Fish and Foreigners: The Case of Hot Salmon in Early Modern England

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Abstract: Fish preparation and consumption have been used to differentiate self from other for thousands of years. Various classical Greek and Latin authors labelled a number of disparate peoples they encountered as *ichthyophagoi*, choosing to categorize them by a real or imagined pescatarian diet which set them apart from Europeans. From the sixteenth century until modern times, Western travellers commonly remarked on fish-eating in the Far Eastern lands. An unusual comment on fish-eating, related to one particular fish – salmon – can be found in several of the health and dietary manuals that became so popular in sixteenth-century Tudor England. Several of these works mention concerns related to serving temperature of several other fish species, but little explanation accompanied the warnings. These comments are unusual because pre-modern medical texts typically focused on the humoral qualities of foods, where cold and warm (along with dry and moist) referred not to the actual physical temperature of the items to be eaten, but to their elemental qualities.

Fish-Eating and Self-Definition

Modes of fish preparation and consumption have long been used to differentiate self from other. Greek and Latin geographers, including Herodotus, Strabo, and Pliny, referred to disparate coastal peoples as Ichthyophagi (lit. 'fish eaters'), choosing to categorize them by a real or imagined pescatarian diet which set them apart from Europeans. Though fish were, of course, consumed in the Mediterranean littoral as well, what marked these non-Europeans as Ichthyophagi, and hence foreign, 'is the fact that they were...*monophagi* – that is, they depended on a single food source'.[1]

The theme of fish eating as a boundary was not limited to classical times. In the sixteenth century, as the world of Europeans was expanding both west and east, this motif can be frequently found in the writings of travellers.

Luís Fróis (1532-1597), a Portuguese Jesuit missionary, noted among his list of six hundred differences between the West and Japan that 'People in Europe enjoy eating fish that has been baked or boiled; the Japanese enjoy it much more when it is raw'.[2] João Rodrigues (d. c.1633) – Fróis' countryman, who served as his interpreter – imagined that the first instinct of a European encountering the Japanese manner of fish preparation would be disgust, though, upon actually sampling it, would find it tolerable – even pleasurable:

> As we have said, nowadays at banquets they usually place three principal tables in front of each guest...The third table is placed on the left with...two other dishes, one of which will be their highly esteemed raw fish cut up into small pieces. Along with it there will be a dish containing a tart sauce or one that burns like mustard and thus takes away the rawness of the fish. For it is the general custom throughout the kingdom to eat a certain kind of esteemed fish raw. This may sound horrible to someone who hears about it from afar and is not accustomed to it. But anyone who becomes used to eating this fish with its appropriate sauce enjoys it and does not find it horrible at all.[3]

The Florentine merchant Francesco Carletti (1573-1636), on the other hand, was less open-minded, even to the point of claiming that this diet resulted in deleterious effects upon the health of the Japanese:

> These things they use as relish to the fish, which is with them an ordinary article of diet, and which is so plentiful as to cost very little. They usually eat this in a practically raw state, after having dipped it in boiling vinegar. And as some of their fish are fleshy and full-blooded, and especially suitable for eating in this way, the result is that in these countries there are large numbers of people infected with leprosy.[4]

The choice of leprosy here – with its centuries-worth of associations in European thought – and the claim that this cursed disease was endemic in the Far East were not happenstance.[5]

Lest one think this focus upon fish was unique to the sixteenth century European encounter with East Asia, we can turn to early Western accounts of Native Americans. In *The Life and Deeds of the Admiral* (1571), Hernando (Ferdinand) Colón's (1488-1539) posthumously published biography of his father, Christopher Columbus, we find a description of the people near Cape *Gracias a Dios*, in Central America. This includes details that the people there 'are almost black in color, ugly in aspect, wear no cloths, and are wild in all respects. According to the Indian who was our prisoner they eat human flesh and raw fish [*mangia carne humana, & i pesci crudi*] ...'.[6] In one breath the author equates cannibalism and consumption of fish sashimi-style, emphasizing how barbaric raw fish eating seemed to Europeans. The accounts of sixteenth-century explorers, many of them collected by Richard Hakluyt, abound in similar descriptions.[7]

Even in an earlier era, and within Europe itself, the British looked askance at consumption of raw fish.[8] The twelfth century English chronicler, William of Malmesbury, described the enthusiastic response of Christendom to Pope Urban's 1095 exhortation to conquer the Holy Land. In his *History of the English Kings* William lists (unflattering) stereotypes of what the wild and uncivilized neighbours of England were engaged in prior to setting off on crusade – including consuming uncooked fish. These lands included areas

like Scandinavia where Christianization had occurred relatively late. And yet they too heeded the Pope's call to arms, just as the English, French, Flemish, Germans, and Italians:

> The central areas were not alone in feeling the force of this emotion: it affected all who in the remotest islands or among barbarian tribes had heard the call of Christ. The time had come for the Welshman to give up hunting in his forests, the Scotsman forsook his familiar fleas, the Dane broke off his long drawn-out potations, the Norwegian left his diet of raw fish.[9]

Vernacular Dietary Handbooks in the Sixteenth Century

Unsurprisingly, in the vernacular health and dietary handbooks that proliferated in sixteenth century England there is a plethora of advice about which fish species are preferred and optimal techniques of cookery. These texts were dependent upon the Latin *Regimen sanitatis Salernitanum*, a work which, according to its opening line, was originally written for an English king.[10] Derivative works in English like *The Governayle of helthe*[11] circulated in manuscript in the fifteenth century and already appeared in the incunabular era, printed by William Caxton and Wynkyn de Worde. In 1528, Thomas Berthelet printed an edition of the Regimen of Salerno along with the detailed commentary of Arnold of Villanova, translated into English by Thomas Paynell. Its subtitle indicated the purpose – to democratize medical knowledge about preserving one's heath: 'This boke techyng *al* people to gouerne them in helthe.' In the opening, Berthelet printed a letter from Paynell to John de Vere, fifteenth Earl of Oxford (c.1482-1540) explaining the need for such a work in the vernacular.

> But what auayleth hit / to haue golde or abundance of riches / if one can nat vse hit?
>
> What helpeth costely medicines / if one receyue them nat?
>
> So what profiteth vs a boke / be hit neuer so expedient and frutefull / if we vnderstande hit nat?
>
> Wherfore I / consydryng the frute yt myght come of this boke / if hit were translated in to the englishe tonge (for why / euery mā vnderstandeth nat the latine) I thought hit very expedient at some tymes / for the welthe of vnlerned persones to busy my selfe ther in.
>
> For lerned persones and suche as haue great experiēce / nede no instructions to diete them selfe nor to conserue theyr helthe. Yet if suche other wyse and discrete parsones / as is your lordeshippe / by chance rede this boke: they may perauenture fynde that shall please them: and that besides theyr owne diete and custome of lyuynge / shall be for theyr corporall welfare and good helthe.[12]

A medical book in the vernacular could enable people to dispense with the need to consult with a physician and could potentially erode the authority of scholarly medicine. Naturally, such a shift provoked opposition from professionals, just as some doctors might be irritated when patients today use resources like WebMD or google their symptoms.

Thomas Elyot (d.1546), a polymath – lawyer, diplomat, and humanist – without formal training in medicine, wrote a self-help book of medicine, influenced by the Regimen of Salerno 'whereby euery man may knowe the state of his owne body, the preseruation of helthe, and how to instruct well his phisition in sicknes, that he be not deceyued'. Written in the span of two months upon discovering that his friend and patron was ill, and first printed in 1536,[13] Elyot's *Castell of Helthe* became one the bestsellers of the sixteenth century, appearing in at least sixteen editions before 1595.[14] By the time of the augmented edition of 1541 Elyot had to include a preface ('proheme'), responding to criticism from members of the Royal College of Physicians about his production of such a work in the vernacular. Elyot appealed to the history of medical literature in arguing that authoritative physician-authors of the past had not attempted to conceal knowledge of their art. More widespread knowledge of the principles of healthy diet would also improve prevention of disease.

> Also to the intent that men obseruing a good order in diet, and preuenting the great causes of sicknes, they should of those maladies the sooner be cured. But if Phisitions be angry, that I haue written Phisick in English, let them remember that the Greekes wrote in Greeke, the Romaynes in Latine, Auicenna and the other in Arabike, which were their owne proper and maternall tongues. And if they had been as much attached with enuie & couetise, as some now seeme to be, they would haue deuised some particular language with a strange cypher or fourme of letters, wherein they would haue written their science, which language or letters no man should haue known, that had not professed and practised Phisicke…

Interestingly, Elyot also wrote a Latin-English dictionary, dedicated to King Henry VIII.[15] That century later witnessed a proliferation of similar popular works in the vernacular – what was controversial for Elyot, 'both the originator and chief representative of this genre of publication',[16] became commonplace. Unlike these works, directed to the lay reader, scientific writing remained exclusively Latin.

Serving Salmon while Hot – A Dangerous Combination?

Two works of the genre pioneered by Elyot contain an unusual remark about salmon. Both were written in the late sixteenth century and were authored by practicing physicians (unlike Elyot). Thomas Cogan's (d.1607) *The Haven of Health* (1584) comments:

> Salmon though it be pleasant fish, and very sweete especially the belly thereof, yet it is not so wholesome as many others before mentioned, but much grosser,

> more clammy, harder of digestion, and fuller of superfluity. And that it is not simply wholesome is prooved hereby, *for that it is not used to be eaten hot, or immediately after it is boyled*. The Trout is of like nature, for it is the yong Salmon. The nature of the Salmon is to spawns in the fresh water, and after useth both fresh and salt.[17]

A similar observation appears in Thomas Moffet's (d.1604) *Healths Improvement* (1655), a work described as 'unquestionable the most eloquent, attractive and learned of a thriving tradition of English treatises on health directed at the layman':[18]

> Salmons are of a fatty, tender, short, and sweet flesh, quickly filling the stomach and soon glutting ... Some have pickled Salmon as Sturgian is used, and find it to be as dainty, and no less wholesom; but salt Salmon loseth a double goodness, the one of a good taste, the other of a good nourishment. *Hot Salmon is counted unwholesome in England, and suspected as a leprous meat, without all reason; for if it be sodden in wine, and afterwards well spiced, there is no danger of any such accident*.
>
> As for Salmon peales (which indeed are nothing but Sea Trouts) howsoever they be highly commended of the Western and Welch people; yet are they never enough commended, being a more light, wholesom, and well tasted meat then the Salmon it self.[19]

Moffet's family had engaged another physician, Christopher Bennet, to prepare *Healths Improvement* for publication half a century after Moffet's death. Despite the delay in its appearance, Bennet judged the work to be the best of its kind – 'I may safely say, upon this subject I know none that hath done better; and were *Platina, Apicius,* or *Alexandrinus,* with all the rest of Dietetick writers now alive, they would certainly own, and highly value this Discourse.'

Both Thomases share a concern with eating hot salmon.

Cogan's comments were copied without attribution into the seventeenth century encyclopedia of John Swan, *Speculum Mundi* (1635).[20] Moffet's discussion was lifted into the entry on salmon in Robert Lovell's (d.1690) *ΠΑΝΖΩΟΡΥΚΤΟΛΟΓΙΑ. Sive Panzoologicomineralogia* (1661), who took the opposite approach of Swan, quoting numerous authorities all by name, among them sixteenth century naturalists like Conrad Gesner and Ulisse Aldrovandi.[21] Lovell juxtaposed Moffet's concerns about the fatty nature of salmon, 'quickly filling the stomach, and soone glutting' with similar earlier comments that 'Maßarius preferreth them before all fishes; but they are to be eaten moderately, otherwise by reason of their excessive fatnesse, they cause surfeits'.[22]

Fish and Leprosy

Cogan wrote that salmon was 'not so wholesome' but did not mention specific concerns that would stem from eating hot salmon. Moffet, on the other hand, and Lovell, following his lead, provided a much more precise fear among the English – that eating hot salmon would result in leprosy.

The association between fish and leprosy was perhaps an easy one to make. The discoloured and thickened patches of the leper's skin could be thought to resemble the surface of a fish. In a popular late fourteenth century Middle English account of perhaps the most famous leper in the Middle Ages, Constantine the Great, the healing of the Roman emperor's skin disease with his acceptance of Christianity was described as the leprosy falling from him 'as if they were fishes' scales'.[23] From the advent of modern dermatology and persisting to medical practice today there are a variety of genetic skin disorders still classified as 'ichthyoses' and physicians speak of psoriasis and other 'scale diseases'. (Sufferers of leprosy were also encumbered by other non-ichthyological zoological eponyms like 'elephantiasis' and 'leonine facies'.[24]) Also, in the pre-refrigeration age, with uncooked fish prone to putrefaction, a similarity to the decaying body of the leper may have sprung to mind, as in Francesco Carletti's linkage of the consumption of raw fish in Japan with leprosy. In an inverted form of the doctrine of signatures, consumption of a food that resembled the bodily defects from a particular illness was thought to trigger (rather than cure) the illness.

In similar fashion to fish, the newly-discovered potato (and sweet potato) became known as a cause of leprosy in herbal literature.[25] 'The white nodular tubers, with bulbous finger-like growths, may well have recalled the deformed hands and feet of the unfortunate leper.'[26] The sweet potato and then potato had also come to be seen as lust and lechery-inducing and this too engendered its connection to leprosy, a biblical punishment for vice.[27] Here too the shape of the edible root may have been involved. 'Its shape, which is often of a somewhat elongated ovoid character, might suggest the likeness of a phallus, seeing that such fantasies are never difficult to conjure up... [Though] If the shape of a vegetable were the determining factor, then the carrot should have earned a like reputation centuries earlier...'[28] Similar thought processes likely lay behind the connection of fish and leprosy.

Seventeenth English authors commented that leprosy had become nearly extinct in Britain, persisting only in regions like Cornwall due to excessive fish-eating there, particularly from fresh (!) fish and fish liver. Richard Carew, in his history of the county of Cornwall, commented:

> The much eating of fish, especially newly taken, and therein principally of the liuers, is reckoned a great breed of those contagious humours, which turne into Leprosie: but whence soeuer the cause proceedeth, dayly euents minister often pittifull spectacles to the Cornish mens eyes, of people visited with this affliction;

> some being authours of their owne calamity by the forementioned diet, and some others succeeding therein to an haereditarius morbus of their ancestors: whom we will leaue to the poorest comfort in miserie, a helplesse pittie.[29]

This dietary model of the pathogenesis of leprosy – emphasizing the role of individual health behaviour – was only one view.[30] Another one, prevalent in sixteenth and seventeenth century Britain, was to see leprosy as a foreign disease, imported to Europe by the Crusaders returning from the Holy Land. The most famous exponent of this approach was William Camden (1551-1623) in *Britannia* (1586), his influential and frequently revised and republished topographical and historical survey of Great Britain and Ireland.[31] Classical authors like Lucretius, Galen, and Oribasius had noted that leprosy was endemic in Egypt. And Pliny, in the first century C.E., describing the arrival of leprosy to Italy, where it was not previously known, blamed the spread of the disease on the return of the army of Pompey from its Middle Eastern campaigns.[32] The conception of the returning Crusader armies spreading leprosy in Europe after their return followed this earlier model.[33]

The dietary and foreign import models of leprosy were fused in claims, like Carew's, that in Cornwall – the Cornish people like the Welsh, are an ethnically Celtic people, differing from the English majority – there was both excessive fish-eating and persistent endemic leprosy. Similar claims, as we shall see, were made about Ireland and Wales.

But what remains unclear is why, of all fish, salmon specifically would be linked to leprosy. Salmon may be spotted, but wouldn't all scaled fishes evoke the similarity to the leper's skin lesions? And why would the temperature of the fish matter? Leprosy, according to the humoural theory of medicine, was often associated with melancholia, combining *cold* and dry qualities. Most unsalted fish, like the water they were surrounded by, were considered to be cold in nature (referring to quality, not physical temperature). Why should *hot* salmon increase this?

Salmon and Surfeit

In addition to concerns for leprosy, in their passages cautioning against eating hot salmon, Thomas Moffet and Robert Lovell had warned that salmon was 'quickly filling the stomach and soon glutting' and 'by reason of their excessive fatnesse, they cause surfeits'.

Surfeit was a major health concern for authors of medical works in sixteenth century England. Paynell, Elyot, Cogan, and the other scholars behind vernacular dietary handbooks were students of the Bible. Their works were informed by scholarly medical traditions, ancient and modern, with dutiful citations from Galen and Hippocrates, down to Paracelsus. But they also had a strong admixture of Christian concerns related to diet. In particular, the influence of Sirach (= Ecclesiasticus) 37:28-30 (in later versions, 37:29-31) on these dietary handbooks has been underappreciated. In the Geneva Bible of 1560, this passage appeared with the marginal note 'Of tēperācie [= temperancie]':

> Be not || griedie in all delites, and be not to hastie vpon all meates.
>
> For excesse of meates bringeth sicknes, and glotonie cometh into cholericke diseases.
>
> By surfet haue manie perished: but he that dieteth him self, prolongeth his life.[34]

At the beginning of his translation of the Regimen Sanitatis, Thomas Paynell included his letter to John, Earl of Oxford. Paynell asked why it was that the lifespans listed for figures of the biblical and classical past far outpaced that of his contemporaries. His answer was the immoderate diet of many in his generation, referring to this passage in Sirach, making his translation of the Regimen necessary:

> Truely the prouerbe sayth / that there dye many mo by surfet / than by the sworde. Accordyng wherto ye wyse mā sayth: Surfet sleeth many a one: and temperance prolongeth the life. Surfet and diuersites of meates and drynkes / lettyng and corruptyng the digestiō febleth man / and very oft causeth this shortnes of lyfe.

On the titlepage of Thomas Cogan's *Haven of Health*, immediately under the name of the author, we find a solitary verse quoted in full: 'Ecclesiasticus Cap. 37.30. By surfeit have many perished: but he that dieteth himselfe prolongeth his life.' Paynell, Elyot, and Cogan all authored separate books dedicated entirely to extracts of important biblical verses. (Elyot's included other proverbs as well.) Wisdom from Ecclesiasticus served as a prominent source for these, and the verses above were cited as authoritative biblical sources on diet.[35] Thomas Moffet too dedicated a chapter to 'Temperance what it is' and explained that 'There be two vices equally opposite to this vertue; Surfeiting, when a man eateth more then either his stomach can hold or his strength digest; and Self-pining, when we eate less then our nature craveth and is able to overcome'.[36]

The wealthy ruling class, who wanted for little, would be especially susceptible to this vice and Thomas Elyot's *The boke named Gouernour*, dedicated to Henry VIII and directed to the training of statesmen, noted that 'The prouerbes of Salomom, with the bokes of Ecclesiastes and Ecclesiasticus, be very good lessons' and he included a chapter 'Of sobriete in diete'. The need for this would have been well understood – two prior kings of England were reputed to have met their ends through immoderate eating – one through a surfeit of lampreys, the other from a surfeit of peaches.[37] The general populace was at risk for this too though, and bills of mortality from seventeenth century London, listing diseases with number of casualties caused by each, have surfeit as a prominent cause of death, alongside more well-characterized menaces in early modern England such as consumption, dropsie, smallpox, and the plague.

The caution against surfeit was also transmitted as proverbial wisdom. Thomas Cogan quoted the Greek poet Theognis that 'surfeit hath destroied mo than famin'.[38] A multitude of variants of this proverb appeared in Latin, English, Italian, and French in the late Middle Ages and in Early Modern Europe. One popular version (already found in the sermons of Jean Gerson [1363-1429]) was 'Gula plures occidit quam gladius' (the gullet [= gluttony] has killed more than the sword).[39] It appeared in a work of Petrarch (1304-1374) as well.[40] Other versions included: 'They digge their Graves with their teeth', 'Meat kills as many as the Musket' (once firearms became popular in Europe), and 'The board kills more than the sword'.[41] John Florio cited types of these sayings which suggest that surfeit was viewed by Italians as a particular problem among the English: 'This cramming after the English fashion, and feasting as they doo is cause of manie diseases. Surfet, and excesse, kills more men in England than any infirmitie else.'[42]

Here too, as with leprosy, it remains unclear why surfeit would be a concern specifically from salmon. While according to some authors other sea creatures like shellfish, including crabs and lobsters, were also described as 'apt to Surfeit and putrifie in the Stomach'[43] there is no similar warning about eating them hot and recently boiled.[44]

Salmon, Thornback, and Conger

Dietetic works did mention concerns relating to serving temperature for several fish species aside from salmon. This suggests that the warnings about hot salmon are not entirely unique, and seem to be solely a medical issue.

In the chapter immediately following his discussion of salmon, Thomas Cogan discusses 'Of Ray and Thornebacke' commenting 'This fish also is thought unwholesome, *if it be eaten hote*, and to dispose a man to the falling euill [= epilepsy]. Which noyseome quality (as I thinke) doth rise thereby, for that it is so moist a fish and full of superfluity...'[45] Similar comments warning against consuming the thornback hot, like salmon, were made by Tobias Venner and an appendix to the 1634 edition of the Regimen Sanitatis Salerni. John Swan noted that consuming thornback could cause epilepsy, but did not link this specifically to consuming the fish hot.

Similarly, Thomas Moffet noted, akin to his comments on salmon, that the conger eel was 'hard of digestion for most stomacks' but here there were dangers in consuming it either hot or cold – 'engendring chollicks if they be eaten cold, & leprosies if they be eaten hot after their seething'.[46] As by salmon, Robert Lovell copied the passage from Moffet nearly verbatim.[47]

Though the inclusion of temperature restrictions for thornback and conger alongside salmon, and the references to leprosy, epilepsy, and colic suggest that the concerns over hot salmon were entirely medical in nature, the standard medical works utilized by authors of the vernacular dietetic handbooks are silent when it comes to the temperature of foods.

Neither classical authors like Hippocrates and Galen, nor medieval ones like Isaac Israeli, Avicenna, Rhazes, and Ibn Abbas al-Majusi ('Haly Abbas'), nor Old Anglo-Saxon medical texts like Bald's Leechbook and the Lacnunga, mention medical concerns related to the temperatures of specific foods. And this should not have been expected – terms like hot, cold, moist, and dry according to the prevalent medical theory referred not to the physical, tactile qualities of a food, but to its essential qualities, its properties that influenced the humours. When sugar or salt were categorized in medical and dietetic texts as hot, this did not reflect a view suggesting that they would feel warm to the tongue, but how they fit into a system of cause and effect on the person consuming them.[48] One notable early exception was water, where the optimal temperature for drinking was debated.[49] Discussions of the physical temperature of foods were relatively rare.[50]

Serving Temperature

Physical temperature was not only absent from medical texts. Serving temperature (apart from cooking temperature) was not a standard component of recipes in medieval and early modern times either, and thus has not been discussed much by culinary historians.[51] When optimal service temperature of foods was mentioned it was typically linked to the method of preparation, rather than to the ingredients. Fried dishes, for example, would be best served while hot. The Catalan *Llibre d'aparellar de menjar* specified that fritters 'should be eaten hot, as they are worthless when cold'.[52] Quite understandable, as freshly fried doughnuts are vastly superior to their cold counterparts late in the day at Krispy Kreme. The same was true for fish.[53] Fried sardines, for example, were preferred hot.[54] Some chefs left serving temperature up to the individual cook – it did not matter either way. Bartolomeo Scappi in over a dozen places concludes an otherwise precise recipe 'serve it hot or cold, whichever you like', while elsewhere expressing a clear preference for how a dish is to be served.[55] If there was a medical rationale for food temperature, would there have been options? In a later period, serving temperature was connected to the place and order of a dish within the meal, again, not to the primary ingredient.[56]

This was regarding the upper classes, for whose chefs the medieval and Renaissance cookbooks were written. For everyday medieval people there may not have been as much of a choice on serving temperature. Martha Carlin suggests that for the poor, especially during the lean months of the year, 'hot meat, and even hot food, was a luxury', citing passages from Chaucer and William Langland's Piers Plowman.[57]

Interestingly, an exception to the absence of discussion of serving temperature can be found in late medieval English culinary manuscripts. There we find a far more systematic discussion of temperature based in large measure upon the primary ingredient in the recipe. For the fish recipes in fifteenth century Beinecke MS 163 and Harleian MS 4016, the authors clearly specify whether to 'serve it forth cold' or 'serve it forth hot'.[58] Not all fish

are served at the same temperature. Thornback and conger do not appear in either recipe collection, but in Harleian MS 4016 we find 'Salmon fressh boiled' with instructions for after the cooking has been completed: '...And þen ye shalł serue hit forthe colde' matching the temperature advice found over a century later in the works of Thomas Cogan and Thomas Moffet and their followers.[59] These recipe collections do not specify why certain fish are to be served hot and others cold, though the rule does not seem to be based upon gustatory concerns, as there is a consistency between prescriptions for serving found here and the various characterizations of the healthfulness of fish species in sixteenth century dietary handbooks, which deserves additional study. However, it is only the serving temperature of salmon, plucked from lists of a dozen other fish recipes, which survives in subsequent centuries.

Salmon, England's National History, and Her Neighbours

The warning against hot salmon cannot be explained fully by concerns about leprosy and surfeit. Its focus on physical temperature, as opposed to humoural quality of hot, marks it as different from the typical health concerns of the era; unsurprisingly, such a warning is absent from traditional classical and medieval medical works. Systematic concern with the serving temperature of many species of fish can be found in fifteenth century English recipe collections, but this does not adequately explain why fears about salmon alone, with a linkage to a stigmatizing disease like leprosy (whose genesis in England was attributed to foreigners), persist in vernacular dietary handbooks until at least the mid-seventeenth century. This cannot be attributed to solely medical or gustatory considerations.

One clue can be found in Thomas Moffet's words that 'hot salmon is counted unwholesome *in England*' (emphasis added). Apparently, according to Moffet, outside of England, hot salmon *was* eaten, to the detriment of those who partook of it. In his *Irelands naturall history* (1652) – a book dedicated to Oliver Cromwell – Gerard Boate, a Dutch physician living in England, who for most of his life had never set foot in Ireland, dedicated a chapter to 'the Diseases reigning in Ireland, and whereunto that country is peculiarly subject'. Following the Tudor conquest of Ireland, the English crown had confiscated Irish lands – the largest of which was the plantation of Ulster – and planned to colonize it with settlers from Great Britain. After the defeat of the Irish Catholic Confederation forces under Cromwell in 1652, the Act for the Settlement of Ireland promoted additional land confiscations.[60] Potential British settlers would be curious what to expect if they headed westward and Boate's book, published posthumously, and prepared by Samuel Hartlib (d.1662) along with Boate's brother, Arnold (d.1653), attempted to fill this need. He reported that leprosy had been endemic in Ireland in the past (just as Carew had claimed that leprosy had been endemic among the Cornish), a fact commonly attributed (presumably by the British) to the gluttonous consumption by the Irish of 'boiled Salmons...hot out of the Kettle in great

quantity' without waiting for them to cool.[61] (*Irelands naturall history* was printed in 1652, several years before the initial printing of Thomas Moffet's *Healths Improvement* in 1655; Boate's work is thus an independent witness for a widely held belief in a link between hot salmon and leprosy.) Boate himself, however, attributed leprosy in Ireland to the Irish eating salmon during the inappropriate season, when the fish are less healthful, taking pains to emphasize the ungratefulness of the Irish to the English who had outlawed salmon fishing during 'that unwholesome season', supposedly reducing the prevalence of leprosy there. Boate seemed surprised that despite this 'that hatefull people [the Irish] hath rewarded with seeking to utterly exterminate their benefactors [the British]'.[62]

Samuel Hartlib, in a book of his own from 1655, repeated the claim that leprosy had been endemic in Ireland because of consumption of salmon during the wrong season. He referred to a Fish-Calendar printed in the Low Countries where 'under every Month are expressed in picture, without any names set by them, the several sorts of Fish fit to be then eaten'.[63] Examples of such calendars survive to this day from the fifteenth century onward.[64] Apparently, the Irish should have been sensitive to the information contained in calendars such as these to guide their fish-eating.

One of the Samuel Hartlib papers, preserved at the University of Sheffield (though not written in Hartlib's own hand), expands upon concerns related to eating salmon in the wrong season. Citing anecdotes from a 'Mr. Church', this undated 'Memo on Herring & Salmon Fishing' speaks of the poor quality of the spawning salmon in Lough Neagh, the largest freshwater lake in Northern Ireland, between Michaelmas (29 Sept) and Allhollandtide (1 Nov):

> Now as the Salmon is weake and poore, not to bee eaten, a while before the spawning, soe after it hee groweth worse, yet Leaprous, and all over full of white spotts for all the world like a scalled head soe as it would loath one to see them; *yet the Irish, if not looked to, will both before and after the spawning take them in abundance, (and eat them greedilie) not only in the day time, but alsoe in the night by lights*; This poore and diseased Salmon continueth in the Logh till Ianuary ...[65]

Here, the sickly appearing salmon, covered in white spots, recalled the pale sores of the leper, likely triggering the association between salmon-eating and disease.

Interestingly, what Moffet (and the English tradition regarding the Irish cited by Boate) recognized – that avoidance of hot salmon was uniquely English, distinguishing them from the Irish (and other Gaelic and Celtic peoples?) – points to the earliest possible source for this dietary warning in Moffet and Cogan. Surprisingly, it is not in a medical or culinary work. Disapproval of those who ate hot salmon can be found in several popular *historical* works, among them some of the most frequently reprinted books of the incunabular era.

These were brought to the press repeatedly by such famed early English printers as William Caxton and Wynkyn de Worde, indicating that they must have had a wide audience to merit the expense of republication.[66] These fifteenth and early sixteenth century chronicles, telling the national history of England, were based upon translations of the *Polychronicon* of Ranulf Higden (d.1364). There, we find a poetic section where the English author describes the Welsh and their customs, among them: 'quod contra jussum physicum | edunt salmonem calidum', in a fourteenth century Middle English translation of John of Trevisa (d.1402): 'They eteþ hote samoun alway, | They phisik seie nay.'[67]

This section on Wales is not without controversy, with some connecting authorship of the poem to Walter Map,[68] who claimed Welsh origins for himself, others linking it to Map's more well-known contemporary, Gerald of Wales, author of famous twelfth century travelogues on Wales and Ireland, and still others to Higden himself.[69] Whomever the author, most scholars have assumed that this ethnographic description of the Welsh, the 'Cambriæ Epitome', is a summary of the contents of the *Descriptio Kambriae* and the *Itinerarium Kambriae* of Gerald. However, while the *Descriptio Kambriae* does indeed contain a passage on the Welsh and the temperature of food – it actually says the exact opposite of what we would expect based upon this section of the *Polychronicon*: 'Both sexes take great care of their teeth, more than I have seen in any country. They are constantly cleaning them with green hazel-shoots and then rubbing them with woolen cloths until they shine like ivory. To protect their teeth *they [the Welsh] never eat hot food*, but only what is cold, tepid or slightly warm.'[70] If, according the Gerald, the Welsh avoid hot foods, doubtful that they would make an exception for hot salmon. The origins of the claim found in the *Polychronicon / Cambriae Epitome* that the Welsh eat hot salmon remain unclear.[71]

But it is remarkable that criticism of the eating habits of others with regard specifically to salmon, repeated by the English about the Irish in the seventeenth-century period of the Protectorate (shortly after Cromwell's forces occupied Ireland), can be found already centuries earlier in English reports about the Welsh.

Hot Salmon and Celtic Mythology

While couched in the language of medical advice ('quod contra jussum physicum'), it is possible that salmon loomed large in the minds of Englishmen when conceptualizing neighbouring Celtic and Gaelic peoples for entirely non-scientific reasons. Salmon symbolism figures prominently in the carvings on the Pictish standing stones of Scotland, all found adjacent to rivers and the seashore. Iconography of salmon adorns the Book of Kells. Interestingly, *hot* salmon figures prominently in the Fenian Cycle of Irish mythology, in the origin story of the hero, Fionn mac Cumhail, and in a parallel account in the Welsh stories collected in the *Mabinogion*. The tale of the Boyhood Deeds of Finn features the salmon of knowledge, a salmon that ate nine hazelnuts that fell into the Well of Wisdom.

The first person to eat of the flesh of the salmon would gain its knowledge, and so the poet Finnéces had spent years fishing for this salmon:

> Seven years Finnéces had been on the Boyne, watching the salmon of Fec's Pool; for it had been prophesied of him that he would eat the salmon of Féc, when nothing would remain unknown to him.
>
> The salmon was found, and Demne was then ordered to cook the salmon.
>
> The youth brought him the salmon after cooking it.
>
> 'Hast thou eaten anything of the salmon, my lad?' says the poet.
>
> 'No,' says the youth, 'but I burned my thumb, and put it in my mouth afterwards.'
>
> 'What is thy name, my lad?' says he.
>
> 'Demne,' says the youth.
>
> 'Finn is thy name, my lad,' says he; 'and to thee was the salmon given to be eaten, and verily thou art the Finn.' Thereupon the youth eats the salmon.
>
> It is that which gave the knowledge to Finn, to wit, whenever he put his thumb into his mouth, and sang through *teinm Iáida*, then whatever he had been ignorant of would be revealed to him.[72]

Fionn, in placing his thumb in his mouth to soothe the burn, tasted the juices of the hot salmon of knowledge. This enabled Fionn to become the hero of Irish legend. Could British chroniclers have had such foundational myths of their neighbours in mind when cautioning against the consumption of hot salmon, disguising it as a medical matter?

Disappearance of the Taboo

The concern about hot salmon did not last. Modes of salmon cookery changed between the sixteenth and seventeenth centuries. Frequently reprinted English cookbooks of the sixteenth century directed that 'Eles, freshe Salmon, Conger…*never fryed* but baken, boyled, roosted or sodden'.[73] Already in the late fourteenth century romance, Sir Gawain and the Green Knight, we find a list of methods of fish cookery. Absent among these is frying (and not just in reference to salmon):

> Staff came quickly and served him in style
>
> With several soups all seasoned to taste,
>
> Double helpings as was fitting, *and a feast of fish,*

Some baked in bread, some browned over flames,

Some boiled or steamed, some stewed in spices

And subtle sauces to tantalize his tongue.[74]

However, by the seventeenth century most English cookbooks now included recipes for fried salmon.[75] This shift may have occurred under French influence, where, as J.L. Flandrin has demonstrated, butter had suddenly become fashionable in the kitchen. Fried foods were best eaten hot, not cold, and fried salmon would have been no different.[76]

Notes

1. Oddone Longo, 'The Food of Others', in: *Food: A Culinary History from Antiquity to the Present*, edited by Jean-Louis Flandrin & Massimo Montanari, trans. by Albert Sonnenfeld (New York: Columbia University Press, 2013), p. 159. Cf. Oddone Longo, 'I mangiatori di pesci: regime alimentare e quadro culturale', *Materiali e discussioni per l'analisi dei testi classici* 18 (1987): 9-55.
2. Luís Fróis, *The First European Description of Japan, 1585*, trans. by Richard K. Danford, Robin D. Gill, & Daniel T. Reff (Routledge, 2014), pp. 130-131. For another English translation, see: Clive Willis, 'Captain Jorge Álvares and Father Luís Fróis S.J.: Two Early Portuguese Descriptions of Japan and the Japanese', *Journal of the Royal Asiatic Society*, third series, 22.2 (April 2012): 418.
3. Michael Cooper, ed., *João Rodrigues's Account of Sixteenth-Century Japan* (London: Hakluyt Society / Routledge, 2001), p. 267.
4. Bishop (Mark Napier) Trollope, 'The Carletti Discourse: A Contemporary Italian Account of a Visit to Japan in 1597-98', *Transactions of the Asiatic Society of Japan*, second series, 9 (1932): 12. This translation is cited in part (omitting the section about leprosy) in: Michael Cooper, ed., *They Came to Japan: An Anthology of European Reports on Japan, 1543-1640* (Berkeley: University of California Press, 1965; reprint: Ann Arbor: University of Michigan, 1995), p. 191. For an alternate translation: Francesco Carletti, *My Voyage Around the World: The Chronicles of a 16th Century Florentine Merchant*, trans. by Herbert Weinstock (New York: Pantheon Books, 1964), p. 110.
5. This association between fish diet and leprosy in Japan was reasserted at end of the 19th century by the American physician Albert S. Ashmead (1850-1911), basing himself upon the work of the English physician Jonathan Hutchinson (1828-1913) who crusaded about the dangers of a fish diet and its link with leprosy for half a century. Ashmead had taught at the medical school of the Tokyo Charity Hospital and served as foreign medical director of a hospital there for several years in the 1870s. Both Ashmead and Hutchinson were prolific writers and proselytized for the acceptance of their theories extensively, including for decades after the discovery of *Mycobacterium leprae* (which eventually demonstrated an infectious rather than dietary or environmental pathophysiology behind leprosy).
6. *The Life of the Admiral Christopher Columbus*, trans. by Benjamin Keen (New Brunswick, NJ: Rutgers University Press, 1959; reprinted Westport, CT: Greenwood Press, 1978), p. 234. (For another mention of raw fish, see p. 72.) For the original Italian text, see: *Historie Del S.D. Fernando Colombo; Nelle quali s'ha particuolare, & vera relatione della vita, & de' fatti dell' Ammiraglio D. Christophoro Colombo, su padre…* (Venice: Francesco de' Francesci Sanese, 1571), p. 202a. On Hernando Colón and his biography of his father, see: Edward Wilson-Lee, *The Catalogue of Shipwrecked Books: Christopher Columbus, His Son, and the Quest to Build the World's Greatest Library* (New York: Scribner, 2018), esp. pp. 298-307, 337-339.
7. For characterization of peoples encountered by European explorers according to diets of raw fish or raw meat see: Richard Hakluyt, ed., *The Principal Navigations, Voyages, Traffiques, and Discoveries of the English Nation…* (London: George Bishop, Ralfe Newberies, & Robert Barker), Vol. I (1599), pp. 283, 491 (accounts of Giles Fletcher and the voyages of Richard Chancellor); Vol. III (1600), pp. 751, 807, 809 (accounts of the voyages of Francis Drake and Thomas Cavendish). For Giles Fletcher, see his: *Of the Russe common wealth…* (London: Printed by Thomas Dawson for Thomas Charde, 1591), p. 75. See also:

Richard Hakluyt, ed., *Diuers voyages touching the discouerie of America*... (London, Thomas Dawson for Thomas Woodcocke, 1582); with notes by John Winter Jones (London: Hakluyt Society, 1850), p. 23 (account of the voyage of Sebastian Cabot); Jan Huygen van Linschoten (1563-1611), *Itinerario, Voyage ofte Schipvaert / van Jan Huygen van Linschoten near Dost ofte portugaels Indien*... (Amsterdam: Cornelis Claesz, 1596), p. 21 = Ibid., *His Discours of Voyages Into Ye Easte & West Indies: Deuided Into Foure Bookes* (London: John Wolfe, 1598), p. 27; see the introductory section 'to the reader' – at the recommendation of 'Maister Richard Hackluyt, a man that laboureth greatly to aduance our English Name and Nation', the printer arranged for this work of 'John-Hugh Linschote' to be translated into English. These European accounts emphasizing foreigners eating raw flesh and fish had medieval antecedents. Cf. *Caxton's Mirrour of the World*, ed. by Oliver H. Prior (Early English Text Society) (London, 1913), pp. 70-71 (a fanciful account of the people of India), based upon the *Imago Mundi* of Honorius Augustodunensis (d. 1154).

8. While the opposition of the raw vs. the cooked could be profitably applied here (Claude Lévi-Strauss, *The Raw and the Cooked* (Mythologiques, Vol. I), trans. by John & Doreen Weightman (Chicago: University of Chicago Press, 1983)), the focus here will be on why fish (rather than raw food in general) was used to distinguish between self and other. Consumption of raw meat was also frequently mentioned, but did not generally elicit as visceral response. Cf. Thomas Cogan, *Healths improvement* (London: Tho. Newcomb for Samuel Thomson, 1655), p. 47: 'What is raw flesh till it be prepared, but an imperfect lump? ...onely Oisters of all fish are good raw...Other fish being eaten raw, is harder of digestion then raw beife: for Diogenes died with eating of raw fish...As for raw flesh...who dare almost touch it with their fingers? Much less grind it with their teeth...' Ichthyophobia does not feature in Marvin Harris, *Good to Eat: Riddles of Food and Culture* (Long Grove, IL: Waveland Press, 1998).
9. William of Malmesbury, *Gesta Regum Anglorum: The History of the English Kings*, Vol. I, ed. & trans. by R.A.N. Mynors, completed by R.M. Thomson & M. Winterbottom (Oxford Medieval Texts) (Oxford: Clarendon Press, 1998), iv.348.2, p. 607.
10. Patricia W. Cummins, 'A Salernitan Regimen of Health', *Allegorica* 1.2 (Fall, 1976): 82-83, l. 1 – 'Anglorum regi scripsit scola tota Salerni [The whole School of Salerno wrote for the English king]...'
11. *The Governayle of helthe* (Westminster: William Caxton, c.1490); reprinted as: *Governall of helthe* (London: Wynkyn de Worde, 1506?).
12. *Regimen sanitatis Salerni. This boke techyng al people to gouerne them in helthe, is translated out of the Latyne tonge in to englishe by Thomas Paynell*... (London: Thomas Berthelet, 1528).
13. There is some controversy regarding the date of the *editio princeps*. See, e.g.: Andrzej Kuropatnicki, 'Sir Thomas Elyot's *The Castel of Helth* as an Example of Popular Renaissance Medical Literature', *Annales Academiae Paedagogicae Cracoviensis* (Studia Romanica II) 18 (2003): 157; John Villads Skov, 'The First Edition of Sir Thomas Elyot's *Castell of Helthe* with Introduction and Critical Notes', (PhD dissertation, UCLA, 1970), p. 4.
14. Paul Slack, 'Mirrors of health and treasures of poor men: the uses of the vernacular medical literature of Tudor England', in: *Health, Medicine and Mortality in the Sixteenth Century*, ed. by Charles Webster (Cambridge: Cambridge University Press, 1979), p. 248. The early editions of Elyot's work were produced by Thomas Berthelet; during the same years, copies of Paynell's translation of the Regimen of Salerno were coming off Berthelet's press.
15. Thomas Elyot, *The dictionary of syr Thomas Eliot knyght* (London: Thomas Berthelet, 1538). See Gabriele Stein, *Sir Thomas Elyot as Lexicographer* (Oxford: Oxford University Press, 2014). Elyot also dedicated a book about training statesmen to Henry VIII (*The boke named the Gouernour*, 1531; see: *A critical edition of Sir Thomas Elyot's The boke named governour*, ed. by Donald W. Rude [New York: Garland Press, 1992]).
16. Slack, op. cit., p. 250.
17. Italics mine. I have cited the fourth edition (London: Richard Field for Bonham Norton, 1596), p. 144. (The *editio princeps* was: London: Henrie Midleton for William Norton, 1584.)
18. Victor Houliston, 'How Good Were Little Miss Muffet's Curds and Whey?' *Oxford Symposium on Food & Cookery, 1986: The Cooking Medium: Proceedings*, ed. by Tom Jaine (Prospect Books, 1987), p. 75.
19. Italics mine. Thomas Moffet (d.1604), *Healths Improvement* (London: Printed by Tho: Newcomb for Samuel Thomson, 1655), pp. 186-187.
20. John Swan, *Speculum Mundi. Or, a Glasse Representing the Face of the World*... (Printers to the Universitie of Cambridge, 1635), p. 387. The title links Swan's work to the encyclopedia tradition of the

Middle Ages, from the *Speculum maius* of Vincent of Beauvais (13th c.). Swan's *Speculum Mundi* was reprinted in 1643, 1665, and 1670. Swan frequent cites anonymous 'authours' but he also directly refers to Cogan as 'the authour of the haven of health' (on pp. 244, 245, 269, 458), though not in the section on fish.

21. Robert Lovell, *ΠΑΝΖΩΟΡΥΚΤΟΛΟΓΙΑ.[Panzooryktologia.] Sive Panzoologicomineralogia. Or a Compleat History Of Animals and Minerals*... (Oxford: Hen. Hall for Jos. Godwin, 1661), p. 220 (quoting 'Muff'. = Thomas Moffet).
22. Francesco Massari was a sixteenth- century Venetian physician who authored a commentary on Pliny's *Natural History*. See Francisci Massarii Veneti, I*n nonvm Plinii De naturali historia Librium Castigationes & Annotationes* (Paris: Michaëlis Vascosani, 1542), p. 42 (an earlier edition was Basileae: Froben, 1537); Ulisse Aldrovandi, *De piscibus libri V* (Bologna, 1613), pp. 481ff. (he cites Francesco Massari on p. 484). Cf. Johannes Bruerinus Campegius, *De re cibaria libri XXII* (Lyon: Sebast. Honoratum, 1560), p. 1123; Robert Burton, *The Anatomy of Melancholy* (Oxford, 1621), p. 90 (1.2.2.1).
23. *Confessio Amantis of John Gower*, ed. by Reinhold Pauli, Vol. I (London: Bell and Daldy, 1857), p. 275.
24. Much more could be said about the history of zoological eponyms in medicine (and its effect on patients). See for now: William H.C. Burgdorf & Leonard J. Hoenig, 'Favorite animal names in dermatology', *JAMA Dermatology* 149.8 (Aug, 2013): 997; Nidhi Jindal, et al., 'Animals Eponyms in Dermatology', *Indian Journal of Dermatology* 59.6 (Nov-Dec, 2014): 631. For such eponyms in neurology: Shin C. Beh, et al., 'The menagerie of neurology: Animal signs and the refinement of clinical acumen', *Neurology Clinical Practice* 4.2 (June, 2014): e1-e9.
25. Caspar Bauhin (1560-1624), *ΠΡΟΔΡΟΜΟS [Prodromos] theatri botanici* (Frankfurt am Main: Paul Jacob for Johann Treudel, 1620), p. 90; John Gerard (d.1612), *The Herball or Generall Historie of Plantes...very much enlarged and amended by Thomas Johnson*, Vol. II (London, 1636), p. 928 ('‡ *Bauhine* saith, That he heard that the use of these roots was forbidden in Bourgondy (where they call them Indian Artichokes) for that they were persuaded that too frequent use of them caused the leprosy. ‡'); Jean Bauhin, *Historia plantarum*, Vol. III (Yverdon, Switzerland, 1651), p. 622. C. Bauhin had commented upon the consumption of potatoes in Burgundy already in his *ΦΥΤΟΠΙΝΑΞ [Phytopinax] seu Enumeratio plantarum*... (Basel: Sebastian Henricpetri, 1596), Appendix, note to p. 302, line 14. Concern about leprosy is absent from discussion of the potato in the first edition of *The Herball*, published during Gerard's lifetime (London: John Norton, 1597), pp. 780-782. For extensive discussion on the potato and leprosy with additional sources (e.g., John Ray, Robert Lovell, details of the legendary French ban on the potato, etc.), see: Redcliffe N. Salaman, *The History and Social Influence of the Potato*, revised impression ed. by J.G. Hawkes (Cambridge University Press, 1949; revised edition, 1985), pp. 108-114.
26. Redcliffe N. Salaman, *op. cit.*, p. 112.
27. E.g.; Thomas Moffet, *Healths Improvement* (London: Tho: Newcomb for Samuel Thomson, 1655), p. 226; Joan Fitzpatrick, *Food in Shakespeare: Early Modern Dietaries and the Plays* (London: Routledge, 2016), p. 86; Gordon Williams, *A Dictionary of Sexual Language and Imagery in Shakespearean and Stuart Literature,* Vol. II: G-P (London & Atlantic Highlands, NJ: The Althone Press, 1994), pp. 1079-1080; Redcliffe N. Salaman, *op. cit.*, pp. 425-429.
    For an interesting example of this belief in seventeenth century England: As part of the celebration of the Sabbath it was customary for Jewish spouses to have conjugal relations on Friday evenings (*Shulhan Aruk* O.H. 280). To enable this, the Talmud (bBQ 82a and yMeg 4:1) recommended consumption of garlic during the daytime on Friday or on Friday evening, as garlic was considered an aphrodisiac (R. Abraham Gombiner, *Magen Abraham* to O.H. 280:1; the advice to eat garlic was believed to be an ordinance enacted by the biblical Ezra and his court). (See, e.g.: Julius Preuss, *Biblical and Talmudic Medicine*, trans. by Fred Rosner [Lanham, MD: Rowman & Littlefield, 2004], p. 461; Fred Rosner, 'Mandrakes and other aphrodisiacs in the Bible and Talmud', *Korot* 7.11-12 [June, 1980]: 277-284.) The Christian Hebraist Johannes Buxtorf the Elder (1564-1629) detailed this practice in his Jewish ethnography, originally published in German as *Synagoga Judaica Das ist Juden Schul* (Basel: Sebastian Henricpetri, 1603), p. 340 ('darumb essen sie *knoblauch* vor dem Sabbath'; knoblauch = garlic). This work became very popular and was translated into multiple other European languages. The Latin editions also correctly refer here to garlic (alliis). See, e.g., *Synagoga Judaica* (Basel: Ludovici König, 1641), p. 246. However, the English translation of the work replaces the Talmudic garlic with the potato – reflecting the contemporary European view that potatoes could induce lust and act as an aphrodisiac.

The lack of fidelity in translation here must have been intentional. *The Jewish synagogue, or, An historical narration of the state of the Jewes at this day dispersed over the face of the whole earth*..., trans. by A.B., Mr. A. of Q. Col. in Oxford (London: Printed by T. Roycroft for H.R. and Thomas Young, 1657), p. 157 – 'Now seeing they will have the Sabbath to signifie delight, therefore their wise Doctors think it good, and as a great honor unto the day, if any married man, but especially one of the Rabbines, who is learned and well seen in knowledge, upon the Sabbath day at night, hug and kisse his wife a little more then ordinary. And this is the cause that *they eat store of potato roots* before the Sabbath begin, that they may become more valiant in the act of carnall copulation.' (Italics mine.)

28. Redcliffe N. Salaman, *op. cit.*, p. 425.
29. Richard Carew (1555-1620), *The survey of Cornvvall* (London: Printed by S. Stafford for John Jaggard, 1602), p. 68. Cf. Thomas Fuller, *A triple reconciler stating the controversies whether ministers have an exclusive power of communicants from the Sacrament* (London: Printed for Will. Bently for John Williams, 1654), p. 2 ('I say generally, a Leper is a rarity, some few in Cornwell caused, as Physitians conceive from the frequent eating of fish new taken out of the sea...'); *Samuel Hartlib His Legacy of Husbandry*...[3rd edition] (London: Printed by J.M. for Richard Wodnothe, 1655), p. 136 ('...but Physicians say it came from eating of fish; for where most fish was eaten, there it most abounded; and eating of fish being left; that noisome disease (God be thanked) is even totally unknown, and all Hospitals for them dissolved...').
30. It had a basis in earlier medical literature. Avicenna, for example, linked the consumption of 'essentially bad food, whether from the kind of fish, or salted meat, coarse flesh, the meat of donkeys, and lentils' with leprosy. See Luke Demaitre, *Leprosy in Premodern Medicine: A Malady of the Whole Body* (Baltimore: Johns Hopkins University Press, 2007), p. 164.
31. William Camden, *Britannia, sive Florentissimorum regnorum, Angliæ, Scotiæ, Hiberniæ, et Insularum Adjacentium*... (London: Radulphum Newbery, 1587), pp. 338-339 (section on Leicestershire); *Britain, or A chorographicall description of the most flourishing kingdomes, England, Scotland, and Ireland, and the ilands adjoining*..., trans. by Philemon Holland (London: Printed by F. K[ingston] R. Y[oung] and I. L[egatt] for George Latham, 1637), p. 522.
32. See, e.g.: Harold S. Snellgrove, 'Leprosy in Ancient and Medieval Times, with especial reference to the Franks' *The Mississippi Quarterly* 7.4 (July, 1954): 2; Luke Demaitre, *op. cit.*, pp. 85-86.
33. For some adopting the view of Camden: Thomas Fuller, *The Historie of the Holy Warre* (Cambridge: Printed by Thomas Buck..., 1639), p. 254; ibid., *A triple reconciler stating the controversies whether ministers have an exclusive power of communicants from the Sacrament* (London: Printed for Will. Bently for John Williams, 1654), pp. 2-3; ibid., *The church-history of Britain* (London: Printed for Iohn Williams..., 1655), p. 280; Edward Chamberlayne, *Angliae Notitia or the Present State of England Compleat* (London: Printed by T.N. for John Martyn, 1669), p. 38; *Samuel Hartlib His Legacy of Husbandry* (London: Printed by J.M. for Richard Wodnothe, 1655), p. 136 (citing 'Cambden'). See Timothy S. Miller & John W. Nesbitt, W*alking Corpses: Leprosy in Byzantium and the Medieval West* (Ithaca: Cornell University Press, 2014) on the increase in number of leprosaria following the First Crusade.
34. *The Bible and Holy Scriptures Conteyned in The Olde and Newe Testament*... (Geneva: Rowland Hall, 1560), p. 438, col. D.
35. *The piththy [sic] and moost notable sayinges of al scripture, gathered by Thomas Paynell* (London: Thomas Gaultier, 1550), p. 64a (Sir 37:28-30); Thomas Elyot, *The Bankette of Sapience* (London: Thomas Berthelet, 1545), p. 14b, s.v. Diete (Sir 37:29); Thomas Cogan, *The Well of Wisedome: conteining chiefe and chosen sayinges... gathered out of the five books of the olde Testament, especially belonging to Wisedome, that is to say, the Prouerbes of Salomon, Ecclesiastes, Canticum, Sapientia and Ecclesiasticus*... (London: Thomas Vautrollier, 1577), p. 24, s.v. Diet (Sir 37:28-30). Cf. Jennifer Richards, 'Useful Books: Reading Vernacular Regimens in Sixteenth-Century England', *Journal of the History of Ideas*, Vol. 73, No. 2 (April 2012): 265 (but correct her reference from Ecclesiastes to Ecclesiasticus; these are two different biblical books, the latter is in the Apocrypha, otherwise known as Sirach).
36. Thomas Moffet, *op. cit.*, pp. 274ff.
37. On King John (d.1216), who had granted the Magna Carta but a year earlier, see: Roger Wendover, *Chronica, sive Flores Historiarum = Roger of Wendover's Flowers of History...formerly ascribed to Matthew Paris*, trans. by J.A. Giles, Vol. II (London: Henry G. Bohn, 1849), p. 378: '...his sickness was

increased by his pernicious glyttony, for that night he surfeited himself with peaches and drinking new cider, which greatly increased and aggravated the fever in him'. (This was among several accounts of his cause of death. Chr. Watson, in 'Replies: King John poisoned by a Toad', *Notes and Queries*, 10th series, Vol. IV, No. 103 [Dec. 16, 1905]: 492-493). On King Henry I (d.1135), see: Henry, Archdeacon of Huntingdon, *Historia Anglorum: The History of the English People*, trans. by Diana Greenway (Oxford Medieval Texts) (Oxford: Clarendon Press, 1996), pp. vii.43 and 491.

38. Thomas Cogan, *The Haven of Health* (London: Richard Field for Bonham Norton, 1596), p. 219.
39. James Woodrow Hassell, Jr., *Middle French Proverbs, Sentences, and Proverbial Phrases* (Toronto: Pontifical Institute of Mediaeval Studies, 1982), p. 256, G1 (Appendix. Proverbs in Other Languages).
40. *A Dialogue between Reason and Adversity: A Late Middle English Version of Petrarch's De Remediis*, ed. by F.N.M. Diekstra (Assen: Van Gorcum, 1968), p. 39: 'It is wreten þat for surfet many hath perched. 3e glotenye sleeth mo þan þe sweerd doth.'
41. Samuel Clarke, *A mirrour or looking-glasse both for saints and sinners*... (2nd edition; London: Printed for Tho. Newberry, 1654), p. 98.
42. John Florio, *Florios Second Frvtes*... (London: Printed for Thomas Woodcock, 1591), pp. 150-151. (He provides the Italian versions of these proverbs there as well.)
43. John Floyer, *The Preternatural State of Animal Humours Described, by Their Sensible Qualities*... (London: Printed by W. Downing for Michael Johnson, 1696), p. 103
44. For a similar report on the danger of eating fresh boyled salmon, a fish 'apt to surfeit', and criticism of the Scottish, see: Richard Franck (d.1708), *Northern memoirs, calculated for the meridian of Scotland*... (London, 1694), pp. 112-113 (the titlepage mentions that it was written in 1658): '...from the plenty of Salmon in these Northern Parts; that should the Inhabitants daily feed upon them, they would inevitably endanger their Health, if not their Lives, by Surfeiting; for the abundance of Salmon hereabouts in these Parts is hardly to be credited... for as Salmon is a Fish very apt to surfeit, more especially fresh Salmon, when only boiled; which if too frequently fed on, relaxes the Belly, and makes the Passages so slippery, that the retentive Faculties become debilitated; so suffers the Body to be hurried into a Flux, and sometimes into a Fever, as pernicious as Death...'
45. Thomas Cogan, *op. cit.*, p. 144.
46. Thomas Moffet, *op. cit.*, p. 149.
47. Robert Lovell, *op. cit.*, p. 200.
48. E.g., Ken Albala, *Eating Right in the Renaissance* (Berkeley: University of California Press, 2002), pp. 78-79.
49. Massimo Montanari, *Medieval Tastes: Food, Cooking, and the Table*, trans. by Beth Archer Brombert (New York: Columbia University Press, 2012), pp. 123-124. One physician, Brandan Dietrich Behrens, even wrote a dissertation, supervised by Heinrich Meibom and defended in 1689, on drinking warm water: *Dissertatio Medica De Aquae Calidae Potu*.
50. For several additional exceptions, see discussions of chilled wine and meat served piping hot, cited in Ken Albala, *op. cit.*, pp. 176 and 278.
51. Precise temperature measurements for cooking (e.g., to ensure that animal proteins were fully cooked) or for serving would have certainly been impossible. Though the first thermoscope was built in Galileo's circle, it was large and unwieldy, and application of temperature measurement to the kitchen took centuries. Also, in the pre-refrigeration age there were undoubtedly limitations upon how much food could be chilled and how quickly.
52. *The Book of Sent Sovi: Medieval recipes from Catalonia*, Joan Santanach, ed., Robin Vogelzang, trans. (Barcelona|Woodbridge: Barcino-Tamesis, 2014), pp. 128-129 'Fritters' and pp. 200-201 (from *Llibre d'aparellar de menjar*, [Fritters without cheese]); Maestro Martino de Como, *The Art of Cooking: The First Modern Cookery Book*, trans. by Jeremy Parzen (Berkeley: University of California Press, 2005), p. 92 ('How to make every type of fritter'); *The Most Excellent Book of Cookery: Livre fort excellent de Cuysine (1555)*, trans. by Timothy J. Tomasik & Ken Albala (Prospect Books, 2014), pp. 154-155 (Fritters [with fish]).
53. One exception: 'Jewish fried fish', a predecessor to fish and chips, known as pescado frido or peixe frito, and brought to England by Marrano Jews after the expulsions of the Jews from Iberia, was typically eaten cold. (It is mentioned already by Manuel Brudo, *De ratione victus* [Venice, 1544].) The fish, usually cod, was deep-fried in vegetable oil and was a traditional Sabbath dish amongst Spanish and Portuguese Jews. Because it was the Sabbath, when cooking was forbidden by Jewish law, the fish would be fried in

advance. On Brudo's work, see: António Manuel Lopes Andrade, 'Conrad Gessner Edits Brudus Lusitanus: The Trials and Tribulations of Publishing a Sixteenth Century Treatise on Dietetics', in: *Portuguese Jews, New Christians, and 'New Jews': A Tribute to Roberto Bachmann*, ed. by Claude B. Stuczynski & Bruno Feitler (Leiden: Brill, 2018), pp. 189-205. John Shaftesley (and, following him, John Cooper) claim that Jewish fried fish could be eaten cold because Jews deep-fried in vegetable oils which did not congeal when cold, as lard, used by Christians, did; the presence of solidified lard would have made fish fried by Christians unappetizing when eaten cold. While true for Northern Europeans, where olive oil was in short supply and felt to have an unappealing taste, Christians living in the Mediterranean, who often fried in olive oil, still preferred to eat fried fish whilst hot, so this explanation may have limitations. (See Massimo Montanari, *op. cit.*, pp. 89-106 ['Condiment/Fundament: The Battle of Oil, Lard and Butter'].)

On 'Jewish fried fish', see: Israel Zangwill, *Children of the Ghetto: A Study of a Peculiar People*, Vol. 1 (London: William Heinemann, 1892), pp. 112-114; Israel Zangwill, 'The Fried Fish of Judaea', *The Epicure: A Journal of Taste*, Vol. IX, No. 97 (Dec., 1901), p. 23; Cecil Roth, 'The Middle Period of Anglo-Jewish History (1290-1655) Reconsidered', *Transactions (Jewish Historical Society of England)* 19 (1955-59): 5; John M. Shaftesley, 'Culinary Aspects of Anglo-Jewry', in: *Studies in the Cultural Life of the Jews of England*, ed. by Dov Noy & Issachar Ben-Ami (Folklore Research Studies 5) (Jerusalem: Magnes Press, 1975), pp. 392-393; John Cooper, *Eat and Be Satisfied: A Social History of Jewish Food* (Northvale, NJ: Jason Aronson, 1993), pp. 180-181, 240; Claudia Roden, *The Book of Jewish Food: An Odyssey from Samarkand to New York* (New York: Alfred A. Knopf, 1996), pp. 112-114 ('Cold fried fish in the Jewish style').

54. *Cuoco Napoletano: The Neapolitan Recipe Collection*, Terence Scully, trans. (Ann Arbor: University of Michigan Press, 2015), p. 205. The rule for Martino de Como was that 'every type of fish is better when cooked whole, rather than in pieces or in any other way'. Hence, larger fish were boiled whole, while smaller fish, like sardines and smelt were fried. Cooking method could vary by species depending upon the size of the fish. When large, pike, perch, and tench and other species were boiled, but when small they were fried. And fried fish were best eaten hot. Maestro Martino de Como, *op. cit.*, pp. 99, 104, 107.
55. E.g., *The Opera of Bartolomeo Scappi (1570): L'arte et prudenza d'un maestro cuoco (The Art and Craft of a Master Cook)*, trans. by Terence Scully (Toronto: University of Toronto Press, 2008), pp. 329, 330, 336, 341, 505.
56. Jean-Louis Flandrin, *Arranging the Meal: A History of Table Service in France*, trans. by Julie E. Johnson (Berkeley: University of California Press, 2007), pp. 207-208, index, s.v. 'serving temperature'.
57. Martha Carlin, 'Fast Food and Urban Living Standards in Medieval England', in: *Food and Eating in Medieval Europe*, ed. by Martha Carlin & Joel T. Rosenthal (London: Hambledon Press, 1998), p. 41.
58. Beinecke MS 163 has appeared in print as: Constance B. Hieatt, *An Ordinance of Pottage: An edition of the fifteenth century culinary recipes in Yale University's MS Beinecke 163* (London: Prospect Books, 1988) and Daniel Myers, *Recipes from the Wagstaff Miscellany: A Transcription of Beinecke MS 163* (2015). Harleian MS 4016 has appeared in print in: Thomas Austin, ed., *Two Fifteenth-Century Cookery-Books: Harleian Ms. 279 (ab. 1430), & Harl. Ms. 4016 (ab. 1450), with extracts from Ashmole Ms. 1429, Laud Ms. 553, & Douce Ms. 55* (London: published by the Early English Text Society by N. Trübner & Co., 1888).
59. Thomas Austin, *op. cit.*, p. 102; Constance B. Hieatt, Brenda Hosington, & Sharon Butler, *Pleyn Delit: Medieval Cookery for Modern Cooks* (2nd edition; Toronto: University of Toronto Press, 1996), §61 (no pagination).
60. See, generally, Jonathan Bardon, *The Plantation of Ulster: The British Colonization of the North of Ireland in the Seventeenth Century* (Dublin: Gill and Macmillan, 2011).
61. Gerard Boate, *Irelands naturall history* (London: Samuell Hartlib, 1652), pp. 183-185.
62. For more on the *Irelands natural history*, the Boate brothers, Hartlib, and the colonization of Ireland, see: Patricia Coughlan, 'Natural history and historical nature: the project for a natural history of Ireland', in: *Samuel Hartlib and Universal Reformation: Studies in Intellectual Communication*, ed. by Mark Greengrass, Michael Leslie, Timothy Raylor (Cambridge University Press, 1994), pp. 298–317; T.C. Barnard, 'The Hartlib Circle and the Cult and Culture of Improvement in Ireland', in Mark Greengrass, et al., *op. cit.*, pp.281–97.
63. *Samuel Hartlib His Legacy of Husbandry...* [3rd edition] (London: Printed by J.M. for Richard Wodnothe, 1655), p. 172.

64. Ria Jansen-Sieben, 'Viskalenders', in: *E Codicibus Impressisque: Opstellen over het boek in de Lage Landen*, ed. by Elly Cockx-Indestege (Miscellania Neerlandica XIX) (Leuven: Peeters, 2004), pp. 291-300; Ernest Wickersheimer, 'Zur spätmittelalterlichen Fischdiätetik: Deutsche Texte aus dem 15. Jahrhundert', *Sudhoffs Archiv für Geschichte der Medizin und der Naturwissenschaften*, 47.3 (Sept. 1963): 411-416.
65. The Hartlib Papers. Ref: 65/20/1A-4B. https://www.dhi.ac.uk/hartlib/view?docset=main&docname=65_20
66. *Here endeth the discripcion of Britayne…* (Westminster: William Caxton, 1480); *Prolicionycion* (Westminster: William Caxton, after 2 July 1482); *The descrypcyon of Englonde Here foloweth a lytell treatyse the whiche treateth of the descrypcyon of this londe which of olde tyme was named Albyon and after Brytayne and now is called Englonde* (Westminster: Wynkyn de Worde, 1498); *Tabula* (London: Wynkyn de Worde, 1502); *Here begynneth a shorte and abreue table on the Cronycles…* (London: Iulyan Notary, 1515); *The Cronycles of Englonde with the dedes of popes and emperours, and also the descripcyon of Englonde* (London: Wynkyn de Worde, 1528).
67. *Polychronicon Ranulphi Higden, Monachi Cestrensis; together with the English translations of John Trevisa and an unknown writer of the fifteenth century*, ed. by Churchill Babington, Vol. I (London: Longman, Green; Longman, Roberts, and Green, 1865), pp. 406-407. A page earlier (pp. 404-405) Trevisa also translates a similar comment about the Welsh eating habits: 'They eteth brede, colde and hote', though the reference to temperature concerns in regards to bread is less clear in the Latin original of Higden. This passage from the Polychronicon was copied into another mid-14th chronicle, the *Eulogium Historiarum*: *Eulogium (Historiarum sive Temporis). Chronicon ab Orbe Condito Usque ad Annum Domini M.CCC. LXVI., A Monacho Quodam Malmesburiensi Exaratum*, Vol. 2, ed. by Frank Scott Haydon, *Eulogium Historiarum* (14th century) (London: Longman, Green, Longman, and Roberts, 1860), p. 135.
68. See 'Cambriæ Epitome', in: *The Latin Poems Commonly Attributed to Walter Mapes*, ed. by Thomas Wright (London: Printed for the Camden Society by John Bowyer Nichols and Son, 1841), p. 136, ll. 145-146. It is doubtful that any of these poems where written by Walter Map. See Lewis Thorpe, 'Walter Map and Gerald of Wales', *Medium Ævum* 47.1 (1978): 16 and 21 n. 100.
69. *Giraldi Cambrensis Opera*, James F. Dimock, ed., Vol. VI: *Itinerarium Kambriæ et Descriptio Kambriæ* (London: Longmans, Greem, Reader, and Dyer, 1868), pp. l-lii – 'It is perfectly certain, it seems to me, that he could not have written it. There is more than one passage in it, additional to Giraldus, which tells of a time long after Map was dead and buried…Moreover, if we compare these additional passages of the poetry with what Higden says in prose…we shall see that the statements of poetry so closely correspond with those of the prose, as almost necessarily to point to the same author. At all events it seems certain that this rhyming description of Wales must have been written in Higden's time, if not by Higden himself; and there is every reason for supposing that Higden himself was the author.'
70. Gerald of Wales, *The Journey through Wales and The Description of Wales*, trans. by Lewis Thorpe (London: Penguin Books, 1978), p. 238.
71. In an email communication dated 4 Jun 2017, Prof. Robert Bartlett at the University of St. Andrews, the preeminent biographer of Gerald of Wales, confirmed my impressions that 'there is nothing like that [comment in the *Cambriae Epitome* about hot salmon] in Gerald's works'.
72. Kuno Meyer, 'The Boyish Exploits of Finn', *Ériu* 1 (1904): 185-186. For additional sources, see: Tom Peete Cross (1879-1951), *Motif-Index of Early Irish Literature* (Indiana University Press, 1952), pp. 61 (B162.1) and 182 (D1811.1.1).
73. *A Proper newe Booke of Cokerye*, ed. by Catherine Francis Frere (Cambridge: W. Heffer & Sons, 1913), p. 23; A.W., *A Booke of Cookrye…* (London: Printed by Edward Allde, 1591), p. 15.
74. *Sir Gawain and the Green Knight*, trans. by Simon Armitage (New York: W.W. Norton & Co., 2007), p. 81, ll. 888-893.
75. Robert May, *The accomplisht cook*, or the Art and Mystery of Cookery (2nd edition; London: Printed by R. Wood for Nathan. Brooke, 1665), pp. 335-336; *The English and French cook* (London: printed for Simon Miller, 1674), p. 72; Hannah Wolley, *The Gentlewomans Companion; or a Guide to the Female Sex* (London: Printed by A. Maxwell for Dorman Newman, 1673), pp. 153-154; *The compleat cook: or, the whole art of cookery…* (London: Printed by G. Conyers, 1694), p. 72.
76. Concerns about the optimal temperature of food, however, persisted and reached an apogee in the works of Thomas Tryon in the late seventeenth century.