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Fish in Renaissance Dietary Theory

Ken Albala

It is clear that the rising consumption of fish in recent decades can be ascribed in large measure to the favorable verdict of physicians and nutritionists. Fish offers a nutritional profile that fits in well with current dietary principles. Was this not also the case with past nutritional theory? Did the advice of physicians formerly dissuade consumers from eating fish, so that a modern revival was required? This paper will attempt to answer that question by examining European nutritional theory from the invention of printing to the mid-seventeenth century to establish the possible origin of fish aversion.

The story, however, is not simply that past physicians banned fish from a healthy diet; the situation is far more complicated. In the past, as today, dietary principles were by no means static. Authorities frequently disagreed, basic theory was misinterpreted, simplified for a popular audience or adapted to local usage and custom. Particular social connotations of rare and expensive items versus common foods frequently conditioned an author's estimation. Within dietary literature there are, in fact, few topics which have aroused so much disagreement as that of fish, and it appears that the origin of fish aversion can be traced specifically to the corruption and simplification of nutritional theory.

A comparable situation in our own day would be the popular perception that all red meat is to be avoided. This is clearly a simplification of recent medical studies. In much the same way, the standard medical opinion of various varieties of fish was simplified in the first centuries of printing into a general fear of fish.

This fish aversion is not altogether surprising, given that the basic tenets of humoral physiology are prejudiced against all watery foods: fruits, vegetables and fish in particular. The idea that substances most similar to our own bodies are most easily broken down and converted into our flesh is one of the cornerstones of this theory and tends to favor meat as the ideal aliment. As Petrus Castellanus explains in his book on meat-eating: there is more nourishment in meat than anything else, and those who eat it hold off hunger much longer than those who fill up on fish or vegetables.¹

Furthermore, the qualities of fish were believed to be much like the element in which they live: watery. Not only do they offer only thin and watery sustenance, but they predominate in cold and moist humors and therefore tend to increase phlegmatic humors in the consumer. In terms of humoral theory, this is particularly dangerous for individuals of a phlegmatic complexion, or to anyone in cold and moist seasons. A humoral imbalance of phlegm, caused by excessive consumption of fish can lead to rheums, catarrh and in extreme cases paralysis.² The cold and moist nature of fish also makes them difficult to concoct or break down by means of heat within the stomach.

But by far the most persuasive argument against fish was based on its corruptibility both outside the human body and within. If not properly and thoroughly concocted in the stomach, the putrefying fish is nonetheless distributed through the body via blood and is assimilated into the flesh thereby subverting the entire system. This fear of corruption within the body underlies many specific dietary recommendations concerning fish: most importantly that they be caught only in clear, moving and unpolluted waters. Following the Greek medical authority Galen, most nutritionists stridently condemn fish caught near cities. Duchesne warns that fish which feed on garbage and human waste are the worst of all.³ Having absorbed the noxious qualities of pollution, they naturally pass them on to the consumer.

Avoiding digestive putrefaction is the primary concern of physicians; it informs their recommended cooking procedures as well as specific guidelines such as avoiding covering fish after cooking lest the superfluous humidity drip down and be reabsorbed by the fish. These superfluities would ultimately putrefy within the body, causing fluxes, nausea and vomiting.⁴ Eating fish after it has become cold is also condemned for similar reasons; Benedict of Nursia pronounces it venomous,⁵ as is exercise or labor after eating fish which can cause the undigested food to be prematurely distributed throughout the body in crude form where it then decays. Fish is also usually prohibited at the end of the meal because of its susceptibility to corruption as it rests in the uppermost part of the stomach. Following this logic Thomas Cogan criticizes the sixteenth-century custom in Oxford of eating crayfish after flesh on festival days.⁶

Apart from corruptibility, the phlegmatic humors of fish were also believed to cause lassitude, laziness and indifference, essentially because the spirits distilled in the heart from cold elements move slowly through the body and brain, much as a cold gas moves more slowly than a hot one. Interestingly, this is particularly dangerous for scholars whose wits are dependent on the rapid movement of spirits through the brain. It is for this reason that the philosopher Marsilio Ficino recommends that his readers eat very sparingly of phlegmatic foods such as fish.⁷

In sum, the qualities of fish according to humoral physiology were one major strike against them, yet perhaps just as important was the substance of fish, its viscous gummy texture, which suggested that only with great difficulty could it pass through the human body. Consider, for example, how Melchior Sebizius describes the tench and its German name *Schleie* derived from 'slime' (*Schleim*) or worse the *Schnotfisch*. Both are consigned to be eaten only by the poor and desperate.⁸ According to standard theory, it is especially the viscosity or agglutination that makes food nourishing and on this basis some authors commend fish's 'sticking' power,⁹ but the stickiest of fish can cause clogs or opilations within the body's narrowest passages.

This is certainly the case with the toughest and most 'crass' of fish, which although the most difficult to digest, also offer the greatest nutritional value. This is why many dietary writers consign rays, squid and octopus to plebeians and the laboring classes. Their well-exercised bodies and powerfully hot digestive systems are the only ones capable of breaking down the toughest of sea creatures.¹⁰ A similar logic holds for herrings which Thomas Moffett contends offer defective nourishment 'saving to

ploughmen, sailers, souldiers, mariners, or laboring persons.¹¹ In weaker systems such tough or slimy foods would engender an infinity of diseases.

The last major argument used against fish is the association of rare and exotic seafood with sybaritic luxury and gluttony. Ancient sources offered a panoply of examples: Lucullus' mad search for the largest shrimp, or the grotesque banquets of Vitellius and Heliogabalus. Stories such as these were frequently cited to argue that fish-eating, along with numerous courses and delicate desserts, are a sign of luxury and weakness and lead ultimately to the downfall of empires.¹² The message, of course, is that courtiers who spend their fortunes buying costly sturgeon or porpoises or subverting their digestive systems with lampreys, are similarly contributing to the decay of their own civilization.

In fact, in this entire dietary genre, only one author stands out in favor of fish-eating peoples as healthier, more sober and longer-lived.¹³ This is the transplanted Spaniard Ludovico Nuñez (Nonnius) who, as will be shown, is the only major promoter of fish in these centuries and stands in sharp contrast to most of his contemporaries.

Given these numerous arguments against fish, do many authors take a definite stand condemning all fish as unfit for consumption? Practically none go this far, though there is found an occasional statement such as 'fyshe for the moste parte are not holesome, or they are of smale and ill nourishment and leave manye superfluities in the body and are easilie corrupted.'¹⁴ Guliermo Grataroli merely recommends that we 'abstain from them.' Thomas Vaughan suggests that we eat sturgeon only in moderation 'which rule I wish to be followed in all fish meales.'¹⁵ Thomas Elyot includes 'all fyshe' among foods engendering phlegm.¹⁶

Rarely do physicians make a blanket condemnation, but it seems to be the case that their readers did indeed interpret their warnings this way. Luigi Cornaro, the most celebrated centenarian health-nut of his day, attributed his longevity to his abstaining from fruit and fish.¹⁷ Apparently many believed that merely keeping the body dry would increase the life span, and avoiding fish would certainly achieve that end. According to Nonnius, many people believed fish to be unhealthy and many modern innovators, such as Leonard Fuchs, had persuaded people never to eat fish in spring.¹⁸

The majority of dietary writers, however, prefer certain fish above others or use slightly different criteria in judging the properties of fish. Their opinions are conditioned by several variables: the years they are writing and, ultimately, which ancient authorities are in vogue; their country of origin; and, most interestingly after the 1520s, their religion.

For physicians in the later fifteenth century, the most important ancient authorities on diet were of the Arabic school including (in the Latin forms of their names) Avicenna, Averröes, Rhasis and Isaac Judaeus, as well as the available writings of Galen. This has an interesting effect on their evaluation of fish, the most important criteria being taste. The sweetest most pleasant-tasting fish were considered the most nutritious, for as Avicenna said (in Latin translation), 'quod sapit nutrit.' There is also a preference for scaled fish. Scales were considered a sign of superfluous humidity

expelled to the exterior of the fish.¹⁹ Agreeing, Symphorien-Champier in the early sixteenth century traces this opinion back to Isaac Judaeus,²⁰ which is not surprising considering the Mosaic prohibition of unscaled fish. Other fifteenth-century authors quote the opinion of Rhasis, directly or indirectly, who claimed that all fish are difficult to digest; because of their coldness and viscosity they generate cold blood and rheums (ie. 'colds'). Platina repeats this in Book X of *De honesta voluptate*.

After the 1520s and a general revival of Galenic medicine in its entirety, along with other 'hellenic' authorities Aetius, Oribasius, Paulus of Aegina, the taste criterion no longer applies. There are many fish, although sweet to the taste, which are nonetheless forbidden on account of their tough texture, polluted origin, or fatness. Eels become the prime example of a fish that tastes good but is dangerous.²¹ On the other hand, Galen makes no general condemnation of fish as food, and his mid-sixteenth-century followers usually concur.

It is only in the later sixteenth and seventeenth centuries that heated arguments on the topic of fish begin to divide physicians. In many cases they ignore ancient opinions in favor of local custom, as in the case of Thomas Cogan who favors British fish, healthier for being tossed in the wind, waves and deep running waters.²² There is also his countryman Thomas Moffett who denies that all fish are cold and moist.²³

The most interesting point of division is whether fish can be safely eaten in late winter and early spring as is prescribed by the Roman Catholic church during Lent. Theoretically, cold and moist fish should only be eaten in hot and dry seasons to counteract their harmful qualities, but most Catholic authors are reluctant to point this out. Protestant authors do not hesitate: 'weither should we need to imitate Gregory the Lent-maker, perswading men to eat only fish at that time, when it is most out of season, most hardly gotten, and most hurtfull to the bodies of most men.'²⁴ Moffett, the author of these lines, also refers to sprats as 'one of Jack-a-lents principle pages' and a queasy, corruptible and aguish food, especially harmful when smoked or fried. William Vaughan also criticizes papists who abstain from flesh only to feed on fish and sugar-sops which stir up lust and defeat the whole purpose of Lent.²⁵ Similarly, Melchior Sebizius of Strassburg criticizes the Carthusians' year-round diet of fish which makes them phlegmatic, somnolent, fat, even obese, oblivious, slow of body and mind, and white-fleshed.²⁶ They also suffer innumerable diseases as a result of their fish diet. It is only the Catholic Nonnius who claims that fish are tempered and lightly nourishing and are the ideal food for spring and Lent.²⁷

While these writers' general estimation of fish is determined by when and where they wrote, and perhaps by a confessional bias, their appraisal of individual species is even more varied and contentious, and will illustrate how easily confusion or corruption of theory could arise among readers.

One interesting example is salmon. Apparently little was written about it by ancient authorities, so nutritionists were free to judge for themselves. Hugo Fridaevallis in Flanders decided that salmon is difficult to concoct, caused flatulence and generated crass juice (the concocted fluid transformed into blood in the liver.)²⁸ The French commentator of Platina, however, decided that salmon had a taste closest to flesh of any fish and praised the sweet red salmon caught in the Garonne, although

he still admitted that it is difficult to digest.²⁹ Nonnius praised the salted and smoked salmon that was shipped from Belgium all around Europe, extolling the superiority of those caught in the Rhine. Alessandro Petronio, on the receiving end of all that shipping, said that they lose all their goodness en route and are eaten only by the poor.³⁰ Clearly the diversity of opinion would only confuse the matter for the reader.

Equally confusing are the various opinions about oysters, particularly over their supposed aphrodisiac potency. Fifteenth-century authors usually claim that they either stimulate dulled passions or actually 'augment the material of coitus'³¹ which probably refers to the textural similarities and ease of conversion from nourishing food to sperm. Other authors also point out that oysters are frequently used to 'excite the appetite of Venus.'³² How this actually happens was a matter for debate though. Petronio contends that while many people believe that similarity of substance causes oysters to increase seed, it can only possibly be the actual nourishment they offer, because, as all people know, sperm (and milk) is nothing more than an excess or plethora of nourishment unused by the body.³³ In his *Erreurs populaires*, however, Laurent Joubert contends that since oysters are cold and not very nourishing, there must be some other cause. Perhaps it is their saltiness which can stimulate by itching the interior parts.³⁴ But 'that lust wanteth sufficiency, because it cometh not from plenty of natural seed, but from an itching quality which is unnatural.'³⁵ If salt were the cause, then all salty foods would also be aphrodisiacs. Another solution would be that they cause 'ventosity' or excessive wind within the body, and this can travel through the body's passages artificially distending the genitals. Albeit this can in no way increase fecundity. Following this logic, beans would also then be aphrodisiac. The third possible solution would be the action of heat, and while oysters are themselves cold, they are frequently eaten with pepper and aromatic spices which do heat the body.³⁶ In the end, the topic is never resolved, nor does any author deny oysters' aphrodisiac properties. Authors are equally divided on what kind of nourishment they offer: salty and pituitous, crass and tough, temperate and restorative. One point in agreement is that they be eaten only in months with an 'R', for 'va in amore, et perde i sapore.'³⁷

Another instructive example of ambivalence among dietary writers is the properties of eels and various related species (*anguilla*, *murena*, *lampreda*). The major fear originates from the idea that these fish spontaneously generate from excrudescences of the ocean floor. Thus, like truffles and fungi and all insects, they are born from the heat of putrefaction and rotting organic matter rather than from generation. Thus, they bear all the noxious qualities of their origin. What, however, was difficult to explain was their sweet, delicious taste. Among the fifteenth-century authors, Benedict is ambivalent, pointing out their harmful properties, while admitting that they are among the most esteemed and expensive of fish.³⁸ Mid-sixteenth-century writers such as Pictorius (in his dialogues on how to conserve health) tend to condemn eels outright despite their popularity.³⁹ Grataroli suggests that 'it were best for suche persons as in this treatise are ment to forbear them altogether,' but he does mention that 'broyled' they are rid of much of their 'vicious and naughtie humours,' and that 'to cormerauntes and Epicures they seeme to go

down their throate pleasuntlie.⁴⁰ Later in the sixteenth century, as Cogan relates, their corrupt origin remains a problem for they are 'engendred of the verie Earth, Dirte or Myre without generation, or spaune,' but taste so pleasant that 'nature seemeth to have done yll, in giving such sweetnesse to such yll fishes.'⁴¹ Moffett agrees and adds that they had caused the death 'not onely ... of King Henry the first, but also of many brave men and captains.'⁴² In the seventeenth century Sebizius points out that they are sweet, a delicacy, and by several authors even considered healthy, but all true physicians teach that they are dangerous. Nonetheless, gourmets can hardly abstain, and roasted with aromatics and wine, they can be significantly improved.⁴³ It appears that, perhaps precisely because of these warnings, eels are thought of as a delicious but dangerous indulgence, all the more prized in eating as an act of transgression. It is for similar reasons that melons are highly treasured in European courts, and perhaps why many unhealthy foods are so sought after in our own day.

On the topic of salted or preserved fish there is even more equivocation among dietary writers. Ostensibly, the basic humoral qualities of fish change entirely under these processes, rendering them hot and dry and in the case of salting a cutting, abstersive and appetite-stimulating virtue is obtained. Yet the social connotations of these fish are generally so strong that an unbiased appraisal is rare. Eobanus Hessus and his commentator Placotomus mention that salted fish have the power to heat and attenuate crass humors, that is, they aid the passage of fluids through the body,⁴⁴ and this is orthodox physiology. Duchesne concurs that herrings and sardines can clean the stomach of mucus and stimulate the appetite by puckering the mouth of the stomach.⁴⁵ For most authors, however, they are a food fit only for the poor. As William Vaughan says 'take heed of salt herrings and slimy fish, as a meate fitter for labourers, then for tender natures.'⁴⁶ Jacobus Sylvius consigns herrings to the more vulgar sort as a food fit for famine times, along with frogs and earthworms.⁴⁷

Similar prejudice surrounds stockfish. Alessandro Petronio mentions that some refer to it as 'sporco' or filthy and that it is never served on the tables of the rich.⁴⁸ Erasmus in one of his colloquies claimed that it nourishes no more than a stock of wood. Only the most talented of chefs can render it palatable for 'a good Cooke can make you good meate of a whetstone.'⁴⁹ How the average reader was to assess these fish remains problematic.

Exactly the opposite social connotations are attached to large, rare and expensive 'fishes' such as whale, porpoise and tuna which are usually condemned as too gross and excrementous, despite the fact that they are highly sought after by curious epicures. There is more disagreement over sturgeon, much of it generated over etymological confusion, but no one could deny that this was considered the ideal dish for lavish banquetting.⁵⁰ Pisanelli admits that it is the most praised and most precious, but its fat viscous flesh made it slow and difficult to digest.⁵¹

Caviar proves equally difficult to assess. Opinions range from approval – as in Platina, who describes how to prepare it⁵² – to Pictorius whose speaker admits 'many love to eat fish, but I more willingly eat fish eggs, though they are reproached by physicians.' To which his interlocutor replies, 'of course they offer terrible nourishment and aggravate the stomach.'⁵³ The most scathing accusation hails from

Moffett who repeats the Italian proverb 'chi mangia di caviare mangia moschi, merdi, et salae.'⁵⁴ (whoever eats caviar eats flies, shit and salt.)

Similarly diverse estimations of crustaceans and molluscs abound in dietary literature. Shrimp, crab and lobsters, by the authority of Galen, were difficult to digest but nonetheless nourishing. Rondelet, undoubtedly the fish expert among natural historians of the sixteenth century, claimed that their soft humid flesh offered little nourishment.⁵⁵ Many authors, such as Domenico Romoli, side with Galen; others, such as Thomas Elyot, include shellfish among those that engender 'yll iuyce' with the exception of 'crevyse deau douce.'⁵⁶ Others contend that because difficult to digest, molluscs in particular despite their soft human-like flesh, cause horrible dreams.⁵⁷ Others similarly reject Galen, as Moffett does when he claims that cuttlefish and calamari must have been commended on hearsay for 'their flesh is as brawny as any ploughmans' though 'their skins be soft as any womans.'⁵⁸

To dispel the possible impression that all fish were condemned by Renaissance physicians, it should be noted that some fish do emerge with consistently high ratings. These are usually the lighter – in color and texture – smaller and more friable or flaky fish. Sole or 'partridge of the sea' is usually commended, as is carp which by some was believed to eat gold, hence its coloring. Mullet and pike are usually praised, especially by the orthodox followers of Galen, and, late in this survey, especially among northern writers, trout is singled out as praiseworthy. Yet even beyond these few species, there was hope for those fond of fish. The harmful qualities of fish could always be corrected in the kitchen.

The most fascinating details in this entire genre, especially for the food historian, are the recommendations that physicians make in order to correct or counteract the harmful qualities of fish. The logic of these corrections explains to a great extent the seemingly odd or jarring combinations of flavors frequently encountered among Renaissance recipes and may also be the origin of many of our present foodways and taste preferences.

In general, 'condiments' or correctives are used to counteract either the humoral qualities of a food or to mitigate the effects of their potentially harmful substance. That is, to cold and phlegmatic fish the appropriate addition would be hot and drying herbs and cooking methods which 'temper' or 'season' the dish as a whole. For crass fish, methods which render the food more passable and help to break it down or make its texture more subtle are called for.

Combining fish with sour flavors serves precisely this purpose. Vinegar, verjus or lemon cut through the viscous substance of many fish. Take, for example, Pisanelli's suggestion that mullet should be cooked over a grill, constantly bathed in oil and (sour) orange juice.⁵⁹ Platina's recipes for fish consistently include verjus or orange.

Mustard, especially because it is hot and volatile, is an equally effective corrective for the more viscous fish.⁶⁰ As Romoli advises unctuous fish are difficult to digest 'whence they ought not to be eaten if not, as is necessary, with mustard and similar things.'⁶¹

As condiments, pepper and hot and dry herbs such as oregano and parsley are the most common recommended to correct fishes' cold qualities; sometimes sugar

or honey are suggested, mostly in the fifteenth century.⁶² Among some authors aromatic spices are appropriate as well, as in Fridaevallis' emendation of *cantharo* (black sea bream) with pepper, cinnamon, ginger and aromatics.⁶³ His contemporary Menapius in Düsseldorf suggests that all fish, especially soft and fat ones, should be condite with wine or vinegar and ginger, cloves, cinnamon, saffron, pepper or, presumably for the less-well-off, onion, leek, parsley, rosemary, hyssop, etc.⁶⁴ Following Galen, leeks and dill are also proposed as the sauce *albo jure*.

The preferred cooking methods were seething (i.e. poaching) for the drier and tougher fish, and roasting, grilling or baking for the moist ones. Both correct the fishes' natural faults. This logic seems to inform Petronio's recipe for tuna in which it is cut into pieces, salted and roasted on a spit with oil, vinegar, coriander and fennel or rosemary.⁶⁵ He advises to turn frequently to prevent burning. Frying is almost always decried because it seals in the noxious humors,⁶⁶ and burned or even browned fish is also sometimes condemned for increasing choler and melancholy.⁶⁷ Interestingly, the most abominable thought among these writers is consumption of raw fish (with the exception of oysters). The most popular story is of Diogenes the Cynic who apparently killed himself by eating a raw octopus.⁶⁸ Moffett relates a story of one Woolmar who as a party trick at court would consume iron, glass, raw fish and fruit, among other horrible things.⁶⁹

Lastly, the universally preferred corrective for fish was to drink wine with it. As the saying went: *poisson sans vin est poison*.⁷⁰ Wine, hot and among the subtlest of substances, promotes the concoction and digestion of fish. Contrariwise, milk (cold and phlegmatic itself) taken with fish would be venomous,⁷¹ though not all authors agree on the reason for this. Manfredi says that it becomes poison through some occult (unseen) cause.⁷²

To return to this paper's original premise: if a people's dietary preferences can be significantly swayed by medical opinion, especially when that opinion is fraught with contention and prone to simplification, then can early modern physicians have, even if inadvertently, caused a general fear of fish in Europe? Even for those unable to read Latin or any of these professional or popular texts, can their physician's warnings have stirred up serious suspicion among potential fish-eaters? It seems clear the answer is yes.

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- ¹ Petrus Castellanus, *Kreophagia, sive esu carniū* (Antwerp: Hieronymus Verdussius, 1626), p. 17. 'Plus etiam alimenti esse in carne quam in alio manifestum est, quod iis sese illa refecerent serius fames oboriatur, quam iis qui se piscibus aut oleribus expleuerunt.'
- ² Hugo Fridaevallis, *De tuenda sanitate* (Antwerp: Christopher Plantin, 1568), p. 172.
- ³ Joseph Duschesne [Quercetanus], *Le pourtraict de la santé* [Dieteticon Polyhistoricon] (Paris: Claude Morel, 1606), p. 452. 'poissons... qui sont peschez á la rive proche des villes, ou on iette les immondices, oubien ou on bastit des retraits poor la commodité publique: comme ill advient en plusiers lieux... tels poissons sont les pires de tous.'
- ⁴ Antonius Gazius, *Corona florida medicinae* (Venice: Ioannes and Gregorius de Gregoriis, 1491), fol. Jvi.
- ⁵ Benedictus de Nursia, *Opus ad sanitatis conservationem* (Bologna: Domenico de Lapis, 1477), fol. M5^v. See also Guliermo Grataroli, *De regimine iter agentium* (Basel: Nicholas Brylinger, 1561), p. 10. In this work the author warns travellers to be wary of innkeepers who serve cold or reheated fish to guests.
- ⁶ Thomas Cogan, *The haven of health* (London: Thomas Orwin, 1589), p. 148.
- ⁷ Marsilio Ficino, *The three books on life*, ed. Carol V. Kaske and John R. Clarke (Binghamton: Medieval and Renaissance Texts and Studies, 1989), p. 179. Also see Gulielmo Menapius, *De ratione victus salubris* (Basel: Bartolomew Westheimer, 1541), p. 612.
- ⁸ Melchior Sebizius, *De alimentorum facultatibus* (Argentinae [Strassburg]: Joannis Philippi Mulbii & Josiae Stedellii, 1650), p. 1,001 under the entry for *tinca*, 'Proinde piscis ignobilis, vilis & pauperiorum cibus' and p. 1,005, under food fit only for plebeians, is '*Schnotfisch*.'
- ⁹ Girolamo Manfredi, *Opera nova intitulata il perche* (Venetia: Zorzi di Rusconi, 1512). The first edition is entitled *Libro de Homine*, 1474. On the topic of fish: 'e pur è viscoso e fa via nutritura.'
- ¹⁰ Alessandro Petronio, *Del viver delli Romani et di conservar la sanità*, translated by M. Basilio Paravicino (Rome: Domenico Basa, 1592), p. 161. This author consigns many fish to the poor; his comments on the 'porco' (*centrina* or spiny shark) are typical: 'si suol mangiare a pena dalla piu vil plebe.'
- ¹¹ Thomas Moffett, *Health's Improvement*, corrected and enlarged by Christopher Bennet (London: Thomas Newcomb, 1655), p. 153. This text was first compiled in the late sixteenth century. See also his comments on tench: 'a viscous stopping, unwholesome, unclean and damnable nourishment', that can 'engender palsies, stop the lungs, putrify in the stomach, encreasing slimy nourishment, and bring a man that eats them to infinite diseases.' (p. 187)
- ¹² Duchesne, pp. 245–251. Among luxurious excesses he includes 'diverse salads, fruits, cooked and raw, ... and many diverse fish, and meats salted or not ... and an infinity of pastries.'
- ¹³ Ludovicus Nonnius [Alvares Nuñez], *Diaeticon, sive re cibaria* (Antwerp: Petri Belleri, 1645), p. 306. The first edition of this work was 1627. Nonnius was also the author of an *Ichthyophagia*, 1616. On the topic of fish-eating peoples: 'Occurent plures nationes, quae solis piscibus, saluberrime aetatem egerunt...' Jean Bruyerin Champier, *De re cibaria* (Lyon: Sebast. Honoratum, 1560) also suggests that Provençals (Narbonensis) are a moral, sober fish-eating people, p. 68 (Frankfurt ed., 1600).
- ¹⁴ Guliermo Grataroli, *A direction for the health of magistrates and students*, translated by Thomas Newton (London: William How for Abraham Veale, 1574), fol. K4.
- ¹⁵ William Vaughan, *Directions for health both natural and artificial* (London: Printed by T.S. for Roger Jackson, 1617), p. 68.
- ¹⁶ Sir Thomas Elyot, *The Castle of Helthe*, 1541. (Reprint N.Y.: Scholars Facsimiles and Reprints, 1937), p. 9^v.
- ¹⁷ Luigi Cornaro, *Treatise on temperance* [Vita Sobria], translated by George Herbert. In Leonard Lessius, *Hygasticon* (Cambridge, 1634), p. 29
- ¹⁸ Nonnius, p. 310.
- ¹⁹ Gazius, fol. J iv^v Also on the topic of taste as criterion: 'omnes ciborum quanto longior a sapitate tanto minus delectabilis et minus conveniens humanis naturis.' Fol. I iii.

- ²⁰ Symphorien-Champier, *Rosa Gallica* (Paris: Iodoco Badio, 1518), fol. LXI'.
- ²¹ Charles Estienne [Carolus Stephanus], *De nutrimentis* (Paris: Rob. Stephanus, 1550), p. 45. 'Murean et lacertus marinus... quorum postremus, veneno potius, quam alimento esse censetur.' But he also admits on page 50 that *anguilla* are delicious.
- ²² Cogan, p. 140.
- ²³ Moffett, p. 33. He includes mullet, crabs, periwinkles and cockles among dry foods, stockfish and salted fish as dry in the third degree.
- ²⁴ Moffett, p. 142.
- ²⁵ Vaughan, p. 108.
- ²⁶ Sebizius, p. 1431.
- ²⁷ Nonnius, p. 311.
- ²⁸ Fridaevallis, p. 202.
- ²⁹ Bartolomeo Sacchi, (Platina), *De honesta voluptate*, translated and emended as *Le grand cuisinier de B. Platine de Cremonne* by M. Desdier Christol (Paris: Jean Ruelle, 1586), p. 233.
- ³⁰ Nonnius, p. 366. 'Inter praecipuas nostrii saeculi lautias, locum obtinet salmo' and 'quotannis ex Belgio in caeteras Europae regiones avehitur.' Petronio, p. 193. 'Condotta da Fiandra salata, perche ha perduto la sua prima bonta, e cibo solamente delle plebe.'
- ³¹ Benedict, fol. N2.
- ³² Nicholas Abraham, *Le gouvernement nécessaire à chacun pour vivre longuement en santé* (Paris: Marc Orry, 1608), p. 49. On oysters: 'Les bon compagnons les font cuire sur le gril dans leurs escailles, y adjoustans du beurre et quelque peu de poivre, pour exciter l'appetit de Vénus.' He also finds them difficult to digest and melancholic.
- ³³ Petronio, p. 166.
- ³⁴ Laurent Joubert, *Erreurs populaires*, book II (Rouen: George L'oyselet, 1587), p. 195,
- ³⁵ Moffett, p. 147.
- ³⁶ Sebizius, p. 1038. 'Ostrea ad venereos amplexus homines stimulat praesertim si elixis addatur piper.'
- ³⁷ Baldassare Pisanelli, *Trattato della natura de cibi et del bere*. (Venice: Giorgio Alberti, 1586), pp. 110–111.
- ³⁸ Benedict, fol. N1. 'Lamprede quidem magis ceteros excellunt pisces in cariore pretio qua nobilitatis nutrimenti.'
- ³⁹ Georgius Pictorius, *Dialogi .. del modo del conservare la sanità*, translated by Pamphilius Fiorim-bene (Venice: Vincenzo Valgrisi, 1550), p. 35. 'Anguille... pessime sopra tutti' are eaten only for the sake of gluttony in disregard for health. Also see Estienne, p. 45, and note 21 above.
- ⁴⁰ Grataroli, fol. Lii'.
- ⁴¹ Cogan, p. 144.
- ⁴² Moffett, p. 181.
- ⁴³ Sebizius, p. 994, 'Nostrates Apicii ab anguillis minime abstinent.' He offers a proof that eels generate spontaneously by the fact that a dead horse thrown in water will soon be covered by innumerable eels. (p. 998)
- ⁴⁴ Elius Eobanus Hessus, *De tuenda bona valetudine*, commentary by Ioannes Placotomus [Brettschneider] (Frankfurt: Heirs of Christ, Egenollfs, 1556), p. 64.
- ⁴⁵ Duchesne, p. 459.
- ⁴⁶ Vaughan, p. 258. Also Cogan, p. 146, comments that they are cheap but not very wholesome, but 'poor folk' eat them anyway.
- ⁴⁷ Joannes Sylvius, *De parco ac duro victu libellus*, in Jean Liebault, *Thesaurus sanitatis paratu facilis* (Paris: 1577), p. 23. 'Haleces or as the vulgar call it *stuva*' is usually cooked with wine, vinegar, salt, butter, verjuice as 'vulgariter parari consuevit.'
- ⁴⁸ Petronio, p. 154: 'Salpa... e ignobile pesce, & plebeo', 'e rifiutato nelle tavole de'ricchi, com bugiardo, e senza sapore.'
- ⁴⁹ Cogan, p. 150.
- ⁵⁰ Nonnius, p. 347, sturgeon: 'inter opiparos ac lautiores cibos esse, nemo est qui neget;' and, p. 372, 'hac aetate lautiores mensae in summis deliciis habent... qui conviviis infertur.'

- ⁵¹ Pisanelli, pp. 94–5.
- ⁵² Platina, *De honesta voluptate* (Venice: L. De Aquila, 1475), book X, ch. ‘conditum: quod caviare vocant.’
- ⁵³ Pictorius, p. 35, ‘lo mi diletto molto di mangiar pescie, ma piu volentieri mangio l’uova de pesci se bene sone biasmati da medici.’
- ⁵⁴ Moffett, p. 172.
- ⁵⁵ Abraham, p. 50. He sides with Galen over Rondelet.
- ⁵⁶ Domenico Romoli, *La singolare dottrina... dell’ officio dello scalco* (Venice, Michele Tramezzino, 1560), p. 245; Elyot, p. 15.
- ⁵⁷ Fridaevallis, p. 194.
- ⁵⁸ Moffett, p. 152.
- ⁵⁹ Pisanelli, p. 96–7.
- ⁶⁰ Gazius, fol. iv.
- ⁶¹ Romoli, p. 242, ‘Onde non devono esser mangiati se non per necessità con senape, & simili cose.’
- ⁶² Ficino, p. 179. He suggests that honey goes well with both milk and fish. Combining sugar with fish is far more common in the middle ages, but the corrective logic is the same.
- ⁶³ Fridaevallis, p. 198.
- ⁶⁴ Menapius, p. 538. Fridaevallis also prefers Galen’s *albo jure*. ‘At optimus est ad concoctionem is apparatus, qui albo jure conficitur.’ (p. 183) The sauce includes water, oil, dill and leeks.
- ⁶⁵ Petronio, p. 150.
- ⁶⁶ Pictorius, p. 36, ‘cose nella padella... sono di pessimo nutrimento, & fanno colera la quale per testimonio de medici, e occasione di pessime malatie.’
- ⁶⁷ Andrew Boorde, *A compendious regymnt* (London: Robert Wyer, 1542, reprint edited by F.J. Furnivall, London: EETS, 1870), p. 48.
- ⁶⁸ Nonnius, p. 380.
- ⁶⁹ Moffett, p. 273.
- ⁷⁰ Cogan, p. 144.
- ⁷¹ Joubert, question #57: ‘Si c’est bien dit, laict & poisson, est poison, & apres le poisson, la noix est contrepoison.’ Joubert never answers the question. Presumably the latter idea is a folk remedy; I have not encountered it anywhere in the dietary literature. See also Menapius, p. 564, who traces the prohibition of milk with fish back to Avicenna.
- ⁷² Manfredi, p. 11, ‘e qualità occulta che resulta dale permistione el lacte cum el pescie over con cose acetose da laquel corruptione precede sangue putrido e corrupto.’