers claimed that potatoes were one way of attaining it, while at the same time building a stronger nation.

What ordinary people ate has not always been of much interest to the state. *That* people ate was of course very important. Rulers everywhere have long been concerned about the political consequences of hunger. Nothing, declared the Tudor politician William Cecil 'will sooner lead men to sedition than dearth of victuals' (Walter 1989:76). For ancient and early modern states, ensuring that urban populations had access to a steady and safe supply of food was a recognised component of statecraft, but as long as city-dwellers were not perishing as a result of dearth, or unsettling the social order by conspicuous displays of extravagance, or provoking divine wrath through sinful overconsumption, political philosophers did not give much thought to what ordinary people had for dinner.³ Monarchs worried about preventing food riots but not, in general, about the particulars of their subjects' daily diets. Whether their polenta was made of millet or of barley, whether

their soups contained cabbage, or whether they baked or griddled their bread possessed no political significance. Such things were the purview of priests and doctors, not statesmen.

Scholars generally argue that it was only in the late nineteenth century that states began to concern themselves in a serious way with the everyday eating habits of the population. Nineteenth-century advances in food chemistry allowed scientists to correlate nutritional intakes with energy outputs in ways that laid bare the deleterious impact of malnutrition of industrial and national prowess. Newly quantified through the calorie and other measures, individual and national eating habits could be mapped directly against a vast range of other indicators. 'The countries which are badly dieted are those where the working energies are slight', observed the Italian politician and economist Francesco Nitti in an 1896 article, before presenting an array of charts that linked poor diet to sluggish economic performance, sub-standard military recruits and other impediments to progress (Nitti 1896: 38). The historian James Vernon has provided a subtle and convincing account of how hunger was transformed in the late nineteenth and twentieth century from individual misfortune to national emergency. Under- and improper feeding, Vernon writes, began to be perceived as threatening 'political stability, economic production, and racial efficiency in ways that drew all of society into its vortex. It demanded not just philanthropic intervention but forms of statecraft'. By the early twentieth century, agrees Nick Cullather, food had 'lost its subjective, cultural character and evolved into a material instrument of statecraft' (Vernon 2005: 699; Cullather 2007:338). Politicians and officials became ever more

concerned about the impact of poor diet on national efficiency and strength, and responded with a range of innovative programmes, from state-subsidised school dinners to healthy-eating campaigns. The voluminous writings on food security offer similar chronologies, which connect developments during the inter-war years to the deepening conviction that adequate diets were essential to national and global stability. The establishment in the late 1940s of international agencies such as the United Nations' Food and Agriculture Organization [FAO] is usually considered the culmination of the new political imperative to ensure that citizens were adequately nourished.⁴

Developments from the late nineteenth to mid-twentieth century transformed many aspects of the state's relationship to food, as such accounts show well. Nonetheless, the belief that individual diets were of fundamental concern to governance emerged not in this period but rather during the Enlightenment. The pan-European promotion of potatoes is part of this eighteenth-century story. Potato-promotion was premised on the belief that national wellbeing required significant changes in the eating practices of ordinary people. In 1935 Stanley Bruce, who later served as the FAO's first chair, described this belief that food production, eating practices and state security were intertwined as 'the marriage of health and agriculture' (Shaw 2007:7). This article argues that although the marriage was solemnised in the twentieth century, it followed a very long engagement.

That everyday eating habits acquired a new political relevance in eighteenth-century Europe should surprise no one. An abundant scholarship has established that food played an important role in eighteenth-century understandings of

governance and political economy. The historian Emma Spary, in particular, has established that food lay at the heart of the century's 'politics of matter', helping to structure enlightened debates about expertise, morality, and the public sphere. Others have traced the experiments with deregulating the grain trade that occurred in a number of European countries, again highlighting the centrality of food to the new models of political economy emerging in this period. A rich body of research into popular politics, beginning with Edward Thompson's influential article on the moral economy of the English crowd, further reminds us that these new models for managing urban food supplies did not go unchallenged.⁵ In recuperating the political relevance eighteenth-century writers ascribed to the eating practices of ordinary people, this article builds on ample foundations.

Reconnecting these ideas to their eighteenth-century origins reveals that from their inception they were strongly influenced by the Enlightenment's emphasis on individualism and its valorisation of personal choice. Just as theorists of the new discipline of political economy insisted that the wealth of the nation was best secured by permitting each person look out for their own economic interests, so potato-advocates maintained that a healthy body politic was best achieved by enabling individuals to select sound dietary practices. The language of choice and the promise of personal happiness that lay at the heart of eighteenth-century discussions of the potato resonate with current neoliberal rhetorics of responsabilization and its celebration of the informed dietary consumer. A small history of the potato's career as an Enlightenment super-food thus sheds light on the

ideological origins of our own ambivalent attitudes towards individual diets and public health.

The Marvellous Potato

The potato was the focus of an extraordinarily international programme of investigation and propaganda during the eighteenth century. A few examples help convey its variety and extent. In 1764 Stockholm King Adolf Frederick, inspired by research undertaken at the Swedish Royal Academy of Science, issued an edict encouraging potato cultivation. Two decades later, Spain's Charles III issued a similar edict, likewise stimulated by the conviction that greater potato consumption was a matter of national importance.⁶ In England, in the same years that members of the Swedish Royal Academy were studying how to make potato bread, the improving landlord and philanthropist John Howard (later famed for his work on prison reform) experimented with a new variety that he hoped would be 'a great relief & help to a most valuable part of our fellow creatures, the labouring poor in this kingdom' (Howard 1769). Sixteen hundred kilometres to the northeast, in Turku, the Finnish Economical Society energetically promoted potato cultivation, distributing seed potatoes free of charge (Talve 1981). Italian physicians and agronomists composed promotional treatises lauding the 'marvellous' potato.⁷ Patriotic individuals and organisations across Europe offered prizes for the largest potato crop, the best recipe for potato bread, the most effective remedy for potato diseases. In 1790, for instance, Peter Sirkal, a peasant from Lifland, received ten roubles when he won a competition sponsored by the St. Petersburg Free Economic

Society for the biggest potato harvest.⁸ The Monmouthshire Agricultural Society, in Wales, the Highland Society in Scotland, and the Royal Economic Society of Aragón sponsored similar competitions in the same years (*Monthly Magazine* 1797; Mackenzie 1799; *Correio mercantil* 1798). Newspapers in Spain and Denmark published testimonial letters from successful growers. Academies of Useful Knowledge in German lands listened to reports on the potato's merits. In 1775 Voltaire reported happily to France's most celebrated advocate of the potato, the scientist Antoine-Augustin Parmentier, that the labourers working his lands had endorsed a potato bread made according to one of Parmentier's recipes.⁹ Twenty years later the Tuileries Garden had been dug up, replaced with potato fields planted on the orders of an enthusiastic Convention Nationale. And in case anyone wondered what to do with all those potatoes, every recipe detailed in Hannah More's 1795 *The Cottage Cook; or, Mrs. Jones's Cheap Dishes: Shewing the Way to do Much Good with Little Money* featured the tuber. French readers could consult the equally potato-heavy *Cuisinière républicaine* (More [1795]; *La cuisinière républicaine* 1976). Evidently, as one French writer remarked with surprise, the ordinary potato had become the darling of the Enlightenment (Legrand d'Aussy 1782:I:112; Spary 2014:167-86).

Several issues generated particularly sustained discussion. Since the fundamental aim was to produce more potatoes, the preferred methods of cultivation were a recurrent topic.¹⁰ The related issues of storage and preservation also received attention from agronomists and investigators. Techniques ranging from burying the surplus in sand to more complex procedures such as desiccation

were evaluated.¹¹ Regarding the potato's use as an animal feed, investigators concurred that livestock from horses to chickens thrived on potatoes, and offered recipes for different mashes.¹² Recipes aimed at people also circulated widely. Particular attention was devoted to identifying the best cooking procedures; the Irish method of slow boiling was widely acknowledged as optimal, a view with which modern nutritionists concur.¹³ Scientists experimented with distilling potato-based spirits that might replace those derived from grain.¹⁴ Most emblematic of all was the quest for a satisfactory recipe for potato bread. The drive to 'panify' potatoes manifested itself across Europe. The healthfulness and nutritive qualities of such breads were the object of intense, if inconclusive, discussion.¹⁵

Interest in the potato transcended national frontiers and languages, as journals and networks of correspondence disseminated this enlightened potato talk across Europe. The French scientist Antoine Laurent Lavoisier experimented with growing potatoes on his estate in Blois; his findings were promptly reported in Spain by the *Semanario de agricultura y artes dirigido a los párracos*, an agricultural journal founded in 1797 with royal support. Both Dublin's Botanical Garden and its Agricultural Society conducted experiments on potatoes on which the *Semanario* likewise reported. Spain's Charles IV moreover funded the publication of an entire treatise on potato cultivation by the Irishman Henry Doyle.¹⁶ Swiss potato enthusiasts referenced Swedish agronomists as well as English, French and German studies of the tuber. English authors translated continental texts on experimental methods of cultivation (Tschiffeli 1766; Engel 1771:7-8, 12, 35, 42, 56, 60, 68). The

efforts of the Swede Carl Skytte to distil brandy from potatoes were reported across Europe, although Skytte's name underwent considerable alteration.¹⁷

[IMAGE: a Norwegian potato-promoting pamphlet: [Peter Harboe Hertzberg](#), *Underretning for Bønder i Norge om den meget nyttige Jord-Frukt Potatos: at plante og bruge* (Bergen, 1774).]

The pan-European nature of Enlightened potato-enthusiasm has attracted little attention from scholars, who have typically examined these schemes in national or regional contexts, producing a rich body of scholarship to which this article is enormously indebted, but which does not always capture its international dimensions.¹⁸ Studies have tended to highlight the conjunctural circumstances favouring the promotion of the potato in a specific area, rather than the extraordinarily widespread interest in its potential, which stretched from St. Petersburg to Naples. It is clear that state-level potato-encouragement was often correlated with particular moments of dearth, but eighteenth-century interest did not reflect only acute concerns over the food supply. The potato had after all been present in many parts of Europe throughout the seventeenth century without attracting such attention, despite that era's recurrent experiences of shortage.¹⁹ The Enlightenment's fascination with the potato reflects the advent not of a new foodstuff, but rather of new ideas about the relationship between the health and vigor of the population, and the wealth and power of the polity.

Eighteenth-century philosophers, *économistes* and statesmen grew increasingly convinced that the well-being of the state, and its commerce, depended on the strength and vigour of its population of working people. Effective statecraft, theorists insisted, required not simply the prevention of famine, but the development of a robust workforce. By the mid-eighteenth century these ideas had become commonplace in many parts of Europe. 'A nation is not powerful by virtue of the space it occupies on the globe, but through its population, its labour, and its industry', declared the Spanish physiocrat Valentín de Foronda. Writing in 1761, E.O. Runeberg, the director of the Swedish Land Survey Board, stated unequivocally that 'the wealth of a state depends on the working population'. Adam Smith reflected this consensus when he observed in 1776 that national prosperity correlated directly with the size of the population. A robust population of labourers, soldiers and other working people was essential to national success (Smith 1975, I.viii.23; Foronda 1793, 3; Hutchison 1959, 88).²⁰

Developing this laborious population required a reliable supply of healthful, nourishing foods. After noting that a nation's prowess lay 'in the populousness of the lower classes', the East India Company official Alexander Dalrymple stated clearly that 'it is in vain to expect an increase of people, without plenty of food' (Dalrymple 1795:21 of appendix). It is this that explains the persistent interest in potatoes, which were increasingly identified as a particularly apt source of sustaining nourishment for working bodies. As John Howard had put it, they were looked on as providing good food for 'a most valuable part of our fellow creatures, the labouring poor in this kingdom'.²¹ Writing from Bologna, the improving landlord

Pietro Maria Bignami spelled out the connections between increased potato consumption and commercial prowess. If his countrymen were to eat more potatoes, the population would become more numerous, and as a result 'our province would become the richest and happiest in all of Italy' (Bignami 1773:4). Eighteenth-century potato promotion reflected not only the serious strains that growing populations and persistent warfare placed on the food supply, but also the impact of these new models of statecraft and political economy.

That is why the potato was endorsed at the highest levels, as well as being the object of enthusiastic investigation by the continent's many patriotic societies and gentlemen savants. These groups in any event overlapped considerably. In France, interest in potatoes penetrated deeply into ministerial policy both before and during the Revolution; scientists such as Parmentier produced some of their most influential writings on potatoes while employed by the state. Anders Chydenius, an active promoter of the potato in Finland, participated in both the Finnish Economical Society and the government of Gustav III of Sweden. In the Austrian Habsburg territories interest in potatoes resonated between regional officials and local landlords, ultimately attracting the attention of Maria Theresa, who from 1767 issued several decrees fomenting cultivation (Talve 1981; Kisbán 1994; Marjanen 2012; Spary 2014).

Such encouragement was at times successful. Having read about the potato's use in Germany and Denmark as a substitute for wheat, a priest in western Iceland determined to introduce them to his parishioners. He reported that when cooked into a pudding with milk and rice they were well received. A comparable encounter

with pro-potato texts led a priest in central Spain to embark on a one-man campaign to promote their consumption in his own parish. He reported regularly to the state-sponsored agricultural journal on his successes.²²

The impact of potato promotion can also be observed in the diary of the Sussex shopkeeper Thomas Turner. Turner, the son of a grocer, ran a general store in the village of East Hoathly from 1750 until his death in the 1790s. From 1754 to 1765 he kept a diary in which he recorded financial transactions, local events, and, especially, what he ate. Potatoes were no novelty to Turner, who consumed them regularly without comment. On 27 January 1758, however, he noted that his household

dined on the remains of Wednesday and yesterday's dinners with the addition of a cheap kind of soup, the receipt for making of which I took out of *The Universal Magazine* for December as recommended (by James Stonhouse MD at Northampton) to all poor families as a very cheap and nourishing food. Turner's soup was one of a number of potato-heavy recipes offered by Stonhouse to demonstrate that it was possible to eat cheaply and well without wheat bread. Turner pronounced it 'a very good, palatable, cheap, nourishing diet', and a month later invited his friend Thomas Davy, a local shoemaker, to dinner 'to taste our soup' (Stonhouse 1757:268-271; Turner 1984:131-2, 137). Like the Icelandic priest Björn Halldórsson, Turner responded to potato promotion by experimenting with new ways of eating.

Potatoes and Happiness

A consistent feature of this pan-European potato talk was the assertion that potatoes would not simply relieve hunger but also promote happiness. Not by chance did the Swiss potato-enthusiast Samuel Engel insist that an abundant supply of healthful and nourishing food such as the potato was necessary 'to make a people happy' (Engel 1771:44). The Bolognese landlord Pietro Maria Bignami likewise linked potato consumption to his province becoming the 'happiest in all of Italy'. Both the individual and the polity as a whole would benefit from this potato-happiness-effect. If poor people were to eat more potatoes and other nourishing vegetables, a French cookery book stated, not only would they be healthier, but their more energetic bodies could better contribute to the glory and prosperity of the state: 'what comfort for them! What happiness for the Nation!' (Varenne de Béost 1772:11; Spary 2014:181).

That it was the duty of the state to make subjects happy was little short of a banality during the Enlightenment. Writers across Europe devoted immense energy to dissecting the nature and sources of happiness, whose pursuit on earth was, in the words of the historian Darrin McMahon, 'the great goal of the century' (McMahon 2006:200). It was widely affirmed that promoting public felicity was consistent with, or perhaps constituted, the highest aim of the state. Whether the 'happiness of the people' was enhanced directly by official policies, or indirectly by generalised economic improvement, itself supported by sensible statecraft, philosophers, *économistes* and officials agreed that no state could be successful if it did not pursue this aim. The connections binding the wellbeing of the state to individual happiness were noted by thinkers great and small. In 1740 Prussia's

Frederick II for instance insisted that the principal objective of a king must be to augment the 'happiness and felicity' of the people he governs. Concurring voices resonated across the continent.²³ The happiness of the working population, as well as their bodily strength, was thus theorised to be of direct relevance to the power and wealth of the state. Frederick Morton Eden, the wealthy author of a remarkable history of the English working poor published in the 1790s, regarded this as a self-evident truth. 'Certain it is', he wrote, 'that, on the welfare of its labouring Poor, the prosperity of a country essentially depends; and that without adverting to the peculiarities of their situation, no general estimate can be formed of its population, its industry, its strength and power, its virtue, and its happiness' (Eden 2011:I:5).

Quite how a state should accomplish this central goal was a topic of dispute, as was the precise nature of the relationship between individual wellbeing and public happiness. One way to bind individual felicity to *félicité publique* was food. Of course hungry people were likely to be unhappy, as Thomas Malthus observed, and unhappy people were liable to be discontented with the political status quo, but the capacity of food to increase both individual and public happiness greatly exceeded the negative potential of food shortages to provoke unhappiness. Contented eaters were theorised as one component of a set of processes that resulted in a strong, secure state.

The connections writers discerned between individual dietary well-being and public happiness can be seen plainly in the opinions of William Buchan, a renowned Scottish physician who composed a number of manuals on health and

household management. In his 1797 *Observations Concerning the Diet of the Common People* he insisted that

if proper encouragement were given to agriculture, Britain would at all times not only have a sufficiency of grain for her own consumption, but a surplus for exportation. This would contribute more to her real wealth, *the happiness of her people*, and the stability of her government, than either the increase of her trade, the flourishing of her manufactures, or the extension of her territory (Buchan 1797:43, my emphasis).

Why, however, would an ample supply of grain for export contribute to the happiness of the British people? Buchan was clear about this: they would be happier because instead of wheat they would eat more wholesome alternatives. The poor, in his view, ate too much meat and bread, and drank too much beer. The inevitable result was persistent ill-health, with diseases such as scurvy and colic wreaking havoc in the bodies of working men, women and children. Buchan encouraged a diet based largely on whole grains and root vegetables, which he insisted were not only cheaper than the alternatives, but infinitely more healthful. He was particularly enthusiastic about potatoes. ‘What a treasure is a milch cow and a potatoe garden, to a poor man with a large family!’, he exclaimed. The potato provided ideal nourishment—‘some of the stoutest men we know, are brought up on milk and potatoes’—and even without milk served as a complete food (Buchan 1797:7, 31).

Buchan maintained that it would be easy for landlords to supply their workers with potato gardens. The benefits would accrue to the individual workers and their families, whose healthy bodies would be full of vigour, to landlords now

able to export more grain, and to the state, which would enjoy a larger population of energetic workers, as well as greater tax revenue. 'What a source of real wealth and population!', he insisted. 'Men would multiply, and poverty, unless among the profligate, be unknown' (Buchan 1797:31).²⁴ With the potato, everyone would win. Fortunately, since potatoes were in Buchan's view perfectly delicious, there was no need to sacrifice one's own happiness by eating disagreeable food in a public-spirited gesture of national solidarity. Potatoes gratified the body and senses of the eater as much as they strengthened the body politic.

Buchan's recommendations were premised on the belief that rational consideration would lead everyone, but especially the working poor, to embrace the potato of their own volition. It is important to recognise that focusing in this way on the individual and public benefits derived from potatoes effaced the structural inequalities that led the 'poor man with a large family' to require potatoes in the first place. Buchan's treatise was composed during the hungry 1790s, when poor harvests, government export policy and near-continuous warfare placed particularly heavy pressures on Britain's food supply. Public dissatisfaction provoked responses ranging from local food riots to organised working-class political movements, all of which proved profoundly unsettling to the political and economic establishment (Wells 1988; Thompson 1991). The challenge of 'feeding the poor' prompted sustained discussion at the highest level of government. In this context, Buchan's insistence that potatoes offered genuine benefits to the disadvantaged was profoundly ideological. Potato-happiness talk presented as

choice decisions that were powerfully motivated by constraint. Nowhere is this clearer than in discussions of potato soup.

The Soup of Happiness

'We cannot practically speak about happiness without considering *whose* happiness it is we mean.' (Grote 1870:85; Tribe 2017:921).

The eighteenth century was awash with recipes for potato soup. Thomas Turner, the Sussex grocer, was one of thousands of Europeans who encountered this emblematic Enlightenment foodstuff. These soups combined a starchy base, usually provided by potatoes, with a small amount of meat and some pungent seasoning. Poor houses and orphanages across Europe added such dishes to their menus, cookbooks explained to the home cook how to prepare them for distribution to the poor, and patriotic individuals offered premiums for the labourer who could invent 'the most wholesome and nutritious soup, costing not more than 5d. a gallon', which he and his family themselves consumed (*European Magazine* 1800:427).²⁵ Like Buchan, the advocates of potato soup were insistent that their concoctions strengthened the body politic and improved the individual health of eaters. More than this, they insisted that their soups brought happiness.

The century's most famous soup was invented by Benjamin Thompson. Born in Massachusetts in the 1750s, Thompson left North America in 1776 when his support for the loyalist cause made his departure expedient. After a spell working

for the British military he served as an advisor to Karl Theodor, the elector of Bavaria. In Munich Thompson reorganised the Bavarian army and established what he called a 'House of Industry', a sort of internment camp for beggars and the indigent. It was in recognition of these efforts that Karl Theodor awarded him the title of Count Rumford. A central element of Rumford's plan to transform Munich's poor into productive citizens was food. As Rumford explained, his experience of running the Munich poor house provided him with ample opportunity to identify the 'the *cheapest, most savoury, and most nourishing* Food'. This proved to be 'a soup composed of *pearl barley, pease, potatoes, cuttings of fine wheaten bread, vinegar—salt and water*', boiled together for three hours. Potatoes constituted the core of the recipe, which required two parts of potatoes for every one of barley with dried peas (Thompson 1797:I:192).

Rumford calculated the cost of preparing his soup in great detail, but he made clear that simple economy was not his sole focus. The soup also needed to be tasty. Citing Hippocrates, he insisted that 'whatever pleases the palate nourishes'. This was why his soup demanded croutons. Croutons, he explained, required extended chewing. Chewing aided digestion because it generated saliva, but, Rumford explained, its importance transcended this role in the digestive process. Chewing also increased happiness, because it 'prolongs the duration of the enjoyment of eating, a matter of very great importance indeed, and which has not hitherto been sufficiently attended to'. Seizing the moral high ground, Rumford insisted that most people dismissed the notion that the poor were entitled to happiness, but he did not. 'The enjoyments which fall to the lot of the bulk of

mankind are not so numerous as to render an attempt to increase them superfluous', he observed piously (Thompson 1797:I:193-195, 202, 210-11). His potato soup, with its croutons, would cheer up even the most miserable of Munich's beggars.

It's pretty clear that the croutons were a way of eking out a small amount of soup (Rumford believed that a twelve-ounce serving provided an ample meal), and it's anyone's guess how much Munich's beggars truly enjoyed his creation. Rumford, however, harboured no doubts. He reiterated in his writings that the pleasure derived from this soup was an essential part of its utility. Of course, he observed, everyone recognised the importance of keeping down costs, but this should never come at the expense of the pleasure of eating, even among the most needy (Thompson 1797:I:256-7).

Rumford's writings, and his vinegary soup, swept across Europe. His essay on feeding the poor (including the chapter titled 'Of the Pleasure of Eating, and of the Means that May be Employed for Increasing it') was widely translated and reprinted. Individuals from Napoleon to the president of the British Board of Agriculture praised his recipes, as well as his patent stove, which facilitated the prolonged cooking his soup required. The war year of the 1790s saw the creation of Rumford-inspired charitable kitchens in many European cities. Rumford himself set one up at the London Foundling Hospital in 1796; by 1800 there were nearly fifty such establishments in London alone. More were formed in other German cities beyond Munich, and in Switzerland, Italy, Sweden, Spain and France; in 1802 Paris counted over twenty. When the director of Geneva's Hôpital Général read about

Rumford's innovations in the *Bibliothèque Britannique*, he travelled to Munich to study the soup distribution in person; on his return he oversaw the establishment of a kitchen funded by public subscription, which by 1800 was reportedly serving 1200 bowls each day.²⁶

[IMAGE: [James Gillray \(?\)](#), *The Comforts of a Rumford Stove*, 1800, British Museum]

In Spain, the soup attracted the interest of a number of institutions. Patriotic organisations translated extracts of Rumford's essays, as did the state-funded *Semanario de agricultura y artes dirigido a los párracos*, which provided regular updates on its own experiments with Rumfordesque soups.²⁷ Charitable Rumford-style soup kitchens were established in various Spanish cities. In Valencia, the local patriotic society, inspired by accounts in the Spanish press, determined to set up its own kitchen. They carefully compared reports by Rumford's acolytes in different parts of Europe, and charged two members with replicating his methods. Rumford's original recipe having been declared excessively bland, the Society set about adapting the soup to the Spanish palate. This could be accomplished by varying the recipe in several ways that, the Society explained, increased the 'pleasure in eating', rather than the soup's nutritional qualities. Pleasure, however, was as important as nourishment, in the Society's view. The Society tested its experimental recipes on inmates detained in the city's San Narciso prison. Given the importance they, like Rumford, placed on ensuring that the soup be eaten with pleasure, the Society was delighted to report that their third variant was a roaring hit. This version, which

proved both the cheapest and the most popular, contained potatoes, barley, beans, onions, oil, salt, mint and hot peppers. It was, in the Society's words, 'best adapted to the local taste, according to the view of the majority of those who tasted it'. The prisoners allegedly loved it, and wanted to eat it every day (*Junta Pública* 1800:60).

The Economic Society in Madrid pursued a similar line of investigation when it determined in 1803 to distribute Rumford soup, in response to that year's poor wheat harvest. Its president, the Marquis de Fuerte Híjar, formed a commission, which met daily during the autumn of 1803 to consider the best location for the distribution centre and the ideal composition of the soup. The original German recipe was again rejected as completely unsuited to Spanish tastes. As the president explained, no one, no matter how hungry, could derive 'pleasure, happiness and satisfaction' from a meal that was not suited to the local palate (Demerson 1969:123). After some experimentation the society settled on a recipe that consisted of six parts of potatoes to one part of dried beans, along with smaller quantities of onion, garlic, cumin, sweet and hot paprika, oil, vinegar and salt. The seasonings were to be fried in oil, ground up, and then added along with the vinegar to the previously-boiled potatoes and beans. This produced a thick potato soup that cost seven *maravedíes* per portion. Variant recipes included peas or barley flour in place of the beans, as well as vegetables such as Swiss chard. Potato dumplings could also be added. Like the Valencian society, the Madrid team tested their recipe on increasingly large numbers of the poor, and adapted the recipes in light of the responses. As a result, the society was confident that its soups 'pleased the Spanish

taste', as well as being nourishing (*Ensayos de comidas económicas* 1803:15; Demerson 1969).

Similar pleasure-increasing modifications were effected across Europe. French charity kitchens adapted the soup to the local palate by replacing Rumford's vinegar not with the cumin, paprika and olive oil used in Spain, but rather parsley, thyme, bay leaf and a different type of crouton. French newspapers reported that Rumford himself had inspected Parisian kitchens and personally endorsed these alterations because they improved the soup's taste. In Neufchatel the potatoes were omitted entirely, 'because the poor preferred rice, barley, peas and pasta'. The Trieste soup was seasoned with pesto di lardo, a local speciality.²⁸

In an important investigation of food in eighteenth-century France the historian Emma Spary suggested that soup-promoters assumed 'that bodies were interchangeable and quantifiable, and that criteria such as habit or preference could be factored out in alimentary calculations' (Spary 2014:32). Soup kitchens were certainly not sites of gastronomic individualism, nor did they offer their clientele much opportunity to exercise dietary autonomy. Nonetheless, habits and preferences, far from being irrelevant, were presented as central to a soup's success. Soup promoters took pains to describe the approval allegedly bestowed on their concoctions by the impoverished consumers. The enjoyment with which these soups were supposedly consumed occupies a prominent place in such accounts, alongside calculations of cost and techniques for limiting access to the deserving poor. Just as prison inmates were marshalled to endorse the Valencian soup, so descriptions of the economic soups served in the 1760s to hungry Parisians not only

included testimonials from wealthy men like the Marquis de Mirabeau, but also reiterated that the poor themselves ate these potato-pottages with pleasure. Even the abandoned babies fed by the Parisian Parish of Saint Roch were called upon to bear witness to potato soup's ability to please; these infants, whose innocent palates could scarcely lie, supposedly preferred potato-rice soup to their usual fare (Varenne de Béost 1772:24-34).

[IMAGE: [Jean Marlet, *The Sisters of St. Vincent de Paul Caring for the Foundlings of Paris*](#), Wellcome Collection.]

As the literary critic Sandra Sherman reminds us, this insistence on pleasure reveals the inherently political dimensions of these schemes, insofar as happiness-rhetoric emphasised individual choice, rather than acknowledging the larger coercive context. Soup-promoters, she notes, maintained that the success of charity soup kitchens did not result solely, or even primarily, from poverty. Instead, they stressed that it reflected 'the poor's intrinsic, self-motivated discovery of soup's virtue': poor people, promoters insisted, *wanted* to eat potato soup. By enabling the hungry to choose potato soup, its advocates believed they were both increasing the happiness of individual soup-eaters and also helping to strengthen the body politic. Individual choice led magically to happier and stronger people, and a happier and stronger state. 'What comfort for them! What happiness for the Nation!' (Varenne de Béost 1772:11; Sherman 2001:192)

Political Economy, Personal Responsibility and the Potato

It was perhaps inevitable that Adam Smith should particularly recommend potatoes. His theorisation of the free market was premised on the conviction that economic success was possible only when the population was content. No society, he insisted, could be 'flourishing and happy, of which the far greater part of the members are poor and miserable'. Economic growth, he maintained, provided the circumstances for the majority 'to be the happiest and the most comfortable' (Smith 1975:I.viii.36). Growth, in turn, required a plentiful supply of pleasant and nutritious food, and that is what potatoes offered. Not only was the potato far more productive than wheat—Smith calculated that land planted with potatoes would produce three times the quantity of nourishment as land laid to wheat—but it was also easier to cultivate, and, crucially, was an 'agreeable and wholesome variety of food'. As he noted, 'the strongest men and the most beautiful women' in Britain subsisted on potatoes. 'No food can afford a more decisive proof of its nourishing quality, or of its being peculiarly suitable to the health of the human constitution', he concluded (Smith 1975:I.xi.39).²⁹

Smith linked the personal benefits individuals would derive from a greater consumption of potatoes to a greater flourishing of the economy. If planted with potatoes, agricultural land would support a larger population, and 'the labourers being generally fed with potatoes' they would produce a greater surplus, to the benefit of themselves, landlords and the overall economy (Smith 1975:I.xi.39). In Smith's vision, as in that of William Buchan, Parisian soup-promoters and countless other potato-advocates, if individuals chose to eat more potatoes, the profits would

accrue to everyone. The result would be greater happiness all around, and that, in turn, would help build a strong and wealthy state.

In keeping with the broader understanding of social organisation that underpinned Smith's model of political economy and agricultural improvement, he did not recommend that people be *obliged* to grow and eat potatoes. His emphasis rather was on the confluence of individual and national interest. Smith's attention to the relationship between discrete, disconnected actions and larger impersonal forces was typical of the eighteenth-century interest in 'self-organisation'. The ways in which order emerged out of the seeming disorder of a myriad un-coordinated events were addressed by philosophers, mathematicians, botanists, and many others. Smith's analysis of economic self-organisation through market liberalisation merged with the conviction that individual eating practices affected the nation's wealth and strength to create a happy vision of successful dietary self-organisation, in which the very things that led to personal well-being simultaneously proved beneficial to society overall (Sheehan and Wahrman 2015).

Indeed, potential tensions between personal and public interest were addressed directly by a number of potato-advocates, concerned precisely to see off any suggestion that they were subordinating individual agency to collective well-being. John Sinclair, president of the British Board of Agriculture and a keen promoter of potatoes, observed that some might imagine farmers should be left to make their own decisions about whether to grow potatoes or follow other recommended practices. This view, he insisted, was misguided. 'If the public were to *dictate* to the farmer how he was to cultivate his grounds', this might, he admitted,

'be the source of infinite mischief'. Providing information to inform individual choice, however, 'instead of being mischievous, must be attended with the happiest consequences' ('Plan for Establishing a Board of Agriculture' 1797:1:I-II, xxi).

[IMAGE: a potato-roaster promoted by the British Board of Agriculture: [*Account of the Experiments tried by the Board of Agriculture in the Composition of Various Sorts of Bread*](#) (London, 1795), 28.]

Advice and information, rather than legislation, remain the preferred techniques for transforming global and national food systems for many policy makers. Scholars have demonstrated the close fit between this approach to healthy eating and the neoliberal preference for individual choice rather than state-level intervention. The 'choosing subject', to use John Coveney's term, has become the protagonist of current discussions of diet and nutrition, through what is sometimes labelled 'responsibilization' (Coveney 2006:49). Responsibilization refers to 'the process whereby subjects are rendered individually responsible for a task which previously would have been the duty of another—usually a state agency—or would not have been recognized as a responsibility at all' (O'Malley 2009). Within the framework of responsibilization it is the individual who is responsible for cultivating the discrimination necessary to enjoy the right foods, and for developing the will-power to avoid the wrong ones. Healthy eating is thus framed as an opportunity for personal agency. 'One of the things I talk a lot about is the need to really work on cultural change in America to encourage a culture of personal

responsibility', stated George W. Bush in a lecture about the HealthierUS initiative, launched in 2002 to promote 'healthier lifestyles' through diet and exercise schemes. HealthierUS, Bush continued, 'really appeals to personal responsibility, doesn't it? It says that we are responsible to our own health' (Bush 2003:893; Bilttekoff 2013:217).³⁰

Such rhetoric encourages us to evaluate our success in eating properly, and links success to positive character traits such as self-control, since it is up to us to follow governmental and industry guidelines by selecting plain boiled potatoes and other recommended foods. And if we're ill and overweight because we've eaten too many chips, well, it's our own fault. 'Negative attitudes towards the obese are highly correlated with negative attitudes towards minorities and the poor, such as the belief that all these groups are lazy and lack self-control and will power', notes a 2006 study (Campos, Saguy, Ernsberger, Oliver, and Gaesser 2006:58; Bilttekoff 2013). Just as William Buchan had insisted in 1797 that potatoes would end poverty for everyone except 'the profligate', so the language of personal responsibility and choice implies that those who fail to thrive have only themselves to blame.

Such hapless eaters perfectly embody the surplus people identified by Michel Foucault as obstacles to modern forms of governance. Foucault contrasted the modern state's approach to managing the population with earlier forms of political power. For the modern state, he believed, power is not a matter of intermittent displays of authority via periodic executions of criminals or other episodic demonstrations of state might. Rather it is a continual process of fostering the wellbeing of some sections of the population, and removing all support for those

whose wellbeing the state does not wish to promote. 'One might say', Foucault observed, that in modern times 'the ancient right to *take* life or *let* live was replaced by a power to *foster* life or *disallow* it to the point of death' (Foucault 1978:I:138).

The population, the productive members of society, must be nurtured, helped to live and flourish. It is precisely such ideas that contributed to the rise, in the eighteenth century, of the conviction that the strength and security of the state depended on the happiness, vigour and productivity of the population. As Foucault described it, this new relationship between individuals and the state comprised 'a circle that starts from the state as a power of rational and calculated intervention on individuals and comes back to the state as a growing set of forces, or forces to be developed, passing through the life of individuals, which will now be precious to the state simply as life'. This circle, he continued, linked together 'the state's strength and individual felicity. This felicity, as the individual's better than just living, must in some way be drawn on and constituted into state utility: making men's happiness the state's utility, making men's happiness the very strength of the state' (Taylor 2004; Foucault 2009:327; Nally 2011). Individual happiness had begun to be theorised as a component in national security, just as potato-advocates insisted. Foucault himself showed little interest in the relevance of food to this process, but the eighteenth-century potato vogue makes clear that diet formed a necessary component of the chain linking men's happiness to the very strength of the state. Little wonder that its promoters so often insisted that the potato offered a high road to happiness.

From within the logic of this modern form of state-craft, however, there are others who are not part of the population. They are just people, and they are in the way. The state sees no compelling reason to encourage their existence. Modern politics, Foucault argued, is a matter both of 'making live' and also of 'letting die'. The Italian philosopher Giorgio Agamben has written evocatively about the dismal fate of those whom the state 'lets die'—the marginal, the stateless, those whose lives are deemed 'unworthy of being lived' and from whom support is withdrawn. In his view, we all teeter on the edge of this abyss, potential outsiders constantly at risk of being left to die, should we cease being of utility, should we eat too many chips and stop exercising, should we be profligate (Agamben 1998:123).

What to do, then, with all these troublesome, irresponsible, unhealthy people, with their hamburgers and fries, disrupting the system and falling ill? In our health-valuing culture, writes the cultural critic Robert Crawford, 'people come to define themselves in part by how well they succeed or fail in adopting healthy practices and by the qualities of character or personality believed to support healthy behaviours. They assess others by the same criteria'. Away with the Unhealthy Other, this impediment to our happiness and the strength of the state! At the same time, Crawford observes, even the most assiduous attention to personal health cannot guarantee against illness, or poverty. And how many of us truly conform to the dictates of healthy living? We are hardly the masters of our own destiny when it comes to diet. What analysts call our 'obesogenic' environment seems likely to outweigh any attempt at nudging us towards better eating habits, and when given the opportunity to choose, few of us consistently make wise decisions either with

our wallets or our meals (Crawford 2006:402, 416; Nestle 2013). Part of the reason we can't decide what to do with these problem eaters weighing down the body politic is that we suspect they might be us.

Potatoes were once promoted as a way to build strong populations, understood within a broad framework of personal choice and individual benefit. We are now encouraged to reject certain forms of highly-processed potatoes in favour of simpler preparations such as the plainly boiled potatoes endorsed by US government dieticians. These recommendations however share an underlying logic, which views our diets as simultaneously an important part of national well-being and also fundamentally a matter of individual choice and therefore individual responsibility. The many recent controversies provoked by public health initiatives aimed at modifying eating practices remind us that state intervention into individual diets continues to pose challenges to the fundamental principles of liberalism.³¹

Events, including the encouragement to eat potatoes, are best understood when they are seen as part of larger sets of ideas, rather than as singularities. The pan-European eighteenth-century potato vogue reflects the new political importance that eating acquired during the eighteenth century, as politicians and philosophers began to link individual diets to the strength and wealth of nations. They framed this debate within a language of choice and the individual pursuit of happiness. It is these links that explain the potato's unprecedented political visibility. The connections between everyday life, individualism and the state forged in the late eighteenth century, of which the history of the potato's emergence as an Enlightenment super-food forms a part, continue to shape today's debates about

how to balance personal dietary freedom with the health of the body politic. The seductive promise that, collectively and individually, we can somehow eat our way to health and happiness remains a powerful component of our neo-liberal world.

¹ It is a pleasure to thank my patient and wise colleagues who collaborated with the potato project. Claudia Stein and Roger Cooter first pointed me towards Count Rumford; heroically, Claudia, together with David Lambert and Joachim Häberlen, also evaluated the happiness-inducing potential of Rumford's vinegary soup, one evening in Coventry. Hanna Hadocs, Colum Leckey, Amund Pedersen, and Hrefna Róbertsdóttir interpreted material in Swedish, Russian, Norwegian, and Icelandic. Lewis Smith and Helen Curry helped improve earlier iterations by offering incisive criticism. To all of them, I am enormously grateful.

² Thompson 1914, 12; Camire, Kubow and Donnelly 2009; Borgi, Rimm, Willett, and Forman 2016; Urban Dictionary, <https://www.urbandictionary.com>. The card is designed by Brainbox Candy (<http://www.brainboxcandy.com>).

³ A substantial scholarship explores the many ways in which pre-modern states sought to ensure that urban areas (in particular) enjoyed a reliable supply of food, in part so as to prevent food riots. See for instance Thompson 1971; Tilly 1975; Rickman 1980; Murphey 1987-8; Walter 1989; Braudel 1995, I:328-32, 570-605; Will and 1991; Bohstedt 2010; Sharp 2016.

⁴ Vernon 2007; Helstocky 2001; Cullather 2010; Nally 2011. For the history of food security see Maxwell 1996; Shaw 2007; Schanbacer 2010.

⁵ Thompson 1971; Kaplan 1976; Wells 1988; Petersen 1995; Miller 1999; Spang 2000; Sherman 2001; Bohstedt 2010; Spary 2012; Spary 2014; and Kaplan 2015.

⁶ *Gentleman's Magazine* 1764, 599; Koerner 1999, 120, 132, 149; *Junta Pública* 1800, 36-7; Lindroth 1967, 261-2. I am grateful to Hanna Hadocs for guidance with interpreting the Swedish material. For similar top-level encouragement see Jones 1984, 154-5; Kisbán 1994, 180-1; Spary, *Feeding France* 2014.

⁷ Zanon 1767; Bignami 1773; Campini 1774, 388-93; Baldini 1783; Occiolini 1784; Delle Piane 1793; *Metodo facile* 1801; Amoretti 1801); Gentilcore 2012.

⁸ Khodnev 1865, 382: I am grateful to Colum Leckey for this reference and his translations. For prizes in Spain see Piqueras Haba 1992; for Germany, *Verhandlungen und Schriften* 1790, 72; Popplow 2010; for Belgium, *Journal Historique et Politique* 1779, 497-8; for Finland Talve 1981; and for miscellaneous British prizes, *London Review of English and Foreign Literature* 1780, 325; *Letters and Papers on Agriculture, Planting, &c.* 1783, 32-3, 242-62; *Letters and Papers on Agriculture, Planting, &c.* 1786, 293; *Monthly Magazine and British Register* 1797, 78; 81; *Monthly Magazine and British Register* 1798, 494; Mackenzie 1799, 93-96; White 1833, 210.

⁹ Kåre 2002); 'Letter of Voltaire to Antoine-Augustin Parmentier' 1937, 200; *Verhandlungen* 1790, 72; Henriette Charlotte, Lancashire Archives; the many reports in the Spanish *Semanario de agricultura y artes dirigido a los párracos* [henceforth *SAA*]; Popplow 2010. I am grateful to Amund Pedersen for his translation of the Norwegian material.

¹⁰ Agricultural techniques are explained for instance in Miller 1754; Halldórsson 1765; Zanon 1767; Hammer 1766; Engel 1771; Henry 1771; *Beskrifning om Jordpärrens Plantering* 1773; Hertzberg 1774; Baldini 1783; Occiolini 1784; Adam 1789; Parmentier 1789; Doyle 1797; Larumbe 1800; *Metodo facile* 1801; Gómez de Ortega 1805; Estéban Boutalou, 'Memoria sobre las patatas', *SAA* 1806, 145-51, 166-71; Riera Climent and Riera Palmero 2007. (Hanna Hadocs and Amund Pedersen helped me understand the material in Swedish and Norwegian.) In 1797 Arthur Young indexed the articles on potatoes that had appeared in his *Annals of Agriculture*; the index provides a good sense of the range of topics—from manures to harvesting times—addressed by one such work: Young 1797, 38-62.

¹¹ Most of the works listed above address issues of storage. See also Board of Agriculture 1795; Young 1795, 64-71; Amoretti 1801, 40-4; *SAA* 1805, 392-3; Virey 1818, XXVII:542ff; Popplow 2010, 277; Spary 2014.

¹² For example in 1764-65 the *Norske intelligenz-seddeler* carried articles explaining 'how to grow potatoes, how to make them into flour and how to use them for animal feed': Drake 1969, 55. In 1787 the *Bibliothèque Physico-économique, Instructive et Amusante* included articles on potato

cultivation, suitability as an animal feed, cooking techniques and panification. For the potato's use as animal feed see for instance Engel 1771, 68; *Mémoires d'agriculture* 1789, 34; Adam 1789, II:1-37; Parmentier 1789; John Billingsley, 'On the Culture of Potatoes, and feeding Hogs with them, during Seven Years', *Letters and Papers on Agriculture, Planting, &* 1792, 339-94; Thompson 1797-1803; John Boys, 'Experiments on Fattening Hogs', Young 1797, 150-159; Doyle 1799; *SAA* 1806, 249.

¹³ 'Various methods of boiling potatoes have been much extolled, but there do not seem to have been sufficiently accurate experiments made to ascertain, which is the best. Should you be able to decide the question and to form a comparative trial have the goodness to inform us of the result', the Board of Agriculture wrote to one of their correspondents: Board of Agriculture Minutes, 8 March 1796, Museum of English Rural Life Special Collections, University of Reading [henceforth MRELSC], SR RASE B/XIII, fol. 71. For discussion of the merits of particular cooking methods (in addition to recipes for potato bread) see Varenne de Béost 1772; Parmentier 1781; 'Potatoes, by a Lancashire Man', Young 1795, 568-575; 'Modo de cocer las patatas en Irlanda', *SAA* 1805, 256; Guðmundsdóttir 2014. I am grateful to Hrefna Róbertsdóttir for glossing the material in Icelandic.

¹⁴ Skytte 1747; *Magazzino Toscana* 1775, 114; Parmentier. 1781, 196; James Anderson, 'Of Ardent Spirits Afforded by Potatoes', *Letters and Papers on Agriculture, Planting &c* 1788, 43-52; Board of Agriculture Committee on potatoes, 28 Jan. 1795, MRELSC, SR RASE B/X, fol. 5; Keith 1811, 266-8; Herrera 1819, III:253; Kibán 1994, '180-1; Koerner 1999, 132, 149.

¹⁵ Panification was widely discussed. For French efforts, and the larger scientific and medical context, see the lucid discussion in Spary 2014. See also Stonhouse 1757, 270; Bolotov 1770; Parmentier 1779; *Extractos* [1779]; Lindroth 1967, 262; Baldini 1783, 23-7; William Augustus Howard, National Archives; Board of Agriculture Minutes of Potato Committee, Committee on the Scarcity of Grain, and the High price of Provisions, and Committee of Correspondence and Expenditure, 23 Aug. 1794-27 Nov. 1795, MRELSC, SR RASE B/X, fols. 1-45; *Account of the Experiments* 1795; Doyle 1797; 'Carta del párraco de Linares', *SAA* 1797, 203-6; 'Report from Saxon Electoral Society of Agriculture on the Cultivation of Potatoes', *Communications to the Board of Agriculture* 1797, 295; Kibán 1994; Koerner 1999 149; Popplow 2010, 277. Colum Leckey provided the material in Russian.

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- ¹⁶ Doyle 1797; *SAA* 1798, 61; *SAA* 1802, 316; Lavoisier 1862, II:815; Grimaux 1888, 165; Larriba 1999.
- ¹⁷ Skytte 1747, 231-2; 'Memoirs of the Royal Academy of Sciences in Sweden', *Gentleman's Magazine* 1749, 123; 'Besuch' 1753; 'Eau-de-vie' 1773; *Report of the Committee* 1795, 177.
- ¹⁸ Pro-potato campaigns in various parts of Europe are analysed in excellent works by Salaman 2000; Wells 1988; Piqueras Haba 1992; Talve 1981; Kisbán 1994; Gentilcore 2012; Spary 2014; Miodunka 2014; Ferrières 2015.
- ¹⁹ For a brief history of the potato's transit across early modern Europe see Earle 2018, as well as the works cited in the previous note.
- ²⁰ On populationist discourse see Riley 1985; Rusnock 2002; Charbit 2011.
- ²¹ John Howard, Royal Society of Arts.
- ²² *SAA* 1797, 203-6; *SAA* 1799, 330-333, 401-402, *SAA* 1801, 97-106; Halldórsson 1765, 20; Guðmundsdóttir 2014. Hrefna Róbertsdóttir interpreted the Icelandic material for me.
- ²³ Bruni and Porta 2003; Wahnbaeck 2004; Beales 2006, 513 (quote); Tribe 2006, 528-9; Paquette 2008, 56-92; Usoz 2015; Earle 2017.
- ²⁴ On potato gardens see Burchardt 2000.
- ²⁵ Manuscript recipe book, Lancashire Archives; Varenne de Béost 1772; Young 1795; More [1795]; Doyle 1797; Cadet-Devaux et al. 1801; *Junta Pública* 1800; Manuscript recipe book, Schlesinger Library; *Ensayos* 1803. See also Demerson 1969; Redlich 1971; Wells 1988; Gonnella 1995; Valles Garrido 1995; Spary 2014.
- ²⁶ The *Bibliothèque Britannique* reported extensively on Rumford's work: see for instance 'Morale Politique: An Account of an Establishment, &c. . . par le Comte Rumford', *Bibliothèque Britannique* 1796, 137-182. See also Letter of Abraham Joly, Geneva, 25 Nov. 1797, *Bibliothèque Britannique* 1797, 300-1; *Ausführlicher Unterricht* [1805?], 17; Redlich 1971; Jaffe 2009; Gentilcore 2012, 3-4.
- ²⁷ *SAA* 1800, 54-64, 71-80, 119-128, 132-138, 148-160, 184-188, 340-349, 393-400; *SAA* 1800, 120-8, 271-2, 369-376; *SAA* 1801, 54-8, 63-4; *SAA* 1802, 284-7; [Thompson] 1800-1; *Memorial literario* 1802, 35, 90-100; Abad-Zardoya 2011, 657.

²⁸ *SAA* 1801, 64 (quote); Cadet-Devaux et. al., *Recueil de Rapports*, 193, 199; *Memorial literario* 1802, 98; Gonnella 1995, 1595-6. The Neapolitan version, like those from Spain, included hot pepper, while Turin's incorporated chestnuts: *Correo mercantil*, 90; Gentilcore 2012, 3-4. See also [Colquhoun] 1797, 10.

²⁹ Smith explained that these strong men and beautiful women were Irish coal-porters and prostitutes.

³⁰ See also Coveney 2006; Guthman and Allen 2006; Crawford 2006; Jarosz 2011; Nestle 2013.

³¹ Lang and Heasman 2004; Coveney 2006; Thaler and Sunstein 2008; Helstocky 2011; Biltekoff 2013.