The well-balanced diet in England in the Late Middle Ages and at the beginning of the Modern Period

The concept of a well-balanced diet appeared a very long time ago and it is not a new term. From time immemorial, it was important to maintain appropriate proportions of particular nutrients. However, this balance was perceived differently in different historical periods. Also the concept of a diet underwent changes and transformations. The first people did not pay a lot of attention to the balance. They ate all that was edible, avoiding poisonous and unhealthy things, and experimenting throughout their lives. Then, it was magic and religion as well as the social position that dictated an individual what to eat and what to avoid. Religion always imposed fasting and moderation in consuming certain foods, which was meant to bring mortals closer to a deity. Indeed, the oldest dietetic regulations had a religious and not, say, hygienic character. Dietary regulations and dietetic rules also governed particular stages in the life cycle of a human being and were related to special events such as wedding, funeral, preparation for a battle, or a hunt.

The word **diet** is derived from the classical Greek language δίαιτα (diaita) and means 'lifestyle'.³ That alone proves that for the ancient Greeks the diet was an extremely important aspect of life and was understood in a considerably broader sense than as nutrition only. Namely, it encompassed everything that is included in the concept of life hygiene, and thus, is dependent on the human. Several authors of *Corpus*

Nowadays, a well-balanced diet is considered to consist of proteins, fats and carbohydrates. It should also include essential mineral salts, vitamins, fibre and other vital nutrients. A well-balanced diet is defined as "a regular provision of nutrients and water, which are essential for all vital functions, in appropriate quantities and proportions to the body." D. Czerwińska, E. Gulińska, *Podstawy żywienia człowieka (The Basics of Human Nutrition)*, Warszawa, 2005, p. 5.

² E. H. Ackerknecht, "The End of Greek Diet," *Bulletin of the History of Medicine*, 1971 (45), p. 242.

³ The Greek dietetics was elaborated on in such publications as: I.M. Lonie, "A Structural Pattern in Greek Dietetics and the Early History of Greek Medicine," *Medical History*, 1977 (21): 235-260, M. Weiss Adamson, *Medieval Dietetics: Food and Drink in Regimen Sanitatis Literature from 800 to 1400* (Frankfurt am Main, 1995).

Hippocraticum⁴ believed that a balance between food and physical exercise was necessary. For example, the author of *De Diaeta* is of the opinion that although food and physical exercise have opposing forces, they cooperate in order to provide the best health.⁵ In the treatise "On Airs, Waters and Places," the author emphasised the significance of the environment for the human health. Coming to an unknown place, a human being should check its position relative to the wind direction and the sun, because each position, north, south, east and west one has its own individual characteristics.⁶

Hippocrates of Kos⁷ is considered to be the founder of the humoral theory, according to which the human body contains four fluids called 'humours,' whose relative proportions influence health and temperament. These were blood (Latin: *sanguis*), phlegm (Greek: *phlegma*), yellow bile (Greek: *chole*) and black bile (Greek: *melancholia*). The hypothesis about the mutual influence of the four fluids was written down by Polybus, Hippocrates' son-in-law and pupil, in his work "On the Nature of Man" (*De natura hominis*) included in the collection *Corpus Hippocraticum*. Each humour had its own characteristics, which were a combination of four features: warmth, moistness, dryness and cold. This description can be presented graphically.

blood	phlegm	yellow bile	black bile
moist and warm	moist and cold	warm and dry	cold and dry

It is assumed that Galen⁸ gave the humoral theory its final shape. Galen referred to various philosophical and medical schools, but drew chiefly on the theories by

⁴ Corpus Hippocraticum includes around 60 works in the Ionic dialect, which were originally attributed to Hippocrates (around 460-377 BC). Now it is known that Corpus was created between the 6th and the 4th centuries BC and is a collection of texts by anonymous authors coming from at least two medical schools: in Kos and Knidos. C. Singer, E. Ashworth Underwood, Short History of Medicine (New York and Oxford, 1962), pp. 27-28. Corpus Hippocraticum was printed for the first time in Latin in 1525 by Marcus Fabius Calvus in Rome. In the following year, a Greek version was published in Venice.

Hippocrates, "A Regimen for Health" [in:] *Hippocratic Writings*, ed. G.E.R. Lloyd, transl. J. Chadwyck, W.N. Mann (London, 1983), pp. 272-276.

Hippocrates, "Airs, Water and Places" [in:] *Hippocratic Writings*, ed. G.E.R. Lloyd, transl. J. Chadwyck and W.N. Mann (London, 1983), p. 148-153.

⁷ Hippocrates of Kos (born c. 460 BC on the island of Kos, died c. 370 BC in Larissa) – a Greek physician, referred to as "the father of medicine."

Roman physicians of Greek descent. He came from Pergamon, where he received a thorough education. He continued his studies in Smyrna, Corinth and Alexandria. He was influenced by Hippocrates' theory. In 161, he settled in Rome. Galen was a prolific writer. His writings can be divided into three groups: medical writings concerning all fields of medicine, philosophical writings (mainly commentaries on Plato, Aristotle, Chrysippus and others), philological writings (research on the language of old Attic writers) and other writings.

Hippocrates and Aristotle. His theory dominated the European medicine for more than 14 centuries after his death. Galen classified the humoral features on a scale of 1 to 4 degrees of intensity. For example, some foods were characterised by warmth in the first degree (almonds), other foods in the second degree (sweet apples), and still other foods in the third or fourth degree (these were mainly such spices as pepper, cloves, and garlic). Galen also believed that in individual people, the proportions did not have to be ideally balanced, but that some of the humours prevailed by nature. Moreover, Galen developed the notion of temperament, which resulted from a given proportion of the combination of humours. The temperament was usually one of the four types depending on the dominance of one body fluid over the others, which was a natural feature of every human being.

Temperament	sanguine	choleric	phlegmatic	melancholic
Cardinal	blood	yellow bile	phlegm	black bile
humour				

In the Middle Ages, Galen's view on medicine was adopted by Arabs, who translated all fundamental works by Galen, Hippocrates and other physicians and philosophers into their language. In the Middle Ages, the humoral theory was considerably developed and connected with astrology and alchemy. Individual humours were related to internal organs, seasons, stages of life and elements.

	blood	yellow bile	black bile	phlegm
body part	heart	liver	spleen	brain
season	spring	summer	autumn	winter
stage of life	childhood	youth	adulthood	old age
celestial body	Jupiter	Mars	Saturn	Moon
element	air	fire	earth	water

⁹ Galen left over 400 works, of which the most important ones in the field of dietetics were: De sanitae tuenda, De alimentorum facultatibus and De probis pravisque alimentorum succis. In these works, Galen describes particular nutrients and deals with diet in a broader sense.

Galen, *De temperamentis et de inequali intemperie libri tres*, transl. Thomas Linacre, a facsimile of the edition from 1521 (London, 1881), p. E2r.; on the temperament according to Galen see G. Sarton, *A History of Science Through the Golden Age of Greece* (Cambridge Mass., 1952); cf. also N. G. Siraisi, *Medieval and Early Renaissance Medicine*. *An Introduction to Knowledge and Practice* (Chicago, 1990), pp. 101-103.

According to Ken Albala, the body fluids never occurred in equal proportions. The most abundant humour is blood, phlegm constitutes 1/4 of the volume of blood, yellow bile – 1/16, and black bile – 1/64. Eucrasia is exceptionally rare. (K. Albala, *Eating Right in the Renaissance* (Berkeley and Los Angeles, California. 2002), p. 49.

According to the humoral theory, maintaining the balance between the humours guaranteed good health. By contrast, the imbalance, which was called *dyscrasia* by the ancient Greeks, led to diseases of various systems and organs of the body as well as mental disorders. The objective of medicine was to restore the required balance, and that could be done using methods belonging to dietetics (Greek *diaitetike*), pharmacy (Greek *pharmakeutike*) and surgery (Greek *cheirourgia*). Dietetics was the most important one of these three 'pillars' and dietetic methods were applied most frequently. According to the humoral theory, in order to ensure the balance of fluids in the human body (or eucrasia), it was necessary to provide the human being with food with the same qualities as his or her temperament had. A person with a sanguine temperament was warm and moist by nature, so in order to maintain health, he or she should consume foods with the same features (but avoid those with the highest degree). The so-called healthy foods included, for example, almonds, asparagus shoots, beans, small birds, chicken, duck, young goat, butter, carp, fresh cheese, figs, liver, and other.

Each person, as was believed, is born with one prevailing humour, but there are numerous factors that determine its intensity or decrease. There are also numerous factors that cause a given humour to spoil. So the balance of humours can be easily upset due to the influence of the above-mentioned external factors as well as internal ones. An improper diet could surely upset this balance, and an improper lifestyle too. Moreover, the eucrasia was largely influenced by such factors as age, place of residence, season, position of planets, emotional state, physical effort and many others. Foods that are too hot (in the humoral sense), that is those warm in the fourth, 'hazardous' degree, like the above-mentioned spices, could cause overheating or even burning of certain humours, which in turn could transform into the undesirable melancholia. A similar effect could be caused by excessive physical effort, for example, a long run or a too intense sexual intercourse. From the point of view of the humoral theory, also all changes of the emotional state, sadness, anger, irritation and the like could be dangerous. As intensity of the emotional state, sadness, anger, irritation and the like could be dangerous.

When no other methods produced the intended result, physicians resorted to more drastic (invasive) methods. In order to remove an excess of an undesirable humour, they triggered vomiting or diarrhoea. One of the most frequent methods was bloodletting, which in most cases was done by a barber and could be done in several ways. One could incise a vein, use leeches or put cups on the incised skin. Bloodletting was popular up until the 19th century. Nowadays, this centuries-old method is back in some countries, for example, in the USA, specially bred leeches, available in pharmacies, are coming back into favour.

¹³ See A. Kuropatnicki, "Melancholy and the Theory of Humours" [in:] M. Misztal, M. Trawiński (eds) *Current Issues in English Studies* Wydawnictwo Naukowe Uniwersytetu Pedagogicznego (Kraków 2009), pp. 259-270.

The above-mentioned factors are described in J. O'Hara-May, Elizabethan Dyetary of Health (Lawrence, Kansas, 1977), pp. 49-81; S. Jarcho, "Galen's six non-naturals: A bibliographic note and translation," Bull. Hist. Med, 1970 (44): 372-77; J. J. Byleby, "Galen on 'the non-natural causes' of variation in the pulse," Bull. Hist. Med, 1971 (45): 482-85.

People who lived in the Middle Ages and at the beginning of the Modern Period tried to have a well-balanced diet, of course in the humoral sense. They acquired knowledge from others, by oral tradition. There were also people who could read and were rich enough to be able to afford an appropriate book, which they could study thoroughly. There was a growing demand for this kind of books, so there appeared treatises, guides and handbooks, from which one could learn what was healthy and what to avoid in order to remain healthy. One could also find there tips on how to recover in the case of an illness. Probably the most famous handbook in the group of books that were called *regimina* (handbooks concerning diet) was the didactic poem, composed of 364 lines, written in hexameter verse, entitled Regimen sanitatis Salernitanum. 15 Other books of this genre were written by Aldobrandino of Siena 16 and Arnaldus de Villa Nova. Probably the most frequently published and translated work was the treatise *De honesta voluptate et valetudine* published in 1474 by Bartolomeo Sacchi, better known as Platina. In England, William Caxton published Governayle of Helthe by an unknown author in 1489. In the 16th century, books on dietetics underwent certain changes, which resulted in an abundance of cookbooks and medical handbooks.17

It can be assumed that in the period discussed here the majority of society was familiar with the basics of the humoral theory, and definitely it was true for people responsible for the preparation of meals. Every housewife knew what dishes she should prepare, what ingredients and what method of cooking to use¹⁸ and what

The poem was probably written at the beginning of the 12th century for the benefit of the son of William the Conqueror, Robert Curthose, who had an accident while he was on the way back from a crusade and had to seek help at the monastery in Salerno. The poem was very popular and well-known long after it was written because it was in verse and, therefore, easy to remember. Moreover, it contained a number of tips on a healthy lifestyle, including nutrition. It is supposed that the author could be John of Milan, the dean of the medical faculty of the school in Salerno. *Regimen sanitatis Salernitanum* was translated into many languages, including Hebrew, German, Italian, and Anglo-Norman. The popularity of the poem did not diminish in the Modern Period. In the end, it was expanded to 3526 lines. The English translation was done in 1608 by Sir John Harington (to whom the invention of the flush toilet is attributed). In Poland, *Regimen* was translated into Polish in 1640 by Hieronim Olszowski. M. Weiss Adamson, *Food in Medieval Times* (Westport, 2004), p. 217-220; *Historia medycyny (The History of Medicine)*, ed. T. Brzeziński (Warszawa, 2000), pp. 50-51.

For example, he published *Regimen corpus* in 1256. In *Li livres dou santé*, Aldobrandino included medical tips addressed to his patrons at the royal court. T. F. Glick et al., *Medieval Science*, *Technology*, and *Medicine: an encyclopaedia* (New York, 2005), p. 263.

These books are discussed in A. Kuropatnicki, "First Medical Books in the Vernacular in Tudor England" in J. Leśniewska, E. Witalisz (eds) *The Legacy of History. English and American Studies and the Significance of the Past*, 2 vol. (Krakow, 2004), II: 490-508.

Methods used to prepare dishes had an important influence on their humoral balance. Boiling caused the ingredients to become warm and moist in the humoral sense. By contrast, roasting on a spit dried meat and increased its humoral warmth to the highest degree. Ac-

spices to add in order to balance the final fare. One of the most common methods of balancing the humoral features consisted in preparing appropriate sauces for different dishes. Passed pork was usually served with a sauce made from verjuice (juice obtained from unripe grapes or crab-apples) or onion, wine and verjuice. Veal was usually served with a sauce made from cinnamon, raisins, red wine, verjuice with the addition of cloves and nutmeg. Fish of the anchovy type was served with a sauce made from parsley, onion and vinegar. The justification for that exact composition of the sauce was logical and understandable. Fish is cold and moist by nature, which results from the environment it lives in. Cold and moistness were considered the least favourable features so they had to be balanced, in this case, by a suitable sauce. Parsley is warm and dry in the second degree, onion is warm in the fourth degree, so it is even hot, and moist in the third degree, vinegar is cold and dry, so it has qualities that reduce the warmth of onion and dry the moistness of fish. As we can see, from the point of view of the humoral theory, the combination of cold fish with a warm sauce was beneficial for the health of consumers.

In small households, where the housewife was responsible for preparing meals, it was not a problem to adjust the menu to the temperaments of the members of the household. The situation was completely different at royal and aristocratic or nobility's courts. There were many more members of the household, and when a feast was organised, the number of participants sometimes amounted to several hundred. The person who was responsible for preparing balanced dishes was the chef.²⁰ The English playwright Ben Jonson,²¹ in his masque entitled *Neptune's Triumph for the Re-*

cording to this logic, fish should always be roasted and beef boiled. Vegetables growing in the soil were considered to be humorally dried, so they had to be boiled or stewed before consuming, and they should never be eaten in the raw state. See T. Scully, *The Art Of Cookery in the Middle Ages* (Woodbridge, 1995), pp. 91-99.

- The most popular sauces included: 'green sauce' (made from parsley or other green plants, mostly herbs, garlic, vinegar and bread; 'black sauce' or pepper sauce (consisting of pepper and grilled bread); 'yellow sauce' (usually containing ginger); cinnamon sauce, garlic sauce (made from garlic and a thickening agent, e.g. cow's milk, coconut milk, bread crumbs); mustard sauce (mustard seeds mixed with a liquid, spices and sweetening and thickening agents); gelatin sauce served with fish. There were sauces that were served only with selected dishes, such as e.g. 'chawdron' served with swan, 'alepevere' served with roasted beef, and 'gauncil' served with goose, and rarely with chicken. See C. A. Wilson, *Food and Drink in Britain* (Harmondsworth, 1976), p. 112-113, 189-190; *Two Fifteenth-Century Cookery-Books: Harleian MS. 279 (ab 1430), & Harl. MS. 4016 (ab.1450), with extracts from Ashmole MS. 1439, Laud MS. 553, & Douce MS. 55. ed. T. Austin (London, 1888).*
- The role and tasks of a cook in the Middle Ages were summarised by T. Scully *The Art of Cookery in the Middle Ages* (Woodbridge, 1995), pp. 236-256; see also B. Henisch, *The Medieval Cook* (Woodbridge, 2009).
- Jonson, who lived at the turn of the 16th and 17th centuries, was the author of, among other works, two plays connected in a way with the theory of humours, namely *Every Man in His Humour* published in 1598 and *Every Man out of His Humour* published in 1599.

turn of Albion, compares a chef to a commander on a battlefield, as "he designs, he draws, he paints, he builds, he fortifies, makes citadels of curious fowl and fish, some he dry-ditches, some motes round with broths, mounts marrow-bones; cuts fifty-angled custards; rears bulwark pies; and, for his outer works, he raiseth ramparts of immortal crust." Indeed, a chef had to be knowledgeable about many things. He had to know what features characterised particular ingredients, what method of preliminary processing to apply, what cooking methods to use in order to prepare a healthy dish, what spices and herbs to add in order to correct the undesirable humoral imbalance. A chef had also to know how to prepare a dish so that it would be colourful or surprising in taste or have an astonishing look. A medieval chef had to know how to improve the colours of his dishes so that they would look appetising and attract the attention of the participants of a feast. ²³

The most important challenge for a chef and subordinate cooks was to prepare dishes for a feast or a sumptuous dinner to which several dozen guests were invited. The problem consisted not in the huge number of dishes but in whether they were healthy from the point of view of the humoral theory, which meant a balance of their ingredients. One solution to this problem was in the very method of serving dishes, which was common till around the 19th century in Europe. It is called *service* à *la française*, and consisted in serving all dishes constituting one course of a meal at the same time. Several kinds of meat, fish, pâté, various sauces etc. were put on the table and guests could choose dishes that suited them. In England, the choice was limited to dishes that were (usually) served for four people. These people helped themselves to dishes from shared plates and platters, taking the chosen portions onto their plates with their fingers (always of the left hand, the right hand was used to put food into the mouth) or knives. Another solution was to prepare dishes that were neutral humorally.

Thus, a chef had to prepare dishes that were right for a so-called average healthy person. In this case, he could rely on the opinion of learned physicians, according to which the safest food, which could be eaten by everybody without a risk of upsetting the humoral balance was food that was moderately moist and warm. Therefore, cooks tried to balance the final effects of their work so that they would be slightly moist and warm. They could do this by choosing the right ingredients, cooking methods, the right spices or by preparing an appropriate sauce. As can be seen, it was not an easy task to prepare balanced dishes. In order to find out to what extent these rules

²² The Works of Ben Jonson, ed. B. Cornwall (London, 1838), p. 639.

²³ Such methods were already known to the Romans, who knew how to apply them. They also knew ways of improving the colour of dishes and boiled vegetables. Apicius knew several such secret methods, which he revealed in his cookbook. According to one of these ways, all green vegetables assume a vivid emerald green colour when we add soda while boiling them. Apicius, *The Roman Cookery-Book*, eds B. Flower and E. Rosenbaum (London, 1958), III, 1.

were taken into consideration, it is necessary to analyse several recipes from this period for the humoral features of the ingredients and of the final dish. A new problem arises here. The recipes come from cookbooks, which were definitely not used by cooks. They knew recipes by heart, and while working in the kitchen, they rather made use of their experience and intuition.

The first one of the recipes randomly selected from English cookbooks from the 15th and 16th centuries is a recipe for a roasted hare. First one has to wash the hare in clean water, parboil it and leave in cold water because hare meat was considered to be warm and dry in the second degree. Washing and soaking in cold water decreased humoral warmth and increased moistness (also by cooking). In the Middle Ages and the Modern Period, hare was considered to be healthy meat. From the point of view of dietetics, it was recommended for people suffering from liver, kidney and bladder conditions as well as from calculi and diarrhoea. Lard (warm and moist in the second degree) protected the hare from excessive drying during roasting. Roasted hare meat was served with a sauce consisting of: vinegar, salt, pepper, ginger, cloves, nutmeg, apples, onions, and sugar.

Vinegar, being humorally cold and dry, decreased the temperature of the hare. Salt, pepper, ginger, cloves, nutmeg and onion were considered to be warm and dry in the three or even fourth degree. Salt dries an excess of wet humours, prevents poisoning and is a basis of a diet, therefore, it is always put in a place of honour on the table. Pepper has balancing properties and dissolves an excess of superfluous products in the body. Moreover, pepper facilitates digestion, prevents colic, acts as a diuretic, removes the excess of phlegm from the head, prevents poisoning. Ginger has as many positive qualities: it makes food move fast to the stomach, by warming the stomach it improves digestion, it removes the excess of phlegm and improves memory and sight. Nicolas Culpeper adds that ginger is particularly recommended for elderly men as it warms joints, cures podagra and acts as a carminative. Cloves have a beneficial effect on the stomach and the liver, they stop diarrhoea, prevent

²⁴ "To roste a Hare. FJrst wash it in faire water, then perboyle it and lay in cold water againe, then larde it, and roste it on a broch. Then to make sauce for it, take red Uinigar, Salt, Pepper, Ginger Cloues, Mace, and put them together. Then minse Apples, and Onions, and frie them in a pan: then put your sawce to them with a litle Sugar, and let them boyle wel together, then baste it vpon your Hare, and so serue it foorth." [J. Partridge], *The good Huswifes Handmaide for the Kitchin* (London, 1594), p. 33a.

²⁵ T. Cogan, The Haven of Health (London, 1589), p. 121.

²⁶ T. Cogan, *The Haven of Health* (London, 1589), p. 163.

²⁷ Bartholomaeus Anglicus, *Batman uppon Bartholome his Booke De proprietatibus rerum*, transl. Stephen Batman (London, 1582), p. 3H1v.

²⁸ T. Cogan, *The Haven of Health* (London, 1589), p. 108.

²⁹ T. Cogan, *The Haven of Health* (London, 1589), p. 110.

³⁰ N. Culpeper, *Complete Herbal* (Ware, 1995), p. 320.

poisoning, and what is more, they act as an aphrodisiac and a breath freshener.³¹ Nutmeg was valued for its beneficial influence on the stomach.³² As far as cooking is concerned, it was mostly used as an addition to stewed beef and to veal, game, hare and bream. Onion, although it was hazardous due to its humoral warmth, was considered to improve appetite, the functioning of intestines and stomach, and preventing worms in children.³³

Apples are cold and moist, but there are differences between different varieties.³⁴ It was commonly believed that apples, like other fruits, are not healthy because they cause flatulence and spoil the blood, so they have to be heat processed because they are most harmful when eaten in the raw state.³⁵ In the case of this recipe, apples and onion are fried in a pan and then mixed with the sauce made from the abovementioned spices and a pinch of sugar. Sugar had positive humoral features as it was believed to be warm in the first degree and moist in the second degree. In the end, the whole dish was warm (probably in the fourth degree) and moist in the third degree. Considering its humoral characteristics, the dish was safe under certain conditions. It was not a dish for children (they were humorally warm and moist) and it was not to be served in spring (the same humoral features).

The next recipe dates from the 15th century and is a recipe for tench in sauce.³⁶ According to the recipe, dish should be boiled, which was a rare method of preparing fish because according to the humoral theory, fish should be fried or roasted due to its humoral features (it was considered cold and moist). In the opinion of medieval and Renaissance writers who were concerned with diet, fish was less nutritious than meat because of the excess of phlegm, in which it abounded.³⁷ Boiling increased the moistness of the fish, but on the other hand, it reduced the degree of its cold.

³¹ H. Buttes, *Dyets Dry Dinner* (London, 1599), p. P1v.

³² T. Cogan, *The Haven of Health* (London, 1589), p. 109.

³³ N. Culpeper, *Complete Herbal* (Ware, 1995), p. 183.

Interestingly, according to *Tacuinum sanitatis*, a medieval handbook on a healthy lifestyle, sweet apples are humorally warm and moist in the second degree, so they are perfect for our health. Cogilati L. Arano *The Medieval Health Handbook: Tacuinum sanitatis*, transl. O. Ratti and A. Westbrook (New York, 1976), f. 6.

³⁵ T. Cogan, *The Haven of Health* (London, 1589), pp. 88-90.

[&]quot;Tenche in Sawce.--Take a tenche whan he is y-sothe, and ley him on a dysshe; take Percely & Oynonys, & mynce hem to-gederys; take pouder Pepir, & Canelle, & straw þer-on; take Vynegre, an caste Safroun þer-on, an coloure it, an serue it forth þanne alle colde." Two Fifteenth-Century Cookery-Books: Harleian MS. 279 (ab 1430), & Harl. MS. 4016 (ab.1450), with extracts from Ashmole MS. 1439, Laud MS. 553, & Douce MS. 55. Ed. T. Austin (London, 1888), p. 23.

³⁷ As usual, there were exceptions to this rule. Thomas Cogan, for instance, believed that tench and other nine fishes in his list were recommendable. See T. Cogan, *The Haven of Health* (London, 1589), pp. 139-150.

The sauce consisted of parsley leaves, onion, pepper, cinnamon, vinegar and saffron. As already mentioned, onion and pepper are very warm and very dry, which makes them perfect to balance a cold and wet fish. Parsley leaves, also warm and dry, were a basic herb used for cooking in the period discussed here. Parsley was valued for its medicinal properties. Thomas Elyot believed that it prevented flatulence and freshens the breath, giving it a sweet smell.³⁸ What is more, parsley helps to remove the excess of gases in the stomach and intestines.³⁹ Due to its humoral qualities, it balanced the features of fish, so it was often used for sauces served with fish dishes.

Cinnamon⁴⁰ was very often used in the medieval and Renaissance English cuisine. Humorally, like most exotic spices, cinnamon is warm and dry in the third degree. It has many medicinal properties: it has a beneficial effect on the stomach and other main body organs (brain, liver, spleen, kidneys), it relieves the inflammation of the intestines, flatulence, cough, hydropsy, it acts as a diuretic, prevents poisoning and putrefaction, freshens the breath and is beneficial for the complexion.⁴¹ Saffron⁴² was characterised as warm in the second degree and dry in the first degree. It was commonly used, because it strengthens the heart, improves the functioning of the lungs, brings relief after overeating, cures jaundice and diseases of internal organs, acts diuretically, and triggers the sex drive.⁴³ Saffron gave a dish a desirable yellow colour, and vinegar reduced its temperature, improved the functioning of the

³⁸ T. Elyot, *The Castel of Helth* (London, 1541), p. 27v.

³⁹ N. Culpeper, Complete Herbal (Ware, 1995), p. 185.

Cinnamon is obtained chiefly from the dried bark of Ceylon cinnamon, although there are several varieties of plants with the same name. Apart from Ceylon cinnamon, there are also Indonesian cinnamon, Vietnamese cinnamon, and Chinese cinnamon, also known as *Cassia*. The latter was mentioned by Gerard, who called Ceylon cinnamon 'cannell.' (J. Gerard, *The Herball* (London, 1597), p. 1348). This name was commonly used in England and often misspelled as 'camel.' Cinnamon sauce was called 'cannell sauce.' Some scholars thought that the name came from the yellow colour of the sauce, similar to the colour of camel's hair.

⁴¹ T. Cogan, *The Haven of Health* (London, 1589), p. 111.

⁴² Saffron is derived from croci (Greek *crocos*), which have purple petals, and inside 3 red and orange carpels, from which the spice is made. The carpels are picked by hand early in the morning, when the flowers open. Then they are dried. During this process, they lose c. 80% of their original weight, change their colour to brownish red and acquire a distinctive smell. In order to obtain 1 g of the spice, as many as 200 flowers are needed. This is the reason why the price of saffron has always been high. Saffron began to be cultivated in England, during the reign of Edward III (1312-1377), near Waldenburg, whose current name is Saffron Walden due to the saffron growing. Saffron was the subject of a whole chapter in a description of England written by the 16th century clergyman William Harrison. W. Harrison, *The Description of England*, ed. G. Edelen (Ithaca, 1994), pp. 350-356.

⁴³ N. Culpeper, *Complete Herbal* (Ware, 1995), pp. 227-228; J. Gerard, *The Herball* (London, 1597), p. 124.

stomach and stimulated the appetite.⁴⁴ To sum up, tench in sauce is definitely a warm fish, and the proportions of moistness and dryness are balanced.

The last dish analysed here is plum tart according the recipe⁴⁵ from the sixteenth-century cookbook *A Proper Newe Booke of Cokerye* from 1545. According to the humoral theory, plums are cold in the first degree and moist in the second degree. The combination of plums with red wine, which is warm and dry in the second degree, corrected the humoral imbalance. 'Manchet' was a kind of bread made from high-quality wheat flour. Bread was considered to be humorally warm, and when it was made from wheat, it had its humoral features, namely, it was warm and moist. Additionally, putting plums, wine and bread in a chafing dish caused it to assume the next degree of humoral warmth. Pouring through a strainer and adding yolks thickened the dish. Yolk gave it warmth and moistness in addition because it had these humoral features. Sugar (warm in the first degree and moist in the second degree) increased warmth and moistness even more. By contrast, baking slightly dried the final product, but it added warmth. Generally, plum tart was regarded as a healthy dish because it had the desirable humoral features, that is warmth and moistness.

The recipes presented and analysed so far prove that the medieval and Renaissance diet was well-balanced.⁴⁶ A chef strived at all costs to select ingredients and cooking methods so that the final product would be a warm and moist dish.

Another important element of a well-balanced diet was the order of serving dishes. Cogan believed that the order of consuming dishes had a great influence on the human health.⁴⁷ It seemed logical to begin every meal with easily digestible dishes because, according to the ancient and medieval dietetics, heavy dishes took enormous amount of warmth in the stomach.⁴⁸ Easily digestible ingredients include: cabbage, lettuce, almost all herbs, chicken, young goat and wild boar meat, all broths

⁴⁴ T. Cogan, *The Haven of Health* (London, 1589), p. 164.

⁴⁵ "Take prunes and set them upon a chafer wyth a little red wyne and putte therto a manshet and let them boyle together, then drawe them thorowe a streyner with the yolkes of foure egges and season it up wyth suger and so bake it." C. Frances Frere, ed. *A Proper Newe Booke of Cokerye* [1545] (Cambridge, 1913), p. 45.

⁴⁶ Several other cooking recipes were analysed in a similar manner, proving that diet in the discussed period was most probably balanced humorally in A. Kuropatnicki, *Food and Drink in the Household of English Nobility in the Fifteenth and Sixteenth Centuries: Procurement, Preparation, Service and Consumption* (Kraków, 2012), pp. 329-341.

⁴⁷ T. Cogan, *The Haven of Health* (London, 1589), p. 197.

⁴⁸ The ancient Greeks believed that the food supplied to the body underwent concoction (Latin *concoctio*, digestion) consisting in its heating. The heavier the food, the more warmth was needed. The food thus digested moves further to the liver, which is the central organ responsible for nutrition. Here, another concoction takes place and, as a result, blood and two types of bile are produced. See Galen, *Galen's System of Physiology and Medicine*, transl. R. E. Siegel (Basel, 1968); Galen, *Galen on the Natural Faculties*, transl. Arthur J. Brock, Loeb Classical Library, 2 volumes (London, 1916); E. M. Tansey, 'The Physiolog-

and soups, which are easily digestible because they are warm humorally. Moreover, moist foods were to be eaten before the dry ones, therefore, all fruits, which were to facilitate digestion by preparing the stomach for this task, were eaten as an appetiser or the first course. Foods considered heavy included pork and beef. Fish was always served with nuts, which absorbed the excess of moisture due to their dry humoral nature. By contrast, meat dishes were always followed by cheese.⁴⁹

To sum up, the notion of balance in the diet has been very important for centuries. In ancient times and in the Middle Ages, health was understood as the maintenance of balance and symmetry of the four fluids in the body. An upset of the balance led to an illness. Improper food or order of consumed foods led to a disharmony of humours. In order to remain healthy, everybody had to eat only the foods that were in accordance with their temperaments. In the case of an illness, one had to consume foods that had opposite features to those of the illness. Obviously, now we are not able to determine authoritatively to what extent people who lived long ago observed all these instructions. However, by analysing selected recipes we can draw a conclusion that the vast majority of them included tips on how to make dishes healthy for an average person, that is humorally warm and moist in various degrees.

Translated by "Archeo-Logos: Joanna Dżdża i Grzegorz Żabiński"

ical Tradition,' [in:] *Companion Encyclopedia of the History of Medicine*, eds W. F. Bynum and Roy Porter. 2 vol. (London, 1993), p. 155.

⁴⁹ T. Scully, *The Art Of Cookery in the Middle Ages* (Woodbridge, 1995), p. 134.