




Ilias Anagnostakis (Athens)

 <https://orcid.org/0000-0003-4041-1894>

## SWEET AND SALTY RECIPES: SOME EXAMPLES FROM THE MUSLIM AND BYZANTINE CULINARY AND MEDICINAL COMMON TRADITION

**Abstract.** This paper discusses the use of salt, vinegar, honey, and sugar in some Byzantine and Arabic-Islamic recipes in cooking and pastry-making as well as for food preservation and in medical preparations. It draws mostly on information provided by Byzantine sources and Arabic translations for any comparison. The research focuses on some examples of salty/sour and sweet culinary and medicinal recipes, common or similar Arabo-Byzantine products like *iṭriya*, *garos/murri*, *zoulapion* *mishmishiyya*, and *libysia*. The paper starts with Galen's Syrian *mēloplakous*, continues with salty and sweet liquid preparations as well as preserves of roses and fruits. It concludes with a discussion of two exemplary Arabic delicacies more widely known in twelfth-century Byzantium, two foods with extreme opposite but equal flavored tastes: a sweet and a salty Arab product, *paloudakin* or *apalodaton* (*fālūdhaj*), which was the most typical sweet the Byzantines borrowed from the Arabs, and *libysia*, the especially flavorful salted fish from Egypt.

**Keywords:** Arabic and Byzantine delicacies, *paloudakin*, *fālūdhaj*, *itrion*, *iṭriya*, *garos*, *murri*, preserves of roses and fruits, Syrian *mēloplakous*, *mishmishiyya* recipe with apricots, Saracen or Egyptian roses, salty and sweet liquid preparations, *jullāb* and *zoulapion*, *serabion*, salty Egyptian fish *Libysia*, *ṣīr*, anchovies, Byzantine *tsiros*, Byzantine female cook and singer Bida in Bagdad, culinary and medicinal common or similar Arabo-Byzantine products, culinary influences and borrowings

A paper presenting aspects of food mobility between the Byzantine and Islamic worlds runs the risk of recycling previously studied topics on production and circulation of some goods and the development of their barter or trade. References to products such as cereals, oil, wine, cheese, honey, meat and fish, dried or pickled fruits, legumes, vegetables, roses, and spices increased in Late Antiquity when these items began to be traded not only as staple foods but also as ingredients in refined



and high-quality processed products and semi-luxury preparations. These raw materials are certainly part of our research with Maria Leontsini<sup>1</sup> in terms of their contribution to the various preparations exchanged between the Arab and Byzantine worlds. The use of salt, vinegar, honey, and sugar for food preservation, for the preparation of medicines, or as sauces in cooking is a rich topic for research and has been the subject of many studies<sup>2</sup>. This paper focuses on some examples of salty/sour and sweet culinary and medicinal common or similar Arabo-Byzantine

<sup>1</sup> I express my gratitude to Maria for our creative collaboration in this research, particularly for suggesting that parts of the research I had personally conducted be published under my name alone. Her assistance, like that of her Arabisant friends and companions, always proved valuable.

<sup>2</sup> On the production, medical and culinary use of salt, honey, and sugar in the Greek and Byzantine world see some basic works. **Bibliography of salt, honey, and sugar in the Greek and Byzantine world. On salt:** *To Ελληνικό Αλάτι, Η Τριήμερο Εργασίας* (= *The Greek Salt, 8<sup>th</sup> Three-days Workshop*), Mytilene 6–8 November 1998, *Proceedings*, Athens 2001 (especially Π. ΑΝΔΡΟΥΔΗΣ, *Μαρτυρίες για το αλάτι από το Βυζάντιο: αλίπαστα είδη και γάρον*, [in:] *To Ελληνικό Αλάτι...*, p. 95–115. J. KODER, *Stew and Salted Meat – Opulent Normality in the Diet of Every Day?*, [in:] *Eat, Drink, and Be Merry* (Luke 12:19). *Food and Wine in Byzantium, Papers of the 37<sup>th</sup> Annual Spring Symposium of Byzantine Studies, in Honour of Professor A.A.M. Bryer*, ed. L. BRUBAKER, K. LINARDOU, Aldershot 2007 [= SPBS.P, 13], p. 59–72. G.C. MANIATIS, *Organization and Modus Operandi of the Byzantine Salt Monopoly*, BZ 102, 2009, p. 661–696. T. THEODOROPOULOU, *To Salt or Not to Salt: A Review of Evidence for Processed Marine Products and Local Traditions in the Aegean Through Time*, [in:] *The Bountiful Sea. Fish Processing and Consumption in Mediterranean Antiquity. Proceedings of the International Conference Held at Oxford, 6–8 September 2017*, ed. D. MYLONA, R. NICHOLSON, New York 2018, Special Issue of JMArch 13.3, p. 389–406; on line I. ANAGNOSTAKIS, *Chrysothemis*, entry ἄλας, ἄλς. **On honey and sugar:** Σ. ΓΕΡΜΑΝΙΔΟΥ, *Βυζαντινός μελίρρυτος πολιτισμός. Πηγές, τέχνη, ευρήματα*, Αθήνα 2016 (= *Byzantine Honey Culture. Texts, Images, Finds*). I. ANAGNOSTAKIS, *Wild and Domestic Honey in Middle Byzantine Hagiography: Some Issues Relating to its Production, Collection and Consumption*, [in:] *Beekeeping in the Mediterranean from Antiquity to the Present*, ed. F. HATJINA, G. MAVROFRIDIS, R. JONES, Nea Moudania 2017, p. 105–118. P. BOURAS-VALLIANATOS, *Cross-cultural Transfer of Medical Knowledge in the Medieval Mediterranean: the Introduction and Dissemination of Sugar-based Potions from the Islamic World to Byzantium*, S 96, 2021, p. 963–1008, <https://eatlikeasultan.com/spotlight-on-salt>. **Bibliography for salt, honey and sugar in the Arab world:** J. SADAN, *Milḥ, Salt in the Mediaeval Islamic World*, [in:] *The Encyclopaedia of Islam*, vol. VII, Leiden–New York 1993, p. 57. A. DIETRICH, *Salt in Medicine*, [in:] *The Encyclopaedia of Islam*, vol. VII, p. 67–68. On the production and use of sugar, in the Arab world, M. OUERFELLI, *Le sucre. Production, commercialisation et usages dans la Méditerranée médiévale*, Leiden 2008 [= MMe, 71]; S. TSUGITAKA, *Sugar in the Social Life of Medieval Islam*, Leiden 2015 [= IAS, 1]. For the use of *milḥ*, *khal* and *sukkar*, salt, vinegar and sugar, in cooking and food preservation especially in Cairo, P.B. LEWICKA, *Food and Foodways of Medieval Cairenes. Aspects of Life in an Islamic Metropolis of the Eastern Mediterranean*, Leiden 2011 [= IHC, 88], p. 188–345. See also the words *jullāb/julap*, *murri*, *sals*, cakes and preserved foods and bibliography in the following works, M. RODINSON, A.J. ARBERRY, Ch. PERRY, *Medieval Arab Cookery. Essays and Translations*, Totnes 2001; N. NASRALLAH, *Annals of the Caliphs' Kitchens. Ibn Sayyār al-Warrāq's Tenth-Century Baghdadi Cookbook*, ed., Engl. trans. with introduction and glossary, Leiden–Boston 2007 [= IHC, 70]; D. WAINES, *Food Culture and Health in Pre-modern Islamic Societies*, Leiden 2011. See also J.C. HOCQUET, J. HOCQUET, *The History of a Food Product: Salt in Europe. A Bibliographic Review*, FoFo 1, 1985–1987, p. 425–447, and M. KURLANSKY, *Salt: A World History*, New York 2003.

products that were not included in our previous paper<sup>3</sup>, i.e. the *iṭriya*, *murri*, *mish-mishiyya*, and *libysia*. It provides some supplementary information on the analytically studied *zoulapion* and on the elliptically mentioned *sikbāj/sikbāja* and *ṣilāga*. It also offers elaborates on Galen's description of the apple dessert, relating it to the Arabic *khabiṣ*<sup>4</sup>. The paper draws mostly on information provided by Byzantine sources and Arabic translations for any comparison. As a result, the study of the products will be chronological rather than thematic, as both sweet and salty are sometimes employed in the same recipe. The paper starts with Galen's Syrian *mēloplakous* and concludes with a discussion of two exemplary delicacies more widely known in twelfth-century Byzantium, two foods with extreme opposite but equal flavored tastes: a sweet and a salty Arab product, *paloudakin* or *apalodaton* (*fālūdhaj*), which was the most typical sweet the Byzantines borrowed from the Arabs, and *libysia*, the especially flavorful salted fish from Egypt.

It seemed more useful and accurate to discuss the exchange of prepared cooked items not only through trade or the formal and ritual exchange of gifts and goods, rather through non-commercial cultural exchange<sup>5</sup>. Therefore, I will attempt to present specific evidence that indicates food mobility not only in historical or medicinal writings and official documents, but also in Byzantine and Arab prose, poetry, legends, and epistolography, thus identifying references that have gone unnoticed. In fact, I largely followed Rodinson's observation regarding the investigation of the impact of non-Arab peoples and culinary traditions on Arab gastronomy that we can also find pertinent information outside cookbooks from such sources, including dictionaries: [...] *the Arab rules of dietetics inherited from Greek medical authors [...] this theoretical literature has had a positive influence on actual food [...] a closer study of Arab food should extend to many other literary genres*. He refers to dictionaries, prose literature and *belles lettres*, satirical works, and poetry – especially gastronomic poems, a popular genre of the Baghdad court versifying praise of all sorts of dishes<sup>6</sup>. This especially resonates with our research on Arab or other Eastern influences on Byzantine gastronomy

<sup>3</sup> M. LEONTSINI, I. ANAGNOSTAKIS, *Food Mobilities between the Byzantine and the Islamic Worlds: Trends in High-value Food Consumption, Seventh to Twelfth Centuries*, [in:] *Mobility and Materiality in Byzantine-Islamic Relations, 7<sup>th</sup>–12<sup>th</sup> Centuries*, ed. K. DURAK, N. NECIPOĞLU, Routledge (forthcoming).

<sup>4</sup> I transliterate Arabic words according to the *Encyclopaedia of Islam* and in certain cases adopt the transliteration of some editors, for example M. RODINSON, A.J. ARBERRY, Ch. PERRY, *Medieval Arab Cookery...*, and N. NASRALLAH, *Annals of the Caliphs' Kitchens...*

<sup>5</sup> K. DURAK, *The Use of Non-commercial Networks for the Study of Byzantium's Foreign Trade. The Case of Byzantine-Islamic Commerce in the Early Middle Ages*, [in:] *Proceedings of the 24<sup>th</sup> International Congress of Byzantine Studies Plenary Sessions, Venice and Padua, 22–27 August, 2022*, vol. I, ed. E. FIORI, M. TRIZIO, Venice 2022, p. 422–451.

<sup>6</sup> M. RODINSON, *Studies in Arabic Manuscripts Relating to Cookery*, [in:] M. RODINSON, A.J. ARBERRY, Ch. PERRY, *Medieval Arab Cookery...*, p. 111–112. More analytically for how I used sources, see the Introduction of M. LEONTSINI, I. ANAGNOSTAKIS, *Food Mobilities...*, forthcoming.

because there are no Byzantine cookbooks, except for descriptions of food preparation recorded in a dietary-medical context.

For the purposes of this paper it is necessary to clarify as closely as possible what denoted foodstuffs or dishes categorized by the Byzantines as *sarakēnikos* and *aigypti(ak)os* (σαρακηνικός, αἰγύπτιος, αἰγυπτιακός) and by the Arabs as *rūmī* and *shāmī*<sup>7</sup>. Arabs and Byzantines who recorded these terms had already dealt with the question of the use and interpretation of the names of agricultural plants and ingredients in medicinal or culinary preparations. Galen addressed the question of the variant nomenclature specifying culinary preparations and medical terms in Greek dialects and other languages, often referring to the misunderstanding resulting from barbaric denominations. Although it is believed he wasn't especially interested in the issue, he devotes considerable attention to the definition of a group of key terms in several of his works, even devoting a special chapter in *On the Pulses*<sup>8</sup>.

The same is found later in translations or more generally in the effort to understand and clarify the terms for a wide audience. For example, the Nabatean Ibn Wahshiyya, in his tenth-century work *Nabatean Agriculture*, states that he translated the name of each tree and plant into commonly used names: *If I transmitted its name (only) in Nabatean, no one would know what I am speaking about. This is because some plants have become famous by their Arabic name, some by their Persian name, some by their Nabatean name and some by their Greek (rūmī) name, according to which name has become dominant*<sup>9</sup>.

Symeon Seth shared the same view on the use of names. He tried to systematize this diverse nomenclature with annotations on the origin of each product or preparation; indeed, he indicated that he was summarizing the existing knowledge that circulated in both Byzantium and the Islamic world. Accordingly, in the prologue of his treatise *Syntagma*, he claimed to have borrowed material from works by Persians, Agarenes, and Indians. He added that although he was aware of the

<sup>7</sup> On this see also the first section of M. LEONTSINI, I. ANAGNOSTAKIS, *Food Mobilities...*, forthcoming on what designates the Byzantine epithets *sarakēnikos* and *aigypti(ak)os* and the Arabic epithets *rūmī* and *shāmī* in a multitude of cases, especially when no other information is provided about the origin of foodstuff, the dish, plant, or ingredients.

<sup>8</sup> GALEN, *De differentia pulsuum libri IV*, II, 5, [in:] *Claudii Galeni opera omnia*, vol. VIII, ed. C.G. KÜHN, Leipzig 1824 (repr. Hildesheim 1965), p. 584–590. See the introduction of I. JOHNSTON in GALEN, *On the Constitution of the Art of Medicine. The Art of Medicine. A Method of Medicine to Glaucón*, ed. et trans. I. JOHNSTON, Cambridge, Mass.–London 2016 [= LCL, 523], p. XXXVI. See also translation and analysis I. JOHNSTON, N. PAPAVERAMIDOU, *Galen on the Pulses. Four Short Treatises and Four Long Treatises Medico-historical Analysis, Textual Tradition, Translation*, Berlin–Boston 2022/2023 [= MMM, 10].

<sup>9</sup> J. HÄMEEN-ANTTILA, *The Last Pagans of Iraq. Ibn Wahshiyya and his Nabatean Agriculture*, Leiden–Boston 2006 [= IHC, 63], p. 89–90. On Ibn Wahshiyya, the Nabateans' nationalism and recipes see N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 52–54.

names established in earlier medical texts, he would make use of the new names that were mutually known and recognized and which had become, in his time, familiar among the peoples of the Mediterranean Sea under the Byzantine and the Islamic rules: *Some of the foods are otherwise the common custom had established and otherwise by the ancient physicians, I will use the more common and familiar names so that the names can be understood by everybody*<sup>10</sup>.

This brief theoretical approach is necessary because after the seventh century, the mobility of material substances and preparations led to the inclusion of new products and new oriental names, mainly in the Byzantine diet. Many names of plants and recipes probably only became dominant in the elite scholarly circles through the translations during the intercultural mobility of the Islamic Golden Age. At the same time, some other names remained dominant using the adjective *rūmī* or *sarakēnikos* through a colloquial tradition or by borrowings for practical reasons through a daily routine.

### **Galen's Syrian *mēloplakous* (μηλοπλακοῦς), Greek *itrion* (ἴτριον), Arabic *khabīṣ*, *iṭriya*, and the dishes *sikbāja* and *ṣilāga***

***Mēloplakous***. It is well known that in Late Antiquity processed foods such as some sweets, preserved pickles, cured meats, fish, garum, and wines moved from the East to Rome. An interesting example of the circulation of these goods is presented in a fifth- or sixth-century papyrus mentioning provisions of sweet liquids and wines, salted meat and fish, and fish sauce in certain vessels, flagons, or jars<sup>11</sup>. Especially for the sweet preparations – starting from Galen's reports about the Syrian conserved and condensed preparations of apples and quinces exported from Syria to Rome – we later note a similar mobility of Arab food products from the same region, but directed this time towards New Rome, i.e., Byzantium. These items were offered as gifts when treaties were concluded and prisoners exchanged. The case of Harun al Rashid's culinary gifts to the Byzantine emperor and the Byzantine female captives mentioned on this occasion – some of whom were considered exceptional cooks of specialized delicacies – illustrates intercultural culinary mobility between Byzantines and Arabs from the similarity, influence, or borrowing of dishes that some called *rūmī* or *sarakēnikos*.

<sup>10</sup> *Simeonis Sethi Syntagma de alimentorum facultatibus*, proem. p. 1.11–17, ed. B. LANGKAVEL, Leipzig 1868 [= BSGR] (cetera: SYMEON SETH, *Syntagma*): ἐπεὶ δὲ τινὰς τῶν τροφῶν ἄλλως μὲν ἢ κοινῇ ὀνομάζει συνήθεια, ἄλλως δὲ ἢ τῶν παλαιῶν ἰατρῶν, τοῖς κοινοτέροις καὶ γνωριμωτέροις τῶν ὀνομάτων χρῆσθαι διὰ τὸ πᾶσι δῆλα τυγχάνειν. P. BOURAS-VALLIANATOS, S. XENOPHONTOS, *Galen's Reception in Byzantium: Symeon Seth and his Refutation of Galenic Theories on Human Physiology*, GRBS 55, 2015, p. 438; P. BOURAS-VALLIANATOS, *Cross-cultural Transfer...*, p. 980.

<sup>11</sup> A. MARAVELA-SOLBAKK, *Byzantine Inventory Lists of Food Provisions and Utensils on an Ashmolean Papyrus*, ZPE 170, 2009, p. 127–146, especially p. 129–134.

## Galen reports:

When it has been prepared well, the juice of Strouthian apples (στρουθίων μήλων χυλός), like that of the Cydonian ones, is stable, but this juice is less sweet and more astringent than the latter. So that, sometimes, this might also be of service for strengthening an excessively relaxed stomach. In Syria they also make the so-called quince-cake, *mēloplakous* (μηλοπλακοῦς), a food so stable (ἔδεσμα μόνιμον) that new containers (λοπάδας καινάς) filled with it are carried to Rome. It is compounded from honey and quince flesh (σαρκός μήλων) that has been made smooth by boiling with the honey<sup>12</sup>.

Strouthian apple was a different apple or quince species from the Cydonian (κυδώνιον μήλον), the common quince known also as *mēlokydōnion* (μηλοκυδώνιον). Despite the suggested translation of *mēloplakous* as quince-cake, the text does not say quince but just apple, *mēlon*. This cake (*mēloplakous*) made with the flesh of roasted (Strouthian) apple and honey was very well-preserved, as indicated by the expression *edesma monimon* (ἔδεσμα μόνιμον, stable food) and could be transported in a new flat dish (λοπάς) from Syria to Rome without spoiling.

In *On the Properties of foodstuffs* (*De alimentorum facultatibus*) and in *On Health* (*De sanitate tuenda*) Galen distinguishes the various preparations with Cydonian (κυδώνιον μήλον) from those with Strouthian apple (στρούθιον μήλον). He refers to the medication prepared not with the flesh of the quince (*kydōniōn mēlōn*, διὰ τῶν κυδωνίων μήλων) but with its thick juice (*chylos*, χυλός), or as he characteristically comments *the Greeks of our own Asia* (i.e. *Asia Minor*), *call Strouthian apples* (ἃ στρουθία καλοῦσιν οἱ κατὰ τὴν ἡμετέραν Ἀσίαν Ἕλληνες). This thick fruit juice boiled only with honey can be preserved in vessels for up to seven years, but it can also be prepared with a specific dosage of honey, white pepper, ginger, and vinegar – a recipe he considers *my own medication for people with anorexia*. He mentions the same recipe for the preparation of the flesh of Cydonian apples (διὰ τῆς σαρκός τῶν κυδωνίων μήλων), likely equally well-known by other physicians as *kydōnaton* (κυδωνάτον)<sup>13</sup>. Consequently, two distinct delicious preparations are described:

<sup>12</sup> *Galen De alimentorum facultatibus libri III*, II, 23, 3, ed. G. HELMREICH, Leipzig–Berlin 1923 [= CMG, 5.4.2] (cetera: GALEN, *De alimentorum facultatibus*), p. 293.18–24: μόνιμος ὁ τῶν στρουθίων μήλων χυλός ἐστιν, ὅταν καλῶς σκευασθῆ, καθάπερ γε καὶ ὁ τῶν κυδωνίων [...] ἐν Συρίᾳ δὲ καὶ τὸν καλούμενον μηλοπλακοῦντα συντιθέασιν, ἔδεσμα μόνιμον οὕτως, ὡς εἰς Ῥώμην κομιῆσθαι μεστάς αὐτοῦ λοπάδας καινάς. σύγκειται δ' ἐκ μελιτός τε καὶ σαρκός μήλων λελειωμένης ἐφθῆς ἅμα τῷ μέλιτι. For the translation see GALEN, *On the Properties of Foodstuffs* (*De alimentorum facultatibus*), trans. O.W. POWELL, praef. J. WILKINS, Cambridge 2003, p. 90. On these sweets see P. BOURAS-VALIANATOS, *Cross-cultural Transfer...*, p. 967–968.

<sup>13</sup> GALEN, *De alimentorum facultatibus*, II, 23, 1–2, p. 223; *Galen De sanitate tuenda libri VI*, VI, 14, 15, ed. K. KOCH, Leipzig–Berlin 1923 [= CMG, 5.4.2] (cetera: GALEN, *De sanitate tuenda*), p. 197: τὸ διὰ τοῦ χυλοῦ τῶν <κυδωνίων>μήλων φάρμακον, ἐπιτήδειον εἰς τε τὰς ὀρέξεις τοῖς ἀνορέκτοις [...] τῶν κυδωνίων μήλων τὰ μείζω τε καὶ ἡδίω καὶ ἦττον στρυφνά, ἃ στρουθία καλοῦσιν οἱ κατὰ τὴν ἡμετέραν Ἀσίαν Ἕλληνες, ἐκ τούτων τοῦ χυλοῦ λαβόντας [...] μῖξαι ζιγυβέρεως [...] πεπέρεως δὲ τοῦ λευκοῦ, καὶ οὕτω πάλιν ἐπὶ τῶν ὁμοίως διακεκαυμένων ἀνθρώκων ἐψησαι μέχρι μελιτώδους



one with the flesh of (Strouthian) apples boiled only with honey and the other with the flesh of Cydonian apples boiled with honey, white pepper, ginger, and vinegar. These preparations and especially *kydōnaton* (κυδωνάτων) are repeated and quoted by Oribasios (c. 320–403), Aetios from Amida in Upper Mesopotamia or modern Diyarbakır (mid-fifth to mid-sixth century), Alexander of Tralles (sixth century), and Paul of Aegina (c. 625 – c. 690)<sup>14</sup>. As we shall see below this type of sweet cake mentioned by Galen and the other physicians apparently continued to be prepared in Byzantium and the wider area of Syria now under Arab control and called Sham<sup>15</sup>. As already observed by researchers, some Arabic recipes for storing and preserving fruits – and particularly quinces – reflect those of Roman

συστάσεως [...] καὶ διὰ τῆς σαρκὸς τῶν κυδωνίων μῆλων σκεύαζε [...] μετ' ὄξους τε καὶ μέλιτος ἐψήσας. On the species of these apples and quinces see G. SIMEONOV, *Obst in Byzanz. Ein Beitrag zur Geschichte der Ernährung im östlichen Mittelmeerraum*, Saarbrücken 2013, p. 84–90; G. SIMEONOV, *Obst und Süßspeisen in den Ptochoprodromika*, JÖB 63, 2013, p. 214–215. On quince marmalade as medicine and preserve, E. FIELD, *Quinces, Oranges, Sugar, and Salt of Human Skull: Marmalade's Dual Role as a Medicine and a Preserve*, [in:] *Food Preservation from Early Times to the Present*, ed. C.A. WILSON, Edinburgh 1991, p. 5–31.

<sup>14</sup> *Oribasii Collectionum Medicarum Reliquiae, libri I–VIII*, V, 15–21, vol. I–IV, ed. J. RAEDER, Leipzig 1928–1933 [= CMG, 6] (cetera: ORIBASIOS, *Collectionum Medicarum*), p. 141; AETIOS OF AMIDA, *Sixteen Books on Medicine* (Βιβλία Ἱατρικά Ἑκκαίδεκα): *Aetii Amideni libri medicinales V–VIII*, V, 23, 140–143, ed. A. OLIVIERI, Berlin 1950 [= CMG, 8.2], p. 101, 115–118: (140) Ὑδροροσάτου σκευασία. ῥόδων νεαρῶν ἐξωνυχησμένων [...], (142) Ὑδρομήλου καὶ κουστομηνάτου σκευασία [...], (143) Κυδωνάτου σκευασία; PAULUS AEGINETA, *Epitomae medicae libri septem*, VII, 11, 27–30, vol. I–II, ed. J.L. HEIBERG, Leipzig–Berlin 1921–1924 [= CMG, 9] (cetera: PAULUS AEGINETA, *Epitomae medicae*), p. 304–305: (27) Τὸ διὰ μῆλων σαρκῶν. Μῆλων Κυδωνίων [...] πετέρεως, ἀνίσου, Λιβυστικοῦ [...] ζιγγιβέρεως [...], (28) Τὸ διὰ τοῦ χυλοῦ τῶν μῆλων πρὸς ἀνορέκτους καὶ δυσπεποῦντας Μήλων Κυδωνίων [...] ὁ Γαληνὸς σκευάζει [...], (29) Μηλοπλακουντίου σκευή [...], (30) Κυδωνάτων τριπτόν ἔχον σῶα τὰ τεμάχη. Galen is invoked in one of the typical examples given by ALEXANDER OF TRALLES, *Therapeutica – Alexander von Tralles*, vol. I–II, ed. T. PUSCHMANN, Vienna 1878–1879 (cetera: ALEXANDER OF TRALLES, *Therapeutica*), vol. I, p. 523.2–13: καὶ ταῦτα σαφῶς βοῶντος τοῦ σοφωτάτου Γαληνοῦ [...] εἰ δὲ ἡδέως ἐχοιέν τι, προσπλέεσθαι ἀρμόζει μόνον ὑδρομέλι μικρὸν ἢ ὑδροροσάτον ἢ ῥόδομηλον. τὸ δὲ ὑδρομήλον μάλιστα τὸ Κιβυρατικὸν ὡς πολέμιον αὐτοῖς φεύγειν δεῖ καὶ τὸ ὄξιμελι; on preparations with quinces and several spices see also *Therapeutica*, vol. II, p. 257.20–21: ἐξ ὧν ἐστί καὶ τὸ διὰ τῶν κυδωνίων μῆλων σκευαζόμενον ἔχον καὶ πετέρεως καὶ σύμρνης ἢ λιβυστικοῦ ἢ κόστου ἢ γλήχωνος. On *kydōnaton* see *Ptochoprodromos*, ed. H. EIDENEIER, Cologne 1991 [= NgrMA, 5], and new edition used here, H. EIDENEIER, *Πτωχοπρόδρομος*, poem IV, 329, Herakleion 2012 (cetera: *Ptochoprodromos*); G. SIMEONOV, *Obst und Süßspeisen...*, p. 214. See the use of *kydōnaton*, *hydromēlon* and *hydrorosaton* proposed Nikolaos Myrepsos' *Dynameron*, ed. I. VALIAKOS, Heidelberg 2020 (cetera: NIKOLAOS MYREPSOS, *Dynameron*), sections 22–31, p. 711–715 (κυδωνάτων), sections 27–30, p. 1058–1059 (Ὑδρομήλων σκευασία). See also B. ΚΙΤΑΡÇI BAYRI, *Warriors, Martyrs, and Dervishes. Moving Frontiers, Shifting Identities in the Land of Rome (13<sup>th</sup>–15<sup>th</sup> centuries)*, Leiden–Boston 2020 [= MMe, 119], p. 82.

<sup>15</sup> On Byzantine preserves see the information provided, which lacks proper citation to the referenced source: *Preserves of quince and lemon appear – along with rose, apple, plum and pear – in the Book of ceremonies of the Byzantine Emperor Constantine VII Porphyrogenetos*, M. TOUSSAINT-SAMAT, *A History of Food*, Engl. trans. A. BELL, Oxford–Cambridge 1992, 2<sup>nd</sup> ed. 2009, p. 507.

Apicius<sup>16</sup>. But this time these identical or similar preparations are destined for New Rome, Constantinople, or sent as gifts to the emperor.

***Khabīṣ***. After the Arab conquest of Herakleia in Cilicia in 806 and in the context of a new treaty and exchange of prisoners, Harun al-Rashid's gifts to Emperor Nikephoros I were sweets and dried fruits as well as, according to Tabari, many cakes, *khabīṣ* (pl. *akhbisa* in the text)<sup>17</sup>. These cake variations are made with starch, *samīdh* flour (free of bran), honey, rose syrup, *jullāb*, nuts, or fruits such as carrot, dates, and apples<sup>18</sup>. Al-Warrāq provides numerous recipes, from which I infer the following: *khabīṣa Ma'mūniyya* or by al-Ma'mūn is a moist condensed cake made with butter and sweet sesame oil (ch. 94); *khabīṣa muwallada* is non-Arab (ch. 94); *khabīṣ* made with dates, apples, carrots, and particularly Levantine Lebanese apples, *Shāmī Labnānī* (ch. 95); condensed *khabīṣ* made with walnut, sugar, and skinned almond (ch. 96); and uncooked *khabīṣ* crumbly and condensed (ch. 97)<sup>19</sup>. Like the *khabīṣ* with almonds, the *Ma'mūniyya* recipe – whether a type of marzipan or a *halāwa* made with *samīdh* flour, oil and sugar – is attributed to the caliph Mamun, and recipe's name probably derives from this renowned gourmet caliph Mamun, son of Harun, who sponsored culinary competitions and even participated in some<sup>20</sup>. Besides, it is known that *an interest in gastronomy appears to have been a pastime of various patrician personalities including several princes of the ruling Abbasid house*<sup>21</sup>.

<sup>16</sup> P.B. LEWICKA, *Food and Foodways...*, p. 272–273.

<sup>17</sup> AL-TABARI, *The History of al-Ṭabarī*, vol. XXX, *The Conquest of Iraq, Southwestern Persia, and Egypt*, trans. H. GAUTIER, A. JUYNBOLL, Albany 1989 (cetera: *The History of al-Ṭabarī*), p. 263–264 [years 710–711]. M. CANARD, *La prise d'Héraclée et les relations entre Harun ar-Rashid et l'empereur Nicéphore 1<sup>er</sup>*, B 32, 1962, p. 359–360, and on *khabīṣ* (pl. *akhbisa*) p. 359 n. 4. Fr. HILD, M. RESTLE, *Kappadokien (Kappadokia, Charsianon, Sebasteia und Lykandos)*, Vienna 1981 [= TIB, 2.149], p. 188–190. See also M. CANARD, *Les relations politiques et sociales entre Byzance et les Arabes*, DOP 18, 1964, p. 54–55.

<sup>18</sup> See description of various *akhbisa*, N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 597–598; P.B. LEWICKA, *Food and Foodways...*, p. 152–163, 247 n. 570, p. 292.

<sup>19</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ed. K. ÖHRNBERG, S. MROUEH, Helsinki 1987 [= SO. SOF, 60]; English trans. in N. NASRALLAH, *Annals of the Caliphs' Kitchens...* (cetera for English trans.: IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh* and for comments: N. NASRALLAH, *Annals of the Caliphs' Kitchens...*), IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 94–97, p. 388–403, and analytically *khabīṣa Ma'mūniyya* ch. 94 p. 389, 392–393, *khabīṣa muwallada*, non-Arab, ch. 94, p. 393, *khabīṣ* of Levantine Lebanese apples, *Shāmī Labnānī*, ch. 95, p. 397; see also several *khabīṣ* recipes in Ch. PERRY, *The Description of Familiar Foods (Kitāb wasfal-at-ima al-mu'tāda)*, [in:] M. RODINSON, A.J. ARBERRY, Ch. PERRY, *Medieval Arab Cookery...*, p. 412–415.

<sup>20</sup> This recipe passed to Christian West as *mamonnia*, M. RODINSON, *Ma'mūniyya East and West*, trans. B. INSKIP, [in:] M. RODINSON, A.J. ARBERRY, Ch. PERRY, *Medieval Arab Cookery...*, p. 183–197. N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 597–598.

<sup>21</sup> D. WAINES, *Dietetics in Medieval Islamic Culture*, MHis 43.2, 1999, p. 231. On the Arab *nudamā'*, kings' and princes' banqueting companions, J. SADAN, *Nadīm*, [in:] *The Encyclopaedia of Islam*, vol. VII, p. 849–852.



It seems more than certain that the *khabiṣ* made with apples, especially Levantine Lebanese apples, *Shāmī Labnānī*, is an Arab adaptation or continuation of the famous Syrian recipe from Galen's time, *mēloplakous* (μηλοπλακοῦς)<sup>22</sup>. It should be noted that the word *plakous* (πλακοῦς), meaning flat cake, probably via Armenian, was used by Arabs as *iflaghun*, a kind of bread or cake with butter and honey. Similar recipes mentioned by Galen for preserving apples and quinces boiled with honey, pepper, ginger, and vinegar also appear in Arabic culinary texts for conserving large and fragrant Lebanese apples and quinces boiled until mushy for *khabiṣ* and for preparing *mayba*, the aromatic medicinal drinks from apple and quince juice boiled with honey, long pepper, ginger, and other spices<sup>23</sup>. Al-Warrāq often uses *Shāmī* Lebanese apples and quinces – or just *Shāmī*, Syrian, or Levantine apples and quinces – in fermented component recipes (ch. 40) or honey-preserving recipes, stating that they resemble *khabiṣ*<sup>24</sup>. According to al-Warrāq, a type of *halāwa* similar to the non-Arab *khabiṣa muwallada* was prepared by Bida, a famous Byzantine slave in the court of Harun<sup>25</sup>. Bida, a cook and singer, was an *safrā' muwallada*. Nasrallah notes: *Muwallada indicates she was born and raised among Arabs but was not of pure Arab blood. She was safrā, i.e. originally Rūmiyya, from Bilād al-Rūm (Byzantium)*<sup>26</sup>. She could have been a Christian of *Shām* or the borderlands that suffered under the Arabs because – according to al-Ṭabarī – Harun feared that the Christians of the frontier regions were in collusion with

<sup>22</sup> GALEN, *De alimentorum facultatibus*, II, 23, 3, p. 293.18–24.

<sup>23</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 124–125, p. 479–480, 486; N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 637. On *iflaghun* (< Gr πλακοῦς, πλακοῦντιον) see M. RODINSON, *Studies in Arabic Manuscripts...*, p. 143 n. 1, p. 154–155. See also the Recipe for [pickled] quince, Anonymous, *al-fawā'id fi tanwī' al-mawā'id*, ed. M. MARÍN, D. WAINES, Beirut 1993 and English trans. *Treasure Trove of Benefits and Variety at the Table. A Fourteenth-Century Egyptian Cookbook. English Translation, with an Introduction and Glossary*, trans. N. NASRALLAH, Leiden–Boston 2018 [= IHC, 148] (cetera for the number and translation of recipe in: Anonymous *Kanz*, and comments: N. NASRALLAH, *Treasure Trove of Benefits and Variety at the Table*), Anonymous *Kanz*, p. 366–369 (592–595).

<sup>24</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 40, p. 205–207; ch. 125, p. 486 and on varieties of apples used in such preparation see N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 640.

<sup>25</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 49, p. 249–253; N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 32–35, 525. The correct transliteration is Bid'a, but we use the form Bida here as we do with other Arabic names. On cooking, cooks and female cooks in the Chalif's courts see D. WAINES, *Ṭabkh*, [in:] *The Encyclopaedia of Islam*, vol. X, Leiden 2000, p. 30–32; M.A.J. BEG, *Ṭabkh*, [in:] *The Encyclopaedia of Islam*, vol. X, p. 24; on Byzantine women in Arabic sources without referring to Bida, see N.M. EL-CHEIKH, *Describing the Other to Get at the Self: Byzantine Women in Arabic sources (8<sup>th</sup>–11<sup>th</sup> Centuries)*, JESHO 40, 1997, p. 239–250 and on the name Bida see H. TAGHAVI, E. ROOHI, N. KARIMI, *An Ignored Arabic Account of a Byzantine Royal Woman*, Al-Mas 32, 2020, p. 185–201.

<sup>26</sup> On *asfar/safar* see I. GOLDZIHNER, *Aşfar*, [in:] *The Encyclopaedia of Islam*, vol. I, Leiden 1991, p. 688. N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 249 n. 5, p. 525, 537.

the Greeks so he had the churches in these regions destroyed, perhaps in retaliation for similar Byzantine military expeditions<sup>27</sup>.

**Sikbāj stew (Sikbāja).** Bida was also well-known for her desserts, *halāwa* dishes, her *lawzinaj* ‘almond confection’ with fresh almonds<sup>28</sup>, and especially for her *sikbāj*, a sweet-sour beef stew with vinegar that she is said to have made for Harun<sup>29</sup>. After Harun’s death, his son Caliph al-Amin (r. 809–813) craved *sikbāj* and asked Ibn al-Mahdi to send him Bida, this excellent cook who had already prepared *sikbāj* for his father. Bida, whose name means “one who excels in everything”<sup>30</sup>, created a dish with more varieties (thirty kinds of foods) and even more delicious than the one made for Harun. The description of Bida’s *sikbāj* dish is so exuberant that it definitely borders on incredible. The arrangement of the items during serving was more than impressive, including the large number of ingredients from various meats, sausages, spices, and vegetables. In the exaggeration of the ingredients used, the description is very similar to the fantastic Byzantine *monokythron*, which in turn resembles the Arab dish *tharīd* with the same ingredients – bread pieces in the broth of different types of meat or, in the monastic version, fish, cheeses, onions, eggs, oil, and spices<sup>31</sup>. By contrast, other *sikbāj* recipes that follow Bida’s in the same chapter of al-Warrāq are simpler, such as beef cooked in wine vinegar, onions, sugar, and spices. Their basic characteristics are reminiscent of Roman and Byzantine meats and game cooked in wine vinegar, plenty of onions, honey,

<sup>27</sup> *The History of al-Ṭabarī*, p. 267–268 [years 712–713]; M. CANARD, *La prise d’Héraclée...*, p. 361.

<sup>28</sup> On *lawzinaj* see the controversial etymology, but only accepted for the French and English words *lozen*, *lozeyn* meaning «gâteau», M. RODINSON, *Sur l’étymologie de «losange»*, [in:] *Studi orientalistici in onore di Giorgio Levi Della Vida*, vol. II, Rome 1956, p. 425–435. On the Akkadian etymology of the name and its Persian origin, see N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 51 n. 149.

<sup>29</sup> *Sikbāj* was a dish loved and sought after by rulers and served also to the Mamluk sultan, P.B. LEWICKA, *Food and Foodways...*, p. 191 n. 273, and on *fish à la sikbāj*, p. 215. On *sikbāj* recipes, N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 51, 53–55, 108–109, 147, 606, 617, *Anonymous Kanz*, p. 85 (7), 132 (90), 154 (136), and fish *sikbāj* 195 (235) and 201 (249), N. NASRALLAH, *Treasure Trove of Benefits and Variety at the Table*, p. 7, 175, 499.

<sup>30</sup> N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 250 n. 7.

<sup>31</sup> On the *monokythron* see, *Ptochoprodromos*, poem II, 104–106, poem IV, 201–217, p. 115, 149–150. See also on *monokythron* and *agiozoumion*, J. KODER, *Stew and Salted Meat...*, p. 59–72; E. KISLINGER, *Christians of the East: Rules and Realities of the Byzantine Diet*, [in:] *Food. A Culinary History*, ed. J.-L. FLANDRIN, M. MONTANARI, Columbia 1999, p. 194–206; I. ANAGNOSTAKIS, *Byzantine Delicacies*, [in:] *Flavours and Delights. Tastes and Pleasures of Ancient and Byzantine Cuisine*, ed. IDEM, Athens 2013, p. 100–101; B. CASEAU, *Nourritures terrestres, nourritures célestes. La culture alimentaire à Byzance*, Paris 2015, p. 206; M. LEONTSINI, *Discovering, Sharing and Tasting: Flavours and Culinary Practices between Byzantium and the Arab World*, [in:] *Προβολές και αντανακλάσεις. Αραβικά και Ελληνικά κατά τους Μέσους Χρόνους*, ed. E. ΚΟΝΔΥΛΗ, Αθήνα 2020, p. 113–115. On *tharīd* and especially a *tharīd* with a variety of meats, breadcrumbs, spices, and *rūmī* leeks known as *Shāmiyya*, a recipe from Syria prepared by some Christians see IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabikh*, ch. 83, p. 337–343; N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 34, 39, 52; I. SHAHID, *Byzantium and the Arabs in the Sixth Century*, vol. II.2, *Economic, Social, and Cultural History*, Washington, D.C. 2009, p. 128, 130.

and spices similar to the modern-day Greek cuisine's *stifado*, a stew made with beef or rabbit. It would be futile to seek an equivalent Roman or Byzantine or even Christian dish to the fabulous dish of a *Rumiyya* slave, such as Bida's dish. The *sikbāj*, one of the grandest medieval dishes, was clearly stated as Sassanid and is considered the queen of dishes, a dish of Chosroes, yet it is very significant that it is attributed as a great creation of a *Rumiyya* because *Byzantine slave girls were among the most preferred by Abbasids for both their physical appeal and domestic prowess*<sup>32</sup>. It is quite intriguing that a poet of Byzantine origin known as Ibn Rūmi, Abū al-Ḥasan Alī ibn al-Abbās ibn Jūraj, i.e. the grandson of George (836–896), also praised Bida in a poem<sup>33</sup>.

***Silāqa Rūmiyya***. In addition to Bida's dish *sikbāj*, and its potential resemblance to Byzantine culinary creations, there are also some other complex Arabic recipes related to Byzantine cuisine like *šilāga rūmiyya*, a Byzantine recipe of boiled sheep and kid extremities or heads served with a lot of mustard sauce that is quite different from *šilāga fārisiyya*, a Persian recipe<sup>34</sup>. Particularly noteworthy are the interpretations in the *Ahmet's Dreambook*, an Arabic work translated into Greek (ninth century) invoking Indian, Persian, and Egyptian interpretations of dreams. For instance, it states that dreaming of eating the heads and feet of animals means prosperity and health, money, leadership, and power. The same interpretation is given to dreams in which pig heads are consumed, with one notable difference: in the Greek translation, the negative aspects of pork and its positive symbolism of profit are greatly diminished. This chapter of the Greek translation appears to have been de-Islamicized by its Greek author<sup>35</sup>.

Byzantines, considered by the Arabs as *chanzir* (pig) eaters, *chatzirofagoi* (χατζιροφάγοι), were careful with the food offered to Arab envoys in Constantinople and avoided pork dishes at their receptions. The tenth-century Arab writers ibn Rosteh (d. after 903) and al-Muqaddasī (c. 945/946–991) report that the Byzantines do not force any of the Muslim prisoners to eat pork<sup>36</sup>. Obviously, while there

<sup>32</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 49, p. 248. On *sikbāj*, one of the grandest medieval dishes, Ch. PERRY, *A Thousand and One 'Fritters': The Food of The Arabian Nights*, [in:] M. RODINSON, A.J. ARBERRY, Ch. PERRY, *Medieval Arab Cookery...*, p. 490. On the most preferred slave girls by Abbasids, N.M. EL-CHEIKH, *Byzantium Viewed by the Arabs*, Cambridge, Mass. 2004, p. 239, and N.Z. HERMES, *The European Other in Medieval Arabic Literature and Culture. Ninth-twelfth Century AD*, New York 2012, p. 77.

<sup>33</sup> N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 525, 530; B. GRUENDLER, *Medieval Arabic Praise Poetry. Ibn Al-Rūmī and the Patron's Redemption*, London–New York 2003.

<sup>34</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 44, p. 222–225; N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, commentary on *šilāga*: boiled dishes of vegetables dressed with oil and seasoned with vinegar, herbs, and spices, p. 614–615. For more, see M. LEONTSINI, I. ANAGNOSTAKIS, *Food Mobilities...*, forthcoming.

<sup>35</sup> M. MAVROUDI, *A Byzantine Book on Dream Interpretation. The Oneirocriticon of Achmet and its Arabic Sources*, Leiden–Boston–Cologne 2002 [= MMe, 36], p. 190–191, 194, 340–345.

<sup>36</sup> Digenis's mother was condemned as a pig-eater *chatzirofagousa* (χατζιροφαγούσα) or *chanzyrissa* (χανζυρίσσα), *Digenis Akritis. The Grottaferrata and Escorial Versions*, ed. E. JEFFREYS,

are cured meats like the completely dried *namaksūd* and *qadīd* (both marinated in salt, vinegar, thyme, and black pepper)<sup>37</sup>, there are no Arabic delicacies associated with salty or smoked, jerked pig meat such as cured pork bacon, or sausages, which were particularly popular among the Byzantines. One more Arabic recipe related to Byzantine cuisine is mentioned in *Kitāb Waṣlah ilā al-ḥabīb* of the thirteenth century. It is a recipe with *laban* (dairy products) called *labaniya rūmīya*, translated into French by Rodinson as “*laban à la grecque (ṣifa labaniya rūmīya)*”, plat de viande au *laban* et au riz avec des légumes” or a recipe “de Byzance” and in English as “*laban à la grecque* a meat dish with *laban* and rice with vegetables” or “from Byzantium”<sup>38</sup>. We could assume that this *laban rūmī* was a Byzantine dairy product imported from Byzantium or made à la grecque<sup>39</sup>.

**Itrion, iṭriya.** A particularly complex case is the ancient Greek *itrion* (ἴτριον, Byzantine ἰτρίν, *itrin*) a kind of cake and pasta, and its relation to the Arabic *iṭriyah/ittriya*. The particularity is due not so much to the similarity of name but to proposals of the controversial invention of pasta, which is not necessarily Greek

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Cambridge 1998 [= CMC, 7], *chanzyrissa* (χανζύρισσα) versio G, II, 82, p. 28–29, *chatzirofagoussa* (χατζιροφαγούσα) versio E, 269–270, p. 258; see on this the section on the legend of Digenis Akritis and the akritai, M. LEONTSINI, I. ANAGNOSTAKIS, *Food Mobilities...*, forthcoming. On Arab writers' reports, A. VASILIEV, *Harun-ibn-Yahya and his Description of Constantinople*, SK 5, 1932, p. 149–163; A. VASILIEV, M. CANARD, *Byzance et les Arabes. La dynastie macédonienne (867–959)*, vol. II.2, Brussels 1950, p. 388, 423; on a different approach and remarks see L. SIMEONOVA, *Foreigners in Tenth-Century Byzantium: A Contribution to the History of Cultural Encounter*, [in:] *Strangers to Themselves. The Byzantine Outsider. Papers from the Thirty-second Spring Symposium of Byzantine Studies. University of Sussex, Brighton, March 1998*, ed. D.C. SMYTHE, Aldershot 2000, p. 229–244.

<sup>37</sup> *Namaksūd* was a cured meat made by salting with crushed salt the whole animal or half of it, while *qadīd* was first sliced into long very thin strips and then cured, N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 718.

<sup>38</sup> *Kitāb Waṣlah ilā al-ḥabīb fi waṣf al-ṭayyibāt wa-al-ṭīb*, [in:] *Scents and Flavors. A Syrian Cookbook*, ch. 6.20, ed. et trans. Ch. PERRY, New York 2017 (cetera: *Kitāb Waṣlah ilā al-ḥabīb*), according to M. RODINSON, *Studies in Arabic Manuscripts...*, p. 138, 153. This reference does not exist in the Syrian version (unlike other recipes) and is therefore absent from the edition of *Scents and Flavors. A Syrian Cookbook*, ed. et trans. Ch. PERRY, New York 2017. See also K. KANABAS, *Γαλακτοκομικά προϊόντα στο βυζαντινό τραπέζι. Αναζητώντας εντυπώσεις και μαρτυρίες από τη σκοπιά των Αράβων*, [in:] *Η Ιστορία του ελληνικού γάλακτος και των προϊόντων του*. 10<sup>th</sup> Three-days Workshop, Xanthi, 7–9 October, 2005, Piraeus Group Cultural Foundation, Aristides Daskalopoulos Foundation, Athens 2008, p. 193–198 especially p. 194, and English summary, p. 552–553 (= *Milk Products on the Byzantine Table. Impression and Reports from the Arab Perspective*); Fr. MOHREN, *Il libro de la cocina. Un ricettario tra Oriente e Occidente*, Heidelberg 2016, p. 20.

<sup>39</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 44, p. 223 and on other *jubn*, cheeses and *laban* and the *jubn rūmī*, N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 586–587. In this case, see the remarks on how to understand names: *some ingredients bear names of more distant places, e.g. Persian yoghurt laban Fārisi [...] the name is unlikely to refer to an actual place of origin (it is difficult to conceive that yoghurt was imported to Egypt from Persia in the fourteenth century) but to a particular type of yoghurt, perhaps like the term 'Greek' attached to thick yoghurt today*, S. WEINGARTEN, *Treasure Trove of Benefits and Variety at the Table: a Fourteenth-century Egyptian Cookbook, Edited and Translated by Nawal Nasrallah*, MHR 33.2, 2018, p. 229–231, here 230.

because its description is preserved very early in a multitude of Greek sources. The words *itrion* and *iṭriya* and some methods of preparing noodles are definitely of Mesopotamian origin. For both Greek and Arabic gastronomy, the word and some of its original preparations probably derive from the Akkadian and Aramaic *iṭriya*, a name that continued to be used during Classical and Hellenistic times and was handed down to the peoples of the eastern Mediterranean basin<sup>40</sup>. In one of the 25 discovered Babylonian stew recipes, dated to 1700 BC, this is considered the first recorded attempt at making noodles or pasta like those of ancient and Abbasid *iṭriya*; the later *itria* and *iṭriya* is just a continuity of practices and not a direct Babylonian origin with likely other venues such as Akkadian, Aramaic, Persian and Greek traditions assimilated by Arabs<sup>41</sup>. The Greeks had known quite early a kind of pasta with different names *laganon* and *ryema* (λάγανον, ῥύεμα) but also adopted a similar oriental preparation called *itrion*, which they subsequently spread in the many variations shared by all Mediterranean and Middle Eastern peoples. *Itrion* continued to be used in Byzantium; the same occurred with the Arabs, and probably both provide the Italian medieval equivalent that survives in modern Italian dialects and beyond<sup>42</sup>. However *assigning to such a multifarious good as pasta a single source is surely wrong headed*<sup>43</sup>.

<sup>40</sup> Ch. PERRY, *The Oldest Mediterranean Noodle: a Cautionary Tale*, PPC 9, 1981, p. 42–45. A. DALBY, *Food in the Ancient World from A to Z*, London–New York 2003, p. 251 entry ‘pasta’ with bibliography. J. ARBERRY, *A Baghdad Cookery Book*, in M. RODINSON, A.J. ARBERRY, Ch. PERRY, *Medieval Arab Cookery*, p. 53. IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 72, p. 38, and Glossary in N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 561. *Anonymous Andalusian Cookbook of the Thirteenth Century: La cocina, hispano-magrebí durante la época almohade*, ch. 8, ed. A. HUICI MIRANDA, Madrid 2005, and *An Anonymous Andalusian Cookbook*, ed. C. MARTINELLI, Engl. trans. C. PERRY, Scotts Valley, CA 2012, and French trans. *Traité de cuisine arabo-andalouse dit Anonyme andalou. Traduction du manuscrit Colin, ms 7009-BnF*, trans. J.-M. LAURENT, Saint-Ouen 2016; *Anonymous Andalusian Cookbook. The Book of Cooking in Maghreb and Andalus in the era of Almohads, by an unknown author. Kitāb al tabikh fi-l-Maghrib wa-l-Andalus fi asr al-Muwahhidin, li-mu’allif majhul*, ch. 8, ed. C. MARTINELLI, C. PERRY, D. FRIEDMAN, *Raccolta di Testi per la Storia della Gastronomia digitalizzati e restaurati da Edoardo Mori* 2018, digitalized version, p. 65–66 (cetera: *Anonymous Andalusian Cookbook*, ed. C. MARTINELLI, C. PERRY, D. FRIEDMAN); Ch. PERRY, *The Description of Familiar Foods...*, p. 333.

<sup>41</sup> J. BOTTÉRO, *Mesopotamian Culinary Texts*, Winona Lake 1995, p. 3–21; IDEM, *The Oldest Cuisine in the World. Cooking in Mesopotamia*, Chicago 2004, p. 25–35; see also Glossary, in N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 45–50.

<sup>42</sup> On the ancient origin and the Greek invention of pasta, see Ph.P. BOBER, *Art, Culture, and Cuisine. Ancient and Medieval Gastronomy*, Chicago 2000, p. 116–117, and 156–157. Pray Bober believes that *when the Arabic word itriyah means noodles it is difficult not to see a derivation from the Greek*, and in dialects of Salentine peninsula and Taranto region *lagana* and *itrion* survive in local dishes, p. 116–117. On the Arabic invention of pasta, see A. WATSON, *Agricultural Innovation in the Early Islamic World. The Diffusion of Crops and Farming Techniques, 700–1100*, Cambridge 1983, p. 22–23; for a critique of this thesis see P. SQUATRITI, *Of Seeds, Seasons, and Seas: Andrew Watson’s Medieval Agrarian Revolution Forty Years Later*, JECh 74, 2014, p. 1205–1220 here 1209 with bibliography.

<sup>43</sup> P. SQUATRITI, *Of Seeds, Seasons, and Seas...*, p. 1209.



The Greek term *itriion* is frequently associated with a dough product made from wheat flour and prepared through boiling. It was originally a dessert consisting of a cake flavoured with sesame and honey referred to by the ancient Greeks and later as a pasta-like substance described by Athenaios, Hesychios, and mentioned by Dioscorides, and physicians like Galen and Oribasios, whose influence on mediaeval Arabic botany and pharmacopoeia and concepts of food are considered important<sup>44</sup>. According to Galen, *there are two kinds of itria, the better kind called ryemata* [‘flowed out’] *and the poorer called lagana* [usually translated ‘wafer’]<sup>45</sup>. According another translation

there are two sorts of cake: the better sort that they call ‘pour-cakes’ and the inferior ‘bread-cakes’. Everything made up of these and *semidalis* is slow to pass, produces a thick humour which is obstructive of the food passages in the liver, causes enlargement of the sickly spleen and produces kidney stones; but if they are concocted and properly turned into blood, they are quite nutritious. Things prepared with honey are of mixed property, since the honey itself has fine juice that thins whatever it is associated with<sup>46</sup>.

The Arabs, repeating Galen and the Byzantine physicians, also believe that the *itriya* noodles are hard to digest because they are made with unfermented dough<sup>47</sup>. It would be very interesting to research how the word in context is rendered in the medieval Arabic translations of these physicians.

<sup>44</sup> *Athenaei Naucraticae Deipnosophistarum libri XV*, ed. G. KAIBEL, vol. I–II, Leipzig 1887 (repr. Leipzig 1965); vol. III, Leipzig 1890 (repr. Leipzig 1965–1966) [= BSGR] (cetera: ATHENAIOS, *The Deipnosophists*), Book XIV, 55, vol. III, p. 428–429. *Pedanii Dioscuridis Anazarbei de materia medica libri quinque*, IV, 63, vol. II, ed. M. WELLMANN, Berlin 1907, p. 216.1–3 (cetera: DIOSCORIDES PEDANIUS, *De materia medica*). ORIBASIOS, *Collectionum Medicarum*, I, 9, p. 11. 22–34; IV, 11, p. 108–109.1–15; *Hesychii Alexandrini lexicon*, vol. I–II, (A–O), ed. K. LATTE, Copenhagen vol. I: 1953, vol. II: 1966, s.v. *itria*. On Greek physicians influence on mediaeval Arabic dietetics, see D. WAINES, *Dietetics in Medieval...*, p. 228–240. On the influence of Galenic medicine on mediaeval Arabic concepts of food and on chapters 2–30 of IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh* based on Galenic theory, see N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 17, 55–65, 94 n. 2, and p. 532, and IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 4, p. 95 where *al-Warrāq* states that “you need to understand all these facts taken from Galen’s *Book of Familiar Food*”, i.e. a translated volume titled *Kitāb al-Aghdhiya al-Mustla’ mala*, meaning book of familiar food.

<sup>45</sup> GALEN, *De alimentorum facultatibus*, I, 4, p. 223, and translation of the first lines A. DALBY, *Flavours of Byzantium*, London 2003 (repr. as *Tastes of Byzantium. The Cuisine of a Legendary Empire*, London 2010), p. 79.

<sup>46</sup> GALEN, *De alimentorum facultatibus*, I, 4, p. 223: Περὶ ἰτριῶν. Διττὸν δὲ τῶν ἰτριῶν τὸ εἶδος, ἄμεινον μὲν, ὃ καλοῦσι ῥήματα, φαυλότερον δὲ τὰ λάγανα. πάντ’ οὖν, ὅσα διὰ τούτων τε καὶ σεμιδάλεως συντίθεται, παχύχυμὰ τ’ ἐστὶ καὶ βραδυπόρα καὶ τῶν καθ’ ἧπαρ διεξόδων τῆς τροφῆς ἐμφρακτικὰ καὶ σπληνὸς ἀσθενοῦς αὐξητικὰ καὶ λίθων ἐν νεφροῖς γεννητικὰ, τρόφιμα δ’ ἱκανῶς, εἰ πεφθειρτε καὶ καλῶς αἰματωθεῖ. τὰ δὲ σὺν μέλιτι σκευαζόμενα μικτῆς γίγνεται δυνάμεως, ὡς ἂν τοῦ μέλιτος αὐτοῦ τε λεπτὸν ἔχοντος χυμὸν ὅσοις τ’ ἂν ὀμίληση καὶ ταῦτα λεπτύνοντος. On Translation, O.W. POWELL – GALEN, *On the Properties of Foods*, p. 44.

<sup>47</sup> N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 561–562.

According to Galen, the name *itrion* in the second century AD was already considered an old name when he states that the ancients used *itria* for what we now call *lagana* and *ryemata*<sup>48</sup>. The description of *itrion* offered by Oribasius based on Antyllos, Athenaios, and Galen is also very analytical; aside from sweet cake with honey and sesame, *itrion* corresponds to groats or a kind of thin, dried strings of noodles made with stiff unfermented dough vermicelli like *itriya* in medieval Arabic cookbooks.

*Itrion* should be made from the wheat from which the best baked breads are made; it must be very thin; for when it is thick it bakes unevenly; it must be pounded extremely finely so that it is of the same size as groats; boil in water [...] with a little salt and no olive oil or can be added just a very small amount of olive oil, and having first boiled the olive-oil with the water sprinkle on the *itrion*<sup>49</sup>.

It is important to note that in both Greek and Arabic recipes, *itria* and *itriya* are boiled in fatty chicken broths or in fat-rich animal components. Rufos, a Greek physician from the first and early second centuries AD, gave a recipe for *itria* that is nearly identical to *Nibāṭiyya*, a dish mentioned by Ibn Sayyār al-Warrāq's *Kitāb al-Ṭabīkh*. *Nibāṭiyya* is made with a fatty chicken broth, ground chickpeas, and cheese. After adding the spices, three handfuls of *itriya* formed from white dough are added. Both recipes call for boiling plump chickens, water, and olive oil twice<sup>50</sup>. Fatty broths derived from poultry containing salt and olive oil are even discouraged by Byzantine physicians for individuals with gastric ulcers. Boiling *itrion*, *semidalis* (the highest quality wheaten flour), and groats of rice-wheat in such broths is advised only in exceptional circumstances<sup>51</sup>. It is worth underlining that

<sup>48</sup> Galeni *De rebus boni malique suci*, IV, 11, ed. G. HELMREICH, Leipzig–Berlin 1923 [= CMG, 5.4.2], p. 400: καὶ αὐτὰ δὲ καθ' ἑαυτὰ τὰ λάγανα τε καὶ τὰ ρυήματα καὶ πᾶν ἄζυμον ἐκ πυροῦ πέμμα καὶ μᾶλλον ὅταν καὶ τυροῦ τι προσλάβῃ, παχύχυμον ἰκανῶς ἐστίν. ὀνομάζειν δέ μοι δοκοῦσιν ταῦτα τὰ νῦν ὑφ' ἡμῶν καλούμενα λάγανα τε καὶ ρυήματα κοινῇ προσηγορίᾳ τῆ τῶν ἰτρίων οἱ παλαιοί.

<sup>49</sup> ORIBASIOS, *Collectionum Medicarum*, IV, 11, 9–11, p. 310, 316: τὸ μὲν οὖν ἴτριον ἐκ πυρῶν ἔστω, ὧν καὶ ὁ ἄρτος ὠπτημένος καλῶς· λεπτόν δ' αὐτὸ δεῖ εἶναι σφόδρα· τὸ γὰρ παχὺ ἀνωμάλως ὀπτᾶται· καὶ τετρίφθαι δὲ δεῖ μάλιστα λεπτότατον, ὥστε ἐπ' ἴσης ἀλφίτω εἶναι· ἐψείσθαι δ' ἐν ὕδατι [...] ἐχέτω δ' ὀλίγον ἁλῶν καὶ ἔστω ἀνέλαιον ἢ βραχὺ τι παντελῶς ἐλαίου προσλαμβανέτω, πρὶν ἐμπάσσεσθαι τὸ ἴτριον συνεψωμένον τῷ ὕδατι τοῦ ἐλαίου. English trans. M. GRANT, *Dieting for an Emperor. A Translation of Books 1 and 4 of Oribasius' Medical Compilations with an Introduction and Commentary*, Leiden–New York–Köln 1997 [= SAM, 15].

<sup>50</sup> *Rufi Ephesii De renum et vesicae morbis*, 2, 21, ed. A. SIDERAS, Berlin 1977 [= CMG, 3], p. 106. 18–20: καὶ ἰτρίους καταθρύπτων εἰς ζωμὸν ὄρνιθος λιπαρὸν. IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 72, p. 308–309. *Anonymous Andalusian Cookbook*, ch. 8, ed. C. MARTINELLI, C. PERRY, D. FRIEDMAN, p. 65–66.

<sup>51</sup> AETIOS OF AMIDA, *Ninth Book on Medicine – Αἰτίου Ἀμιδηνοῦ λόγος ἑνατος*, 21.26–27, ed. Σ. ΖΕΡΒΟΣ, ΑΘ 23, 1911, p. 273–390: καὶ σεμίδαλις χωρὶς μέλιτος διὰ λιπαρῶν ζωμῶν ἐσκευασμένη, καὶ ἴτρια ὁμοίως; ALEXANDER OF TRALLES, *Therapeutica*, vol. II, p. 219: Ὅρνεων δὲ ἐσθιέτωσαν τήν τε κατοικίδιον ὄρνιν καὶ τῶν φασιανῶν τὰ μὴ λιπαρὰ καὶ περδίκων ὁμοίως [...]· οἱ γὰρ ζωμοὶ ρύπτουσι

the domestication of chickens was initially not known in some areas of the Muslim world, especially in Egypt where until the Early Byzantine period (sixth century) its consumption is not certain or at least ambiguous<sup>52</sup>.

This continuity of preparing *itria* and *iṭriya* in Mesopotamia and the Greco-Roman world and the similarity of Byzantine and Arab practices is not the sole example. I have already presented similar Byzantine and Arab sweet or salty recipes like cakes and dishes as *ṣilāga rūmiyya*, and *ṣilāga fārisiyya* for cooked sheep and kid extremities, heads, and legs<sup>53</sup>. These Arab dishes are considered similar to the Babylonian “goat kid’s broth”, with heads, extremities, and innards simmered in water and enriched with fat, onion, leeks, and garlic described in al-Warrāq’s cookbook<sup>54</sup>. Although the Babylonian recipes enable us to see a continuity in the Persian, Greek, Byzantine, and Abbasid cuisines, as has been rightly argued, these recipes *at the same time render the issue of ‘origin’ somewhat inconclusive*, because this ancient haute cuisine had assimilated other regional Assyrian and Elamite traditions<sup>55</sup>. I ultimately believe, as previously noted and discussed further below, that aside from an ancient Mesopotamian legacy, there is also a common ancient Greek as well as Roman legacy in these recipes of both Byzantine and partially Arabic Islamic cuisine.

There was a suggestion that the Arabs inherited the culinary traditions of both the Persian and Byzantine cultures and incorporated elements from both into their own cuisine and beverages thus a “new wave” cuisine emerged<sup>56</sup>. This new cuisine of the gastronomical “navel of the earth”, Bagdad, was *based on intensive borrowing from the Persian and Persian-Indian culinary traditions, sparsely interlaced with elements derived from the Greek medical lore and the Bedouin Arab cooking ideas*<sup>57</sup>. I think there are numerous not so apparent borrowings, despite the strong objections to the idea of Greek and Byzantine influence and the belief that there were

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μᾶλλον τὰ ἔλκη ὑγροτέραν τε τὴν γαστέρα ποιοῦσι καὶ τοὺς πυρετοὺς (οὐκ) ἐπιτείνουσι [...] σπουδάζειν δέον, ὡς ἐνδέχεται, μὴτ’ ἐλαίου πολλοῦ μὴθ’ ἁλῶν ἐμβαλεῖν, τὰ δ’ ἀρμόζοντα πρὸς τὴν ὑποκειμένην χρεῖαν μιγνύειν τοῖς ζωμοῖς [...] ἰτρίου ἢ ἄλικος ἢ σεμιδάλεως.

<sup>52</sup> P.B. LEWICKA, *Food and Foodways*..., p. 200 n. 320.

<sup>53</sup> M. LEONTSINI, I. ANAGNOSTAKIS, *Food Mobilities*..., forthcoming. For the recipe, IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabikh*, ch. 44, p. 222–225; N. NASRALLAH, *Annals of the Caliphs’ Kitchens*..., commentary on *silaqat* p. 614–615: boiled dishes of vegetables dressed with oil and seasoned with vinegar, herbs, and spices.

<sup>54</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabikh*, p. 48.

<sup>55</sup> N. NASRALLAH, *Annals of the Caliphs’ Kitchens*..., p. 50. D. WAINES, *Murrī: the Tale of a Condi-ment*, Al-Q 12, 1991, p. 371–388.

<sup>56</sup> On the Greek legacy, D. WAINES, *In a Caliph’s Kitchen*, London 1989, p. 21; D. WAINES, *Dietetics in Medieval*..., p. 230–240. Also the Greek legacy is suggested by Ḥabīb Zayyāt, according to P.B. LEWICKA, *Food and Foodways*..., p. 74 n. 26; Ḥ. ZAYYĀT, *Fann at-Ṭabkh wa-Iṣlāḥ al-Aṭ-ima fi-l-Islām*, Al-M 41, 1947, p. 2–3. On the term “new wave”, D. WAINES, *In a Caliph’s*..., p. 7–15, and M. MARÍN, D. WAINES, *The Balanced Way: Food for Pleasure and Health in Medieval Islam*, MME 4, 1989, p. 124, and on the Hellenistic background of the Arabic culinary culture p. 124–127.

<sup>57</sup> P.B. LEWICKA, *Food and Foodways*..., p. 74, and on gastronomical “navel of the earth”, p. 78.

only sporadic elements derived from the Greek. A two-way influence between these two cuisines, the Byzantine and Arabic Islamic, could be investigated and not so sparsely as is thought. However I really wonder if these cuisines can be perceived in such a simplistic way or if we can speak of “ethnic” or “imperial” cuisines as compact and cohesive entities without considering the numerous variations that exist within each, with their haute cuisine and local – rural diet<sup>58</sup>. I consider that Greco-Roman and Early Byzantine haute cuisine, like the Abbaside of Baghdad, *was not confined to the court circles alone yet neither was it accessible to the lower classes*<sup>59</sup>. In my opinion, however, the lower classes were undoubtedly influenced by various elites depending on the historical era and geographic location, provided that the lack of accessibility does not exclude imitation and influence.

In her rich and insightful observations, Paulina Lewicka – rightly considered a pioneering researcher of the Arabic Islamic food cultures and especially of medieval Cairenes daily practices – expresses doubts about the Greek and Byzantine influence. She is correct in her interrogation regarding the definition of Byzantine cuisine, which is indeed less well-known and studied with the problem if the late antique and Early Byzantine period must be included in this thousand-year-old cuisine. She critically evaluates some theses on Byzantine influence, particularly that of Ḥabīb Zayyāt, and believes with some exaggeration that the Byzantine contribution raises certain questions. However, I cannot agree with her that under Roman and Byzantine rule the indigenous population, for example in Syria or Egypt, *paid little attention to Greek, Roman, or Hellenized elites and their lifestyles, their menu included*<sup>60</sup>. Nor do I agree that ***the cuisine of the Byzantine elites, the ‘Byzantine cuisine’, travelled back, after the Arab conquest, to the Byzantine mainland, together with those who could have possibly fancied it, then the post-conquest Arab settlers had little chance to know the Byzantine culinary culture:***

While the Persian influence upon the future Arab food culture is indisputable, the presumed Byzantine contribution raises certain doubts. First of all, the Byzantine cuisine of the early Middle Ages is difficult to define; second, its popularity among the population of Byzantine Syria and Byzantine Egypt is more than doubtful; third, as the cuisine of the Byzantine elites (if such was practiced in the provinces at all), the ‘Byzantine cuisine’ travelled back, after the Arab conquest, to the Byzantine mainland, together with those who could have possibly fancied it. In practical terms, then, the post-conquest Arab settlers had little chance to know the Byzantine culinary culture. First of all, the Byzantine cuisine of the early Middle Ages is difficult to define; second, its popularity among the population of the Byzantine Syria and Byzantine Egypt is more than doubtful; third, as the cuisine of the

<sup>58</sup> On the rise and fall of the world’s great cuisines, the culinary family tree, the construction of new cuisines of empires, and nationalistic myths of the contemporary food movement, see R. LAUDAN, *Cuisine and Empire: Cooking in World History*, Berkeley 2015 [= CStFC, 43].

<sup>59</sup> D. WAINES, *In a Caliph’s...*, p. 10. P.B. LEWICKA, *Food and Foodways...*, p. 131 n. 249.

<sup>60</sup> P.B. LEWICKA, *Food and Foodways...*, p. 70. The same thesis is repeated by N. NASRALLAH, *Treasure Trove of Benefits and Variety at the Table*, p. 23.

Byzantine elites (if such was practiced in the provinces at all), the ‘Byzantine cuisine’ travelled back, after the Arab conquest, to the Byzantine mainland, together with those who could have possibly fancied it<sup>61</sup>.

I consider, however, that Byzantine cuisine is far more complicated than the cuisine of the Byzantine elites, of the Byzantine aristocracy, as stated, and this description is restricted, distorting and deceptive. Byzantine cuisine is also multiethnic, multiregional, multi-religious, multicultural cuisine of an Empire with many variants, and this idea of movement and transmigration of a “Byzantine cuisine” returning to the Byzantine mainland after the Arab conquest is both provocative and strangely imaginative. Furthermore, it is correctly noted that the Byzantine cuisine of the early Middle Ages is difficult to define and I would also add Byzantine cuisine throughout the Middle ages. Regarding its popularity we still know very little, and research – primarily archaeological – has a lot to reveal. This thesis that *the post-conquest Arab settlers had little chance to know the Byzantine culinary culture* may likely be the case, if the influence on new settlers was only an affair of the elites and not of country’s indigenous population – for example, of the “autochthone conservative” population in Egypt, as described by Lewicka. Was this pharaonic population virgin and unaffected by significant changes that occurred, especially its Christianization with all these dietary Coptic particularities? And how can we be so sure that this “autochthone conservative” population

<sup>61</sup> P.B. LEWICKA, *Food and Foodways...*, in the chapters *The Cairenen menu: genesis*, p. 70–74 and n. 26. See also *ibidem*, in the chapter *Sharing the Table*, p. 387sq. However, according to excavation findings, Muslims and all Christians (specifically Byzantines who had not travelled back with their cuisine) coexisted peacefully in Syria throughout the Umayyad period, C. FOSS, *Syria in Transition, A.D. 550–750: An Archaeological Approach*, DOP 51, 1997, p. 189–269: *living side by side in some of the cities, themselves embedded in an almost entirely Christian countryside. The Muslims were clearly a small minority of the population concentrated in a few places rather than scattered through the region*, p. 267. In the same article excavations of houses deteriorated in two stages reveal that the inhabitants consumed a fair amount of chicken and pork (in a later stage less pork), somewhat less beef and fish, and a preponderance of meat from sheep and goats; the heads of the sheep and goats had all been cut in half for stew making, p. 219–220, 236. See a new (Re)Mapping, A.A. EGER, *(Re)Mapping Medieval Antioch: Urban Transformations from the Early Islamic to the Middle Byzantine Periods*, DOP 67, 2013, p. 95–134, especially p. 102 the Byzantine and early Islamic continuity of the physical and religious landscape, and p. 114–117 the Islamic/middle Byzantine ceramics and kitchens. See also *La Syrie de Byzance à l’Islam, VII<sup>e</sup>–VIII<sup>e</sup> siècles, actes du Colloque international, Institut français de Damas*, ed. P. CANIVET, J. REY-COQUAIS, Damas 1992, and the articles of H. KENNEDY, *The Byzantine and Early Islamic Near East*, Burlington 2006 especially the thesis of urban (and monastic) continuity in Syria and especially in Antioch and the significant elements of continuity, H. KENNEDY, *Antioch: from Byzantium to Islam and Back Again*, [in:] *The City in Late Antiquity*, ed. J. RICH, London 1992, p. 181–198 (= H. KENNEDY, *The Byzantine and Early...*, p. 181–198). See the contributions in *Byzantium in Early Islamic Syria. Proceedings of a Conference Organized by the American University of Beirut and the University of Balamand, June 18–19, 2007*, ed. N.M. EL-CHEIKH, S. O’SULLIVAN, Beirut 2011. Also, *The Byzantine and Early Islamic Near East*, vol. II, *Land Use and Settlement Patterns*, ed. G. KING, A. CAMERON, Berlin 2021.



ignored the Byzantine culinary culture (either the Christian or certainly the court and elite cuisine) when it is consistently emphasized that we are unaware of the cuisine of the ancient Egyptians and of the indigenous Copts by using the report by Herodotos and extending it across time? Herodotos's account of the dietary ethics of sixth-century-BC Egyptians leads Lewicka to an overall conclusion:

The autochthonous Egyptians apparently remained unchanged [...] rejected anything foreign, but also they invariably continued to live the life they knew, thus keeping the tradition of their forefathers undisturbed. If a habit was not traditionally practiced by native Egyptians, there was little chance it could be adopted from local Greeks<sup>62</sup>.

I don't know if this existing difference over time – not only in Egypt but also elsewhere in Italy, Balkans, Greece, Eastern Mediterranean Islands, Asia Minor, Syria, Palestine – between the autochthonous mainly country/rural people and the Hellenized locals and elites excludes every cultural mobility and every kind of culinary exchanges. The Hellenized elites but mainly the large rural Christianized population certainly received influences from very early and in turn influenced the developing Christian cuisine, the ways of cooking and eating, the choices of food and the fasts. The legend of the Arab meal offered as sign of friendship and reconciliation by the Arab conquerors to the locals of Fustat is indeed revealing. The meal (camels slaughtered and cooked in water and salt) and table manners of newcomers disappointed the locals. Muslims began to eat in typically Arab fashion, tearing at the meat with their teeth and slurping the broth, dressed in their woolen cloaks... the people of Misr dispersed with their ambitions and courage boosted. The Arabs repeated the meal, this time with local foods and ways of dressing and eating. This fact indicates that the inhabitants, like the case of Bida in Syria, had quite different ways of dressing and eating compared to those of the typically Arab fashion, and rather similar to cosmopolitan Greco-Roman and Late Antiquity habits that the conquerors gradually adopted as they did with those of Persia<sup>63</sup>. In cases such as for the production, marketing, such as the import of products, the use of amphorae and cooking utensils (a rich field for new approaches), and consumption of wine or other prohibited foods (river mussels, *ad-dallīnas*, fish sauces, fish with no scales) it has been argued that the Fatimid and Ayyubid Egypt mentality – not only of Christians subjects (and this is probably true for other regions like

<sup>62</sup> P.B. LEWICKA, *Food and Foodways...*, p. 377–378, although she notes that this probably did not apply to the Hellenized Egyptians (or Egyptianized Greeks), p. 378 n. 99.

<sup>63</sup> *The History of al-Ṭabarī*, p. 174. P.B. LEWICKA, *Food and Foodways...*, p. 69. On Fustat and new insights into Egypt's society during the first century of Muslim rule, J. BRUNING, *The Rise of a Capital. Al-Fuṣṭāṭ and its Hinterland, 18/639–132/750*, Leiden 2018 [= IHC, 153]. J. BRUNING, J. DE JONG, P.M. SIJPESTEIJN, *Egypt and the Eastern Mediterranean World. From Constantinople to Baghdad, 500–1000 CE.*, Cambridge 2022. G.T. SCANLON, *Al-Fuṣṭāṭ: The Riddle of The Earliest Settlement*, [in:] *The Byzantine and Early Islamic Near East*, vol. II..., p. 171–180.

Shām and Palestine) – was closer to the style and food consumption of the ancient Mediterranean-Near Eastern culture than to the new religion<sup>64</sup>.

It may be that *the haute cuisine of the medieval Islamic world stemmed largely from the courts cookery of Sassanid Iran*<sup>65</sup> but the common people had already received and preserved various other influences in the previous centuries which were transferred to the new ruler. Arabs themselves admit that Baghdad's haute cuisine, which affected the entire Arab world, assimilated various culinary influences and adopted different methods of food preparation. Arabic tales and anecdotes relate that some recipes were not Arab food and are given as examples of the luxury dishes of Christian or Persian origin, compared with the plain diet of the ancient Arabs<sup>66</sup>. Bida's legend includes preparations of multicultural origins, probably of Byzantine Syrian provenance, that were appropriated by Islamic culinary culture like *khabiṣa muwallada*, which is considered non-Arab. The same applies to *khabiṣ* made with Syrian / Levantine Lebanese apples, *Shāmī Labnānī*, a sweet like

<sup>64</sup> P.B. LEWICKA, *Food and Foodways...*, p. 513–514, 542–547, and on fish and *ad-dallīnas*, p. 473–474. See also below our remarks on *Libyia*. On the use of Greek language in the Eighth-Century Fayyum and wine marketing, L. BERKES, J. HAUG BRENDAN, *Villages, Requisitions, and Tax Districts: Two Greek Lists from the Eighth-Century Fayyum*, *BASP* 53, 2016, p. 189–222. L. BERKES, N. GONIS, *Monastic Wine Distributions in the Eighth Century. Papyri from the Catholic University of America*, *JCopS* 22, 2020, p. 1–27. On ceramics, *Amphores d'Égypte de la basse époque à l'époque arabe*, ed. S. MARCHAND, A. MARANGO, Le Caire 2007, and on hermitages, V. GHICA, S. MARCHAND, A. MARANGO, *Les ermitages d'Abu Darag revisités*, *Bulletin de l'Institut français d'archéologie orientale* 108, 2008, p. 115–163. See also recent studies on the relationship of Christians and Muslims in everyday life in Early Islamic Egypt (642–10<sup>th</sup> c.) focusing on administrative and social history using the papyrological documentation and discussing various aspects of transition and continuity from Byzantine to Islamic Egypt, *Christians and Muslims in Early Islamic Egypt*, ed. L. BERKES, Durham, NC 2022. See also research of particular importance for the methodology used to examine the identities of the rural people of Crete and Palestine, which may be applicable to other regions, on how ceramics (Islamic jug, disc, bag-shaped and olla cooking-pots) reveal the transition between Byzantine and Islamic culinary habits and technological practices as well as the critical issue of coexistence and interaction between Muslim incomers and the pre-existing Byzantine communities, M.G. RANDAZZO, *Archaeological Approaches to the Islamic Emirate of Crete (820s–961 CE): A Starting Point*, *JGA* 4, 2019, p. 311–336 especially p. 313–314, 321–323, and D. REYNOLDS, *Byzantium from Below: Rural Identity in Byzantine Arabia and Palaestina, 500–630*, [in:] *Identities and Ideologies in the Medieval East Roman World*, ed. Y. STOURAITIS, Edinburgh 2022, p. 164–199, and especially 167, 192: *Byzantium was the inheritor of a complicated legacy of earlier traditions of urban and rural organisation which had shaped the landscape of Arabia-Palaestina...the longevity of conventions, which continued to be used in the public image of the rural family until well over a century after the collapse of Byzantine control in the region... the use of Greek, patronymic conventions being employed among communities with limited connections to Byzantium.*

<sup>65</sup> Ch. PERRY, *The Description of Familiar Foods...*, p. 273–465 (here p. 279); N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 50–51. On the Persian courtly influences, see P.B. LEWICKA, *Food and Foodways...*, p. 75–77 and on the Arab *nudamā'*, the kings' and princes' banqueting companions, p. 389.

<sup>66</sup> M. RODINSON, *Studies in Arabic Manuscripts...*, p. 151, and on the recipe and its origin, p. 152 n. 2.

Galen's Syrian *mēloplakous*. The recipes *šilāga rūmiyya* and *taqdīd laḥm 'amal ar-Rūm* are clearly attributed to Byzantine origins and particularly *taqdīd laḥm 'amal ar-Rūm* referred to as *Rūm*, a drying meat, jerked meat in Greek/Byzantine style and, according to Lewicka, a recipe 'almost absent from the cookery books and clearly not the food of the city people quite similar to the Byzantine recipe for dried meat (*apokti*)<sup>67</sup>. However, *apokti* was primarily a cured loin of pork but also of goat and sheep meat, as it is today in Greece, and this fact probably explains why jerked meat in Byzantine style is rarely mentioned in official Muslim cookery books, although it was consumed by Christians or recent converts to Islam<sup>68</sup>.

While not relevant to Arab Islamic haute cuisine, the following preparations are also considered Byzantine: Byzantine *murrī* (see below), the recipes for *lift Rūmī* (Byzantine-style turnip pickles), the recipes for *ḥimmaṣ kassā* (a Byzantine specialty with boiled chickpeas), the *baqsamāṭ* known as *khubz Rūmī* (Byzantine bread). These and other Byzantine/Christian dietary-restricted recipes, referred to as "simulated dishes" or *muzawwarāt* in Arabic cookbooks (see Byzantine *murrī* below), were not just for Christians<sup>69</sup>. Consequently, "Byzantine cuisine" did not travel back to the Byzantine mainland with Byzantine elites after the Arab conquest; rather some of its recipes continue to be present or traveled like Bida to Bagdad, the heart of the Arabic culinary world. I wonder, therefore, if the thesis about the dubious influence of the Byzantines in Egypt but elsewhere can apply especially to the first centuries of the Arab conquest in the seventh and eighth centuries since there has not been any comparative research. For this early period, the Arabo-Byzantine culinary relations and the Byzantine culinary contribution have not been studied as has been the case with the importance of Arabic-Islamic medico-culinary tradition's Greek heritage or the contribution of Christian translators in the Bagdad court with the translated recipes of the Greek and Early Byzantine physicians<sup>70</sup>. And while we may not have Byzantine cookbooks for comparison,

<sup>67</sup> M. RODINSON, *Studies in Arabic Manuscripts...*, p. 145 and n. 180; P.B. LEWICKA, *Food and Foodways...*, p. 189 n. 263.

<sup>68</sup> On pork consumption and avoidance in Egypt, P.B. LEWICKA, *Food and Foodways...*, p. 176–178. On *apokti* and Byzantine cured meats, A. DALBY, *Flavours of Byzantium...*, p. 71, 175, 190; Z. RZEŃNICKA, M. KOKOSZKO, K. JAGUSIAK, *Cured Meats in Ancient and Byzantine Sources: Ham, Bacon and "Tuccetum"*, SCer 4, 2014, p. 245–259.

<sup>69</sup> On these recipes see *Anonymous Kanz*, p. 343 (542) for *lift Rūmī*, Byzantine-style turnip pickles, p. 384 (625) for *ḥimmaṣ kassā*, a Byzantine specialty with boiled chickpeas, p. 188 (211), and N. NASRALLAH, *Treasure Trove of Benefits and Variety at the Table*, p. 468 for *baqsamāṭ* known as *khubz Rūmī*, Byzantine bread. On Byzantine *murrī*, and the *muzawwarāt*, simulated dishes, see below *Liquid preparations and preserves of roses and fruits: Garos, murrī*.

<sup>70</sup> On Arabic-Islamic medico-culinary tradition, the importance of the Hellenistic heritage and on Christian contribution to the Arabic-Islamic medical tradition, with relevant bibliography, P.B. LEWICKA, *Food and Foodways...*, p. 75–78. See also the Byzantino-Arabic-Islamic relations, *Ambassadors, Artists, Theologians. Byzantine Relations with the Near East from the Ninth to the Thirteenth Centuries*, ed. Z. CHITWOOD, J. PAHLITZSCH, Mainz 2019.

numerous additional sources that have yet to be explored can be exceedingly helpful. It is possible that some of these views about the dubious influence of the Byzantines are valid, but mainly for the period after the ninth and tenth centuries, when the reverse effect is noted, as discussed below.

Here, I would like to propose my own “reverse suggestion” which relies on Rodinson’s and Lewicka’s suggestions about the similarity between dishes served in both East and West: we need to show they have a common, parallel origin in Greco-Roman cooking but eventually also with their ancient Oriental culinary additions that had influenced the ancient Mediterranean world<sup>71</sup>. I therefore believe that the Byzantine legacy alongside Hellenistic, Greco-Roman and major Persian heritages each contributed in a different way and degree to the formation of the Arabic Islamic culinary reality as attested, for example, by Syrian *mēloplakous* (μηλοπλακοῦς), Greek *itrion* (ἴτριον), Arabic *khabīṣ*, *iṭriya*, and the dishes *sikbāja* and *ṣilāga* discussed earlier.

### **Salty and sweet liquid preparations and preserves of roses and fruits: *Garos / Garum, murri, jullāb/zoulapi(o)n and mishmishiyya***

***Garos, murri.*** The opinion cited above that the issue of ‘origin’ is inconclusive is obviously valid and applicable to many other examples where the proposed controversial etymology of terms and the likeness of preparation leads us to suspect the ‘origin’ of a meal and recipe. Names of foods, equipment, and cooking processes were shared and assimilated by Middle Eastern peoples who maintained contact and exchanged recipes using names they adopted throughout prehistoric and ancient times. The etymological approach of the Arab condiment *murri* proves exactly how the issue of ‘origin’ is inconclusive but also how the similarity of words and preparations can lead to erroneous conclusions.

The Latin *murria* (meaning primarily brine, salt, and water in which salted fish was stored, *muria salsamenti*) and the Arab condiment *murri* are thought to be associated with or even derived from either the Aramaic *muriyes* or the Greek *halmy(u)ria/halmuris* (from *halmē*, brine, ἄλμυρία, ἄλμυρίς<ἄλμη). *Halmuria/halmuris* literally means saltiness, brine, or salted, thus giving the Arab *almori* or *al-murri* > *murri*<sup>72</sup> similar to the Greek and Roman salted fish-fermented con-

<sup>71</sup> *Ibidem*, p. 78 and M. RODINSON, *Venice, the Spice Trade and Eastern Influences on European Cooking*, [in:] M. RODINSON, A.J. ARBERRY, Ch. PERRY, *Medieval Arab Cookery...*, p. 204: *Thus, when we see a general similarity between dishes served in both East and West we need to show that they do not have a common, parallel origin in Graeco-Roman cooking before we adduce any oriental influence.* See also the interesting thesis on borrowings and transmitted names and recipes M. RODINSON, *Ma'mūniyya East and West...*, p. 183–197.

<sup>72</sup> Ch. PERRY, *The Description of Familiar Foods...*, p. 281–282. On *almori*, Anonymous *Andalusian Cookbook*, ed. C. MARTINELLI, C. PERRY, D. FRIEDMAN, p. 216.

diment though the Arab *murrī* was made mainly from cereal grain but also not frequently from salty fish blood/viscera. The Arab term *murrī* usually describes a fermented sauce made with barley flour and defined as a liquid sauce, salty, sour, and bitterish. It should be noted that the salty fish blood/viscera-fermented sauce existed in Ancient Mesopotamia with the name *siqqu* and was made from salted fish, shellfish, and locusts exposed to sun<sup>73</sup>. The Latin *murria* is probably derived from the Akkadian word *marru*, denoting a sour or bitter taste employed for fish or fish sauce<sup>74</sup>. It is intriguing that in Talmudic literature, in third-century AD Palestine *halmi/hilmi* (< *halmē*, ἄλμη, brine) is called the strong salt solution used in making some forms of *muries* – exactly the term *halmē*, (ἄλμη) used by Byzantine *Geoponika* for producing *garos*<sup>75</sup>. Furthermore according to Talmudic literature, this salted water *muries* and *hilmi*, was used for preserving sausages<sup>76</sup>. In the seventh century AD, in Byzantine Palestine, *murial/ies* seems to have been the term for the *garos* or *liquamen*. Although this etymological hypothesis of *murrī* from the Greek *halmuria/halmuris* has not been completely ruled out and is usually given as one hypothesis, it is generally believed that the origin of the word is “*sans étymologie*”<sup>77</sup>. This brief etymological overview of the research (as in other instances in this article), regardless of the conclusions, i.e., whether the word derives from Greek, is of primary interest to us as a complement to other dominant similarities and differences with *garos/garum* and *liquamen* and the eventual origin of certain methods of the preparation and consumption of some kind of *murrī*, not only from Mesopotamian but also from the Greco-Roman and Byzantine traditions.

<sup>73</sup> J. BOTTÉRO, *The Oldest Cuisine in the World...*, p. 60; N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 580.

<sup>74</sup> On *murrī*, its varieties and etymology from Akkadian, or of its Arabic and Nabatean origin, meaning bitter, see N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 579–582; on its description as *liquid fermented sauce, salty, sour, and bitterish*, p. 879 and its connection with Latin *murria* p. 580; J. BOTTÉRO, *The Oldest Cuisine in the World...*, p. 60.

<sup>75</sup> S. WEINGARTEN, *Mouldy Bread and Rotten Fish: Delicacies in the Ancient World*, FoHis 3.1, 2005, p. 61–71. S. WEINGARTEN, *Fish and Fish Products in Late Antique Palestine and Babylonia in their Social and Geographical Contexts: Archaeology and the Talmudic Literature*, [in:] *The Bountiful Sea. Fish Processing and...*, p. 235–245, here 239.

<sup>76</sup> S. WEINGARTEN, *Ancient Jewish Sausages*, [in:] *Cured, Fermented and Smoked Foods. Proceedings of the Oxford Symposium on Food and Cookery 2010*, ed. H. SABERI, Totnes 2011, p. 369.

<sup>77</sup> A. ERNOUT, A. MEILLET, *Dictionnaire étymologique de la langue latine. Histoire des mots*, 4<sup>th</sup> ed., Paris 1959 (repr. 1985), p. 423 entry *muries -ei (muria, -ae)*, saumure: ...*Mot technique, sans étymologie. Peut-être en rapport avec gr. ἄλμυρίς, de même sens.* A. DALBY, *Food in the Ancient World...*, p. 157, entry *garum*: *Latin muria, salimoria, Greek halmyris, Aramaic muriyes was a product with a family resemblance to garum.* S. GRAINGER, *Garum, Liquamen, and Muria: A New Approach to the Problem of Definition*, [in:] *Fish and Ships. Production et commerce des salsamenta durant l'Antiquité. Actes de l'atelier doctoral, Rome 18–22 juin 2012, Bibliothèque d'Archéologie Méditerranéenne et Africaine 17*, ed. E. BOTTE, V. LEITCH, Arles-Aix-en-Provence 2014 [= BAMA, 17], p. 39: *Greek halme and its Latin counterpart muria [...]. Garos and muria were sufficiently different to require separate names.*



*Garos/liquamen/muria* had a different meaning at the start of the first century AD and there were distinct variations of fish sauces with a later convergence of the terms describing: the variation of aged *garum* made from tuna or mackerel (these fish not used to make *liquamen*), the variation of ordinary black tuna *garos/garum* or *muria*, a subtype, and the variation called *liquamen*; Martial refers *tria genera*, three kinds of *garum* ‘*Liquamen est sale thynni soluti. Cum enim tria apud Veteres huiusmodi liquaminum genera essent; primum, quod a scombro, garum*’<sup>78</sup>. The latter, the *liquamen*, designated just a liquid, as the name indicates, and *in the late empire a vulgar term in contrast to garum, but not lower class or cheaper being the cooking sauce made from mackerel or a mixture of clupeidae and sparidae; an original small whole-fish sauce and in Apicius the universal term for the primary fish sauce (garum only in one Apician recipe), remained in the kitchen and invisible to the diner who only saw and valued expensive sauces at table*<sup>79</sup>.

The *garos – garum/liquamen/muria* was quite widespread during Roman times and in Late Antiquity was used in culinary, medical, and veterinary sources<sup>80</sup>. However, its manufacturing and use in Byzantium probably diminished after the seventh or eighth centuries, and aside from the *Geoponika*’s reference, there is only anecdotal evidence of its use (not clear the type or subtype of *garos*) in the Byzantine palace and monasteries<sup>81</sup>. It has been argued – but not fully accepted – that

<sup>78</sup> MARTIAL, *Epigrams. Books VI–X–10, XIII*, 102–104, ed. D.R. SHACKLETON BAILEY, Cambridge, Mass.–London 1993 [= LCL, 95] (cetera: MARTIAL, *Epigrams*). See R. CURTIS, *Garum and Salsamenta. Production and Commerce in Materia Medica*, Leiden 1991 (repr. 2018) [= SAM, 3], p. 172 and n. 52 and S. GRAINGER, *Garum and Liquamen, What’s in a Name?*, [in:] *The Bountiful Sea. Fish Processing and...*, p. 247–261.

<sup>79</sup> On the three different types of salted fish-fermented condiment *garos/liquamen/muria* and on *muria* as primarily salt and water, brine in which salted fish was stored (*muria salsamenti*), S. GRAINGER, *Garum, Liquamen, and Muria...*, p. 37–45, the subchapter 2.5, fish sauce in Galen and especially the conclusion, p. 45. See also EADEM, *Garum and Liquamen...*; EADEM, *The Story of Garum. Fermented Fish Sauce and Salted Fish in the Ancient World*, London 2020, p. 107–108 and *passim*.

<sup>80</sup> R. CURTIS, *Garum and Salsamenta...*; S. GRAINGER, *Garum, Liquamen, and Muria...*, see the subchapter 2.5, Fish sauce in Galen. See also EADEM, *The Story of Garum...*, the chapter 3 fish sauce in culinary, medical, and veterinary sources, p. 81–93.

<sup>81</sup> T. WEBER, *Essen und Trinken in Konstantinopel des 10. Jahrhunderts nach den Berichten Liutprands von Cremona*, [in:] *Liutprand von Cremona in Konstantinopel. Untersuchungen zum griechischen Sprachschatz und zu realienkundlichen Aussagen in seinen Werken*, ed. J. KODER, T. WEBER, Wien 1980, p. 71–99. J. KODER, *Liutprands of Cremona. A Critical Guest at the Byzantine Emperor’s Table*, [in:] *Flavours and Delights...*, p. 105–107. On Amalfitan *garos* in the monastery of Mount Athos, I. ANAGNOSTAKIS, M. LEONTSINI, *Fishing and Fish Consumption in the Aegean Sea according to the Lives of Saints 7<sup>th</sup>–12<sup>th</sup> Centuries*, [in:] *The Byzantines and the Sea*, ed. T. ANTONOPOULOU, B. FLUSIN, Venice 2024, 283–326. See also A. CARANNANTE, C. CHARDINO, U. SAVARESE, *In Search of Garum. The “Colatura d’alici” from the Amalfitan Coast (Campania, Italy): an Heir of the Ancient Mediterranean Fish Sauces*, [in:] *Proceedings of the 4<sup>th</sup> Italian Congress of Ethnoarchaeology, Rome 17–19 May*, ed. F. LUGLI, A.A. STOPPIELLO, S. BIAGETTI, Oxford 2011 [= BAR.IS, 2235], p. 69–79; I. ANAGNOSTAKIS, *Le manger et le boire dans la Vie de Saint Nil de Rossano: l’huile, le vin et la chere dans la Calabre Byzantine X<sup>e</sup>–XI<sup>e</sup> siecles*, [in:] *Identità euromediterranea e paesaggi culturali del vino e dell’olio, Atti del*

the production of *garos* and salted fish in general declined or even disappeared as a result of the salt tax, a high levy imposed on salt since the Roman era or primarily due to the insecurity prevalent in the seas, the limited fishing during the Middle Ages, and the shift of people from the coasts to the interior<sup>82</sup>. However, it is important to note that in Late Antiquity and Byzantium, many clay receptacles – some self-heating – were used for sauces, and known as *gararia* or *saltsaria* regardless of whether the contents were just a salty sauce or one of the many *garos* preparations like *elaiogaron*, *hydrogaron*, *oinogaron*, *oxygaros*, or *oxygaron*, i.e., *garos* mixed or diluted with oil, water, wine, vinegar, considered by the physicians as purging, cleansing, and purifying<sup>83</sup>. Additionally, *garos* was combined with honey (it's unclear what kind of *garos* or if it's just a salt dilution) and used in a variety of potions, patches, and ointments by Byzantine physicians and veterinarians. The most characteristic of all is Plutarch's critical reference to the use of *garos* mixed with honey and Syrian and Arabian spices for seasoning meats, a sauce he critically associates with the embalming of the dead: 'we need sauces, seasoning "supplements" for the flesh itself, mixing oil, wine, honey, *garos*, vinegar, with Syrian and Arabian spices, as though we were really embalming a corpse for burial'<sup>84</sup>. This is also the case with *murri*, which is frequently mixed with honey.

The classical Arabic *murri* was made by moistening a combination of ground flatbread, barley flour, and salt then allowing it to ferment<sup>85</sup>. The most detailed recipes of its preparation without fish are in later Egyptian cookbook; *murri* is

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*Convegno Internazionale di Studio promosso dall'IBAM-CNR nell'ambito del Progetto MenSALe Potenza, 8–10 Novembre 2013*, ed. A. PELLETTIERI, Foggia 2014, p. 186–187. See also S. GRAINGER, *The Story of Garum...*, the chapter 5 Fish sauce in the late Roman, Byzantine and early medieval world, p. 101–114.

<sup>82</sup> C. JARDIN, *Garum et sauces de poisson dans l'Antiquité*, RSLi 37, 1961, p. 70–96. See the divergent thesis of R. CURTIS, *Garum and Salsamenta...*, in his epilogue highlights the persistence of *garum* in the West from the 5<sup>th</sup>–6<sup>th</sup> centuries AD until the 16<sup>th</sup> century.

<sup>83</sup> *Scholia in Nicandri theriaka*, Vita-scholion 526b, line 8, ed. A. CRUGNOLA, Milan 1971: ὄξυβάφου, οἶον ἐμβαφίου εἰς τράπεζαν πεποημένου, ὅπερ καλεῖ γαράριον ἢ συνήθεια (= *Oxybafon* or *embafion*, vessels for sauces, saucers, in a dining table is commonly called *gararion*). I. ANAGNOSTAKIS, *Byzantine Delicacies...*, p. 85–86. On *gararia*, X. ΜΠΑΚΙΡΤΖΗΣ, *Βυζαντινά τσουκαλολάγνα. Συμβολή στη μελέτη ονομασιών, σχημάτων και χρήσεων πυρίμαχων μαγειρικών σκευών, μεταφορικών και αποθηκευτικών δοχείων*, Αθήνα 2003 (1<sup>st</sup> ed. 1989), p. 55–65. *Everyday Life in Byzantium. Catalogue of the Exhibition Byzantine Hours – Works and Days in Byzantium, Thessaloniki, Oct. 2001–Jan. 2002*, ed. D. ΠΑΡΑΝΙΚΟΛΑ-ΒΑΚΙΡΤΖΙ, Athens 2002 (in Greek *Ἔργα Βυζαντίου, Έργα και Ημέρες στο Βυζάντιο, Καθημερινή Ζωή στο Βυζάντιο*), p. 327–329. A. VASSILIOU, *Middle Byzantine Chafing Dishes from Argolis*, ΔΧΑΕ 37, 2016, p. 251–276.

<sup>84</sup> PLUTARCHOS, *De esu cranium*, I, [in:] *Plutarchi moralia*, vol. VI.1, ed. C. HUBERT, Leipzig 1954 (repr. 1959), 5, p. 100.23–26 – 101: ὄψον τὸ κρέας προσαγορευόμεν, εἴτ' ὄψων πρὸς αὐτὸ τὸ κρέας δεόμεθα, ἀναμιγνύντες ἔλαιον οἶνον μέλι γάρων ὄξος ἡδύσματα Συριακοῖς Ἀραβικοῖς, ὥσπερ ὄντως νεκρὸν ἐνταφιάζοντες.

<sup>85</sup> On *murri* and its varieties, N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 579–582; D. WAINES, *Murri: the Tale...*, p. 371–388; P.B. LEWICKA, *Food and Foodways...*, p. 341; N. NASRALLAH, *Treasure Trove of Benefits and Variety at the Table*, p. 617.

confused or identified with the relatively similar preparations *mulūḥa* and *ṣīr*, which both mean saltiness and salt fish anchovies or fish sauce<sup>86</sup>. A fish paste called *ṣaḥna* and in Hebrew *tzahana* is a strong-smelling condiment made with crushed fish with herbs and spices. Salt-cured preparation *ṣīr* and in Hebrew *tzir* is also made without fish – a fake *ṣaḥna*<sup>87</sup>. Egyptian *mulūḥa*, a rarely mentioned food, has negative connotations as foul-smelling and consumed by Christians: *a kind of Arabic-Islamic equivalent of garum*<sup>88</sup>. *Mulūḥa* literally means “saltiness”, like the original meaning of the Greek *garos* and *the term, when referred to fish macerated in salt in jars, connotes the concentrated salty brine rather than the fish itself*<sup>89</sup>. *Murrī* was used in the recipes of the Arabic cookbooks – the tenth-century *Ibn Sayyār al-Warrāq’s Kitāb al-Ṭabīkh* and the thirteenth-century *Kitāb Waṣf al-Atima al-Mutada*<sup>90</sup>. A special variety of *murrī* was prepared in *Shām*, and the Byzantine region of Antioch with small fish known as *ṣīr*, and another Egyptian variety was called *ṣīr* and *murrī ṣīr Qadīm*, a fish-based liquid fermented sauce made from small fish known as *ṣīr* or *tjir*, *tzir*, anchovy<sup>91</sup>. It is unclear what Perry translates as “Byzantine *murrī*” (probably a translation of *murrī Rūmī*), a recipe for Byzantine *murrī* with Byzantine saffron<sup>92</sup>. Anyway, the hypothesis for the surviving tradition of a kind of *garos* and its use in Byzantine provinces under Arab control is strengthened by these references to such a fish product made either in the Antioch region with the fish known in Egypt as *tjir* and *ṣīr* or made in Martyropolis/

<sup>86</sup> P.B. LEWICKA, *Food and Foodways...*, p. 219–220. A very detailed presentation of *murrī* is available at *Anonymous Kanz*, p. 162–164 (150, 151): Recipe for *murrī naqī’* (liquid fermented sauce) and (151) Recipe for Moroccan *murrī* (liquid fermented sauce) made with barley.

<sup>87</sup> N. NASRALLAH, *Treasure Trove of Benefits and Variety at the Table*, p. 50, 498, 618, 653–654. S. WEINGARTEN, *Fish and Fish Products...*, p. 235–245. P.B. LEWICKA, *Food and Foodways...*, p. 218.

<sup>88</sup> C. WISSA-WASSEF, *Pratiques rituelles et alimentaires coptes*, Le Caire 1971, p. 342–343. P.B. LEWICKA, *Food and Foodways...*, p. 220: *mulūḥa* seemed to invoke negative connotations. Presumably because of its relatively offensive smell and sight, possibly because of its association with the religiously motivated diet of the Copts.

<sup>89</sup> P.B. LEWICKA, *Food and Foodways...*, p. 220.

<sup>90</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, see *murrī*, *passim*; Ch. PERRY, *The Description of Familiar Foods...*, i.e., *Kitāb Waṣf al-aṭ’ima al-mu’tāda*, p. 281–282, 400 and the recipe of Byzantine *murrī* with Byzantine saffron p. 406–407. *Kitāb Waṣlah ilā al-ḥabīb*, translation reprinted in *Scents and Flavors. A Syrian Cookbook, Delectable Recipes from the Medieval Middle East*, Introduction XXXVI, trans. Ch. PERRY, praef. Cl. RODEN, vol. ed. M. COOPERSON, Sh.M. TOORAWA, New York 2020 (cetera: *Scents and Flavors*): *murrī* was very popular in Spain and Iraq but makes only a single appearance (§5.47) in this book.

<sup>91</sup> N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 580, 582. On *ṣīr* M. RODINSON, *Studies in Arabic Manuscripts...*, p. 144, and on preserves, seasonings and the eleven *sls* (salty sauces?) p. 143–145; Ch. PERRY, *The Description of Familiar Foods...*, p. 281. P.B. LEWICKA, *Food and Foodways...*, p. 218–223.

<sup>92</sup> For the recipe of Byzantine *murrī* with Byzantine saffron, Ch. PERRY, *The Description of Familiar Foods...*, p. 406–407, and *Anonymous Andalusian Cookbook*, ed. C. MARTINELLI, C. PERRY, D. FRIEDMAN, p. 217.

Mayyafariqin without fish and known as fake *murrī -murrī Rūmī* (translated as Byzantine *murrī*) mentioned in Arabic cookbooks<sup>93</sup>.

All the above – i.e., the *murrī* made with fish, the Egyptian fish products made with *ṣīr* like fish sauce *ṣīr*, *mulūḥa*, and *ṣaḥna* – was prepared with small fish, indeed with the smallest fish *ṣīr* identified with *aphye* (ἀφύη), the anchovy, and according to the *Geoponika* probably with *lykostomos* (λυκόστομος), a kind of anchovy. However, it should not be ruled out that the term *ṣīr* can generally refer to any small fish and certainly the lean salt-cured mackerel known in Byzantium as *tsiros* used by Modern Greek fishermen to prepare a type of *garos*. We will discuss the Arabic term *ṣīr* below in the subchapter *Libysia*, along with its etymology and relationship to Byzantine fish *tsiros*. So, chub mackerel and scomber (σκόμβρος, *scomber colias*) were amongst the small fish, like picarel and anchovy, the primary ingredients (and lean scomber, *tsiros*, later) used for making *garos/liquamen*. Latins authors say mackerel is used only to make fish sauce, and Pliny and Martial lauded chub mackerel, stating that the highest quality *garos* was produced from fresh mackerel (scomber)<sup>94</sup>. Strabo reports that an island near Carthage called *Scombraria* was named because of the mackerel found there, from which the finest *garos* is made<sup>95</sup>. In the versions of the *garos/liquamen* recipe saved in the *Geoponika*, mackerels (σκόμβρους) is mentioned amongst small fish or any small enough (λεπτά ὀψαρίδια ... ἢ ὁ ἄν δόξη λεπτὸν εἶναι), definitely picarel and anchovy as well as, of course, larger fish like *tunny mixed with a lot of salt, in an earthenware jar which they leave uncovered in the sun for two or three months, occasionally stirring with a stick, then extract the liquid [...]* A better *garos*, called *haimation* ‘blood sauce’, is made with *tunny entrails with gills, fluid and blood, sprinkle with sufficient salt in a jar for two months*<sup>96</sup>.

<sup>93</sup> The weights and measurements given in the recipe of this fake Byzantine *murrī* are Antiochan and Zahiri [as] in Mayyafariqin, *Anonymous Andalusian Cookbook*, ed. C. MARTINELLI, C. PERRY, D. FRIEDMAN, p. 217. See also the kosher *murrī* in late antique Palestine mentioned in the Talmudic literature, S. WEINGARTEN, *Fish and Fish Products...*, p. 235–245.

<sup>94</sup> On the Latin authors’ reference to mackerel in fish sauces see C. JARDIN, *Garum et sauces de poisson...*, p. 85, and S. GRAINGER, *The Story of Garum...* MARTIAL, *Epigrams*, XIII, 102–103 mentions a *garum socium* from the first blood of the mackerel, *scombrī de sanguine primo: 102 Garum sociorum / Expirantis adhuc scombrī de sanguine primo accipe fastosum, munera cara, garum. 103 Amphora muriae Antipolitani, fateor, sum filia thynni: essem si scombrī, non tibi missa, forem*. See R. CURTIS, *Garum and Salsamenta...*, p. 172 and n. 52 and S. GRAINGER, *Garum and Liquamen...*, p. 247–261.

<sup>95</sup> *Strabonis geographica*, III, 4, 6, vol. I–III, ed. A. MEINEKE, Leipzig 1877 [= BSGR]: εἶθ’ ἢ τοῦ Ἡρακλέους νῆσος ἥδη πρὸς Καρχηδόνι, ἦν καλοῦσι Σκομβραρίαν ἀπὸ τῶν ἀλίσκομένων σκόμβρων, ἐξ ὧν τὸ ἀριστον σκευάζεται γάρων. The question regarding *garon* from mackerel in a later date Strabo’s commentary is quite intriguing: νῆσός ἐστιν ἢ καλουμένη Σκομβραρία ἀπὸ τῶν ἀλίσκομένων σκόμβρων, ἐξ ὧν τὸ ἀριστον σκευάζεται γάρων (οὕτως οὖν εἶπεν ὁ Στράβων τὸ γάρων), STRABO, *Chrestomathia*, III, 59, 2, [in:] *Strabons Geographika, Epitome und Chrestomathie*, vol. IX, ed. S. RADT, Göttingen 2010.

<sup>96</sup> *Geoponica sive Cassiani Bassi scholastici De re rustica eclogae*, XX, 46, ed. H. BECKH, Leipzig 1895 (repr. Stuttgart–Leipzig 1994) [= BSGR] (cetera: *Geoponica sive Cassiani Bassi*), p. 528–529. English

In recent years, Greek fishermen have used mackerel and the small fish *tsiros* (the so-called small lean mackerel) to make a kind of *garos* in the Bosphorus and Black Sea. There is an analytical description of how to catch and preserve mackerel and *tsiros* but there is no mention anywhere of processing the blood of these fish, but only entrails and livers, which are washed to remove the blood and impurities. These salted livers – called *garos* in their dialect – were for trade<sup>97</sup>. It is noteworthy that, with the exception of fasting days, the Byzantines and Christians of the East paid little heed to the proscriptions against consuming blood, particularly that of fish. Blood alone as an ingredient in recipes or for the preparation of sausages may have been avoided, but not the well-washed viscera; indeed, the livers of animals and fish full of blood were always favorite foods, either preserved with salt or cooked<sup>98</sup>. We do know they did not use fish sauce, *garos*, during Lent. Did they, perhaps, use a fake *garos*, a vegetarian sauce like Arabian *murrī*? What is fake *murrī Rūmī* or Byzantine *murrī* and what is its equivalent in Byzantine cuisine? Let's look at the Byzantine and Arabic sources on these two types of *murrī* with and without fish and their shared culinary and medical traditions.

Some recipes are known in Arabic cookbooks as *muzawwarāt*, 'simulated dishes,' usually translated as false, fake, or counterfeit dishes like *eggless omelet*, *drained yogurt without yogurt*, *making milk from coconut*, *fish condiments without fish*, and so<sup>99</sup>. Condiments similar to the fish sauces *garos* and *murrī* but made without fish, *ṣīr*, and similar to the false *ṣaḥna* in Egypt mentioned above, are certainly a type of counterfeit *garos*, the fake *murrī Rūmī* translated as Byzantine *murrī*, a *muzawwarāt* recipe either intended for the fasts of Christians or diets restricted for medical reasons. Nawal Nasrallah, in the translation and commentaries of Ibn Sayyār al-Warrāq, *Kitāb al-Ṭabīkh*, says that *Christians traditionally prepare muzawwarāt during the fasting days of Lent. Cooks also make them for the sick since they are light and nourishing [...] and doctors prescribe them because they*

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trans.: *Geoponika. Farm Work. A Modern Translation of the Roman and Byzantine Farming Handbook*, trans. A. DALBY, Totnes 2011, p. 348–349. See also A. DALBY, *Flavours of Byzantium...*, p. 68–69, 177. See the comments on this recipe S. GRAINGER, *Garum and Liquamen...*, p. 250–252.

<sup>97</sup> B. ΒΑΦΕΙΛΑΔΟΥ, "Ἡθῆ καὶ ἔθιμα Σωζοπόλεως, Λα 29, 1974, p. 185–186. On *tsiros* or *tzeros* and *scomber*, F.H. TINNEFELD, *Zur kulinarischen Qualität byzantinischer Speisefische*, SMW 11, 1988, p. 164, 165. A. DALBY, *Flavours of Byzantium...*, p. 334. See also Π. ΑΝΔΡΟΥΔΗΣ, *Μαρτυρίες για το αλάτι από το Βυζάντιο...*

<sup>98</sup> Ch. MESSIS, *Le corpus nomocanonique oriental et ses scholiastes du XII<sup>e</sup> siècle. Les commentaires sur le concile in Trullo (691–692)*, Paris 2020, p. 375–377. B. CASEAU, *Nourritures terrestres, nourritures célestes...*, p. 67–69; EADEM, *Le tabou du sang à Byzance – observances alimentaires et identité*, [in:] *Pour l'amour de Byzance. Hommage à Paolo Odorico*, ed. C. GASTGEBER, Ch. MESSIS, D.I. MURESAN, F. RONCONI, Francfort 2013, p. 53–62.

<sup>99</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 46 (Simulated dishes Christians eat during Lent), p. 105 (Healthy vegetarian dishes for the nourishment of the sick); N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 42.



are easier to digest. Indeed, in the medieval sense, *muzawwar* is also synonymous with ‘improved,’ and ‘remedying’<sup>100</sup>.

This is precisely what is confirmed by Aetius, a Byzantine physician from Amida, present-day Diyarbekir (probably 502 in Amida, Mesopotamia 575), when speaking about a fake *garos* recipe for use on fast days – a reference that has thus far remained unused regarding fish condiments without fish like Arab *murrī* made mainly from cereal grain. According to Aetius’s recipe for preparing a fasting *garos* (Γάρου νηστικῆ σκευασία): *mix with water, salt, black dry chickpeas, mushrooms, and dry black figs, drain later and store for future use*<sup>101</sup>. The preparation of yeast from ground chickpeas, water, and salt – sometimes with the addition of spices (black sesame, sesame oil, cinnamon, clove oil) – is always used in the Greek world for a special, fine bread. Chickpea yeast initiated by spontaneous fermentation of coarsely-ground chickpea in water, a variant of conventional sourdough yeast, is used for the bread *autozymon* (αὐτόζυμον) or “self-rising”, that is, a bread that doesn’t need any yeast, baking soda, or a sourdough starter to rise but uses a cultivation of bacteria found on the chickpea. *Autozymon* (αὐτόζυμον), pronounced *aftozymon*, is also called by pareymological interpretation *heptazymon* (ἑπτάζυμον), and especially nowadays in Crete “*eftazyimo*” (εφτάζυμο), which means “kneaded seven times”<sup>102</sup>. It is also worth adding that in Late Roman times there were vegetarian alternatives to *garum*, like pear vinegar and pear liquamen (*liquamen ex piris*) recommended to vegetarians by Palladius<sup>103</sup>. Finally, according to a rereading of the Arabic tale of *Delectable War between Mutton and the Refreshments of the Market-Place*, like all *muzawwarāt* or simulated dishes this fake *garos*, as meatless recipes, was not really a dish and never became a rightful part of the Arabic-Islamic cuisine. Such dishes were considered as therapy for invalids and imported from the local Christian Nestorian tradition of fasting and the Greek idea of curing certain

<sup>100</sup> N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 613. D. WAINES, M. MARIN, *Muzawwar: Counterfeit Fare for Fasts and Fevers*, [in:] *Patterns of Everyday Life*, ed. D. WAINES, Ashgate 2002, p. 303–315 (= I 69, 1992, p. 289–301). See also L.N.B. CHIPMAN, *Digestive Syrups and After-Dinner Drinks. Food or Medicine?*, [in:] *Drugs in the Medieval Mediterranean. Transmission and Circulation of Pharmacological Knowledge*, ed. P. BOURAS-VALLIANATOS, D. STATHAKOPOULOS, Cambridge 2023, p. 328.

<sup>101</sup> AETIOS OF AMIDA, *Sixteenth Book on Medicine – Gynaekologie des Aëtios*, 141.1–3, ed. Σ. ΖΕΡΒΟΣ, Leipzig 1901, p. 165: Γάρου νηστικῆ σκευασία. “Υδατος ξστλα ἦτοι ξέστ. λα. ἀλῶν ξστβ ἦτοι ξέστ. β. ἐρεβίνθων ξηρῶν μελανῶν ξστδ ἦτοι ξέστ. δ. ἀμανιτῶν λιβ ἦτοι λίτρ. β. ισχάδας μέλανας ν. ἐνώσας εἶτα διηθήσας φύλαττε. See on this recipe and the use of chickpea as a medicinal foodstuff, M. KOKOSZKO, K. JAGUSIAK, J. DYBAŁA, *The Chickpea (ἐρέβινθος; Cicer arietinum L) as a Medicinal Foodstuff and Medicine in Selected Greek Medical Writings*, SCer 7, 2017, p. 114.

<sup>102</sup> *Anonymus medicus, De cibis*, 25.2–3, [in:] *Anecdota medica Graeca*, ed. F.Z. ERMERINS, Leiden 1840 (repr. Amsterdam 1963), p. 275, and Latin translation and commentary p. 274–275 n. 1; *Scholia in Batrachomyomachia*, scholion 35, ed. A. LUDWICH, [in:] *Die Homerische Batrachomachia des Karpes Pigres. Nebst Scholien und Paraphrase*, Leipzig 1896, p. 225.17–20.

<sup>103</sup> A. DALBY, *Food in the Ancient World...*, p. 157 entry *garum*, and p. 341 entry *Vegetarianism*.

illnesses by a vegetarian diet. Both seem to have been inserted into the Arabic-Islamic culinary corpus by the Christian Nestorian physicians<sup>104</sup>.

Byzantine and Arab cuisines made extensive use of boiled or soaked chickpeas. It's interesting to note that some recipes, particularly from Syria, like *Shāmiyya* and *Levantine qaliyya*, combine soaked chickpeas with meat and add *murri*<sup>105</sup>. It is worth noting that the recipe *himmaṣ kassā*, a specialty with boiled chickpeas, is considered *Rūmī*, and the Byzantine recipe *ṣilāga rūmiyya* used head, trotters, neck, extremities, and a handful of chickpeas<sup>106</sup>.

**Jullāb/zoulapi(o)n.** The Arab sweet liquid preparation *jullāb* was mentioned in Byzantine sources as *zoulapi(o)n* or *zoulabi(o)n* (ζουλάπι(ο)ν, ζουλάβι(ο)ν, pl. ζουλάπια *zoulapia*) as early as the ninth century but it was more frequently and analytically described in the eleventh century and later<sup>107</sup>. The *zoulapion* could be made of water and flower essences or pharmaceutical vegetal substances, fruit juice, sugar, or honey, but also rose oil. It was used as an emollient and sedative or as a solution for other drugs; it is specified in Byzantium as *rodozoulapon* or *zoulapi(o)n rodōn* (ρόδοζούλαπον, ζουλάπιν ρόδων), when the *zoulapi(o)n* is made with roses<sup>108</sup>. The word *zoulapion* is a loan from Arabic *jullāb* with the original Iranian meaning of rosewater, *ma' ward*, and later with the meaning of rosewater *syrup* (< Arab. *sharab* a solution mainly of sugar in water) or a syrup with other flavoring agents such as herbs, fruits, spices, and aromatics. An Arab recipe for *jullāb* is given by Ibn Sina (known in the West as Avicenna, 980–June 1037): *cook together 2 pounds sugar, ½ cup water, and before taking it away from heat, add 2¼ cups rosewater*<sup>109</sup>.

<sup>104</sup> P. LEWICKA, *The Delectable War between Mutton and the Refreshments of the Market-Place. Re-reading the Curious Tale of the Mamluk Era*, SAI 13, 2007, p. 20–29, here 29 n. p. 24. L.N.B. CHIPMAN, *Digestive Syrups and...*, p. 328–329.

<sup>105</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabikh*, ch. 84, p. 343–344.

<sup>106</sup> On *himmaṣ kassā* see *Anonymous Kanz*, p. 384 (625). On *ṣilāga rūmiyya*, IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabikh*, ch. 44, p. 223.

<sup>107</sup> PSEUDO-NICEFORO, *Libro dei sogni*, part 3 alphabetic entry zeta line 42, ed. G. GUIDORIZZI, Naples 1980 [= Koi, 5]; PSEUDO-GALEN, *De remediis parabilibus libri III*, 564.10, [in:] *Claudii Galeni opera omnia*, vol. XIV, ed. C. G. KÜHN, Leipzig 1827; M. MAVROUDI, *A Byzantine Book on Dream Interpretation...*, p. 65 n. 14; P. BOURAS-VALLIANATOS, *Cross-cultural Transfer...*, p. 974–976.

<sup>108</sup> On some *zoulapia*, SYMEON SETH, *Syntagma*, p. 30.7, p. 35.16; p. 66.17, and on some rose products with sugar and honey, and *zoulapion* made with roses, NIKOLAOS MYREPSOS, *Dynameron*, for *zoulapi(o)n rodōn* section 92, p. 65 (ζουλάπιν τῶν ρόδων), and for *rodozoulapon* section 35, p. 340–341 (ἀε' Δροσάτου σκευασία τοῦ λεγομένου, ῥοδοζουλάπου· ὠφελεῖ· πρὸς πλευριτικοῖς [...] τὸ δὲ τούτων ῥοδοζούλαπον). For *rodozoulapon* in John Aktouarios and Nikolaos Myrepsos see P. BOURAS-VALLIANATOS, *Innovation in Byzantine Medicine. The Writings of John Zacharias Aktouarios (c.1275–c.1330)*, Oxford 2020 [= OSB], p. 165–168, 263. On recipes of *zoulapia* culled from Arabic sources in the early fifteenth-century codex Vaticanus graecus 282, in ff. 433v–437r, see D.C. BENNETT, *Medicine and Pharmacy in Byzantine Hospitals. A Study of the Extant Formularies*, Abingdon–New York 2017 [= MMM], p. 40, 45–46 n. 36.

<sup>109</sup> N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 380 n. 41, and p. 597.

Around the same period, in the mid-eleventh century, it is reported that Byzantine *zoulapion* was made with Saracen or Egyptian roses despite the fact that we know nothing about roses from Egypt in that time; rose confiture and dried plums were exported to Egypt from Antioch and Laodicea (then under Byzantine rule) as well as from Syria and Palestine<sup>110</sup>. In Late Byzantium *zoulapion* described any other pharmaceutical syrup preparation with sugar or honey and is equated to or identified with *serabion* or *serapion* (σεράβιον or σεράπιον) and συρόπιον < Ital. *siroppo* < Lat. *siruppus*, *syrupus*) from the Arabic *šarāb* that may designate drink, beverage, wine, syrup and used in the general sense of beverages. According to Byzantine Chariton's *Recipe Book*, an unedited work, *zoulapia* are also called *serabia*, this is how the Egyptian physicians call them in the barbarian language or according to *Scholia* in Aristophanes' *Plutus* beverages are those that the vulgar people called *zoulapia*, *syropia*, *potoi*<sup>111</sup>. The Byzantine astronomer Georgios Chionides (fourteenth century), called these sugar-based preparations or potions *glykysmata* (γλυκύσματα), the equivalent Greek term for the Arabic *juwārish/jawārish*, syrupy preparations, used in one instance as *tzouarisia* (τζουαρίσια)<sup>112</sup>. Gradually, a number of medicinal preparations of Arabic names *zoulapion* and *matzounion* were introduced and began to appear in Byzantine medical texts adhering to a cosmopolitan medical tradition and this complex, varied nomenclature preoccupied already Byzantines dealing with medical and nutritional issues<sup>113</sup>. The Byzantines

<sup>110</sup> S.D. GOITEIN, *Letters of Medieval Jewish Traders*, Princeton, N.J. 1973, for products of Syria–Lebanon imported to Egypt, rose marmalade, dried plums p. 89, 91, 94–95, 185, 268, 287. On Antioch after Byzantine reconquest of 969, H. KENNEDY, *Antioch: from Byzantium to Islam...*, p. 196–197: *Antioch shows signs of joining in the revival experienced by the coastal cities, to take its place once again in the twelfth century as one of the most important cities of the Levant*. See also, *Ambassadors, Artists, Theologians...*

<sup>111</sup> On beverages (*sharab*), IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 114, p. 460–463, ch. 123, p. 477–478. See *serapion*, plum syrup (σεράπιον τῶν δαμασκηνῶν) in CHARITON, *On lozenges – Χαρίτωνος Περὶ Τροχίσκων*, ed. A.Π. ΚΟΥΖΗΣ, [in:] *Τεσσαρακονταετηρὶς Θεοφίλου Βορέα*, vol. I, Ἀθήναι 1939, p. 109–115, here p. 111.24–25. See also the unedited Chariton, *Recipe Book*, Parisinus gr. 2240, according to P. BOURAS-VALLIANATOS, *Innovation in Byzantine Medicine...*, p. 170 n. 112: ζουλαπίων τῶν καὶ σεραβίων καλουμένων, οὕτω γὰρ βαρβάρῳ φωνῇ οἱ τῆς Αἰγύπτου κεκλήκασιν ἰατροί, and p. 171; *Scholia in Aristophanem Plutum*, 717b, ed. M. CHANTRY, [in:] *Scholia in Aristophanem*, vol. III, *Scholia in Thesmophoriazusas, Ranas, Ecclesiazusas et Plutum*, Groningen 1996: πιστὸν τὸ πινόμενον, τὰ δὲ καλοῦνται πιστά, οἷά εἰσι τὰ ἰδιωτικῶς λεγόμενα “ζουλάπια” καὶ “συρόπια” καὶ “ποτοί”.

<sup>112</sup> On *juwārish* ‘syrupy preparations consumed as digestive stomachic after the meals’, N. NASRALLAH, *Treasure Trove of Benefits and Variety at the Table*, p. 623, and *Anonymous Kanz*, p. 260–265 (recipes 372–80). P. BOURAS-VALLIANATOS, *Cross-cultural Rransfer...*, p. 1000 n. 188. On Georgios Chionides and the Persian substances see D.C. BENNETT, *Medicine and Pharmacy in Byzantine Hospitals...*, p. 128–129 and on the inter-relationship between the Greek and Arabic medicine, p. 22–23, and p. 124–128.

<sup>113</sup> B. ZIPSER, *Griechische Schrift, arabische Sprache und graeco-arabische Medizin: Ein neues Fragment aus dem mittelalterlichen Sizilien*, MLR 15, 2003/2004, p. 154–166; M. MAVROUDI, *Arabic Words in Greek Letters: The Violet Fragment and More*, [in:] *Moyen arabe et variétés mixtes de l’arabe à travers l’histoire: Actes du premier colloque international (Louvain-la-Neuve, 10–14 mai 2004)*, ed. J. LENTIN,

were quite open to external influences and promoted a steady diffusion of Arabic medical knowledge focused on the introduction and diffusion of sugar<sup>114</sup>. *Zoulapion* was a new term adopted by Byzantines for the thick liquid preparations with sugar instead of honey used in the late antique dietetic-pharmaceutical treatises, but sugar's use as a medicinal substance was promoted intensely in the context of Byzantine daily medical nutritional practices from the late eleventh-early twelfth century onward. Bouras-Vallianatos says that we are not informed as to whether the juleps were prepared in Byzantium or transported there; nevertheless, there was awareness of sugar-based potions in Constantinople from the twelfth century forward<sup>115</sup>.

Based on the aforementioned data and our own research I can deduce that the Byzantines became aware of and started utilizing *jullāb* as *zoulapion* during the ninth to tenth centuries, when they have more direct interaction with well-known Syrian and Upper Mesopotamian rose-producing towns, and particularly during the eleventh century, when they successfully reoccupied these cities<sup>116</sup>. Thus Symeon Seth from Antioch – an eleventh-century scientist, translator from Arabic, and official – mentioned numerous *zoulapia* in his treatise *On the Properties of Food* written for the emperor Michael VII Doukas (r. 1071–1078)<sup>117</sup>. Symeon Seth describes the pharmaceutical properties of the rose and several rose products: the already well-known in Antiquity and Byzantium rose oil, *rodelaion* or *rodinon elaiion*, rose honey, *rodomeli*, extract of roses or rosewater, *rodostagma*, *hydrosaton*<sup>118</sup>; and for the first time in a Byzantine text, four special *zoulapia* with pharmaceutical vegetal substances that are obviously absent from ancient Greek or Early Byzantine medical literature, certainly loans of Arabic origin<sup>119</sup>. Numerous

J. GRAND'HENRY, Louvain-la-Neuve 2008 [= PIOL, 58], p. 321–354. For the Arabic loanwords and edited and unedited translations of Arabic medical texts into Greek and works by Byzantines, see P. BOURAS-VALLIANATOS, *Cross-cultural Transfer...*, p. 963–1008 and especially p. 974 *passim*.

<sup>114</sup> P. BOURAS-VALLIANATOS, *Cross-cultural Transfer...*, p. 974.

<sup>115</sup> *Ibidem*, p. 980–993.

<sup>116</sup> On this proposal and a chronology of when Byzantines began using the *jullāb* see M. LEONTSINI, I. ANAGNOSTAKIS, *Food Mobilities...*, forthcoming.

<sup>117</sup> P. BOURAS-VALLIANATOS, S. XENOPHONTOS, *Galen's Reception in Byzantium...*, p. 431–469; M. CRONIER, A. GUARDASOLE, C. MAGDELAINE, A. PIETROBELLI, *Galien en procès à Byzance: l'Antirrhétique de Syméon Seth*, Gal 9, 2015, p. 89–139.

<sup>118</sup> SYMEON SETH, *Syntagma*, p. 92.14–22 on roses (Περὶ ῥόδων), p. 50.14, p. 58.12, p. 68.21–22, p. 80.1, p. 91.24 rose-oil, *rodelaion* or *rodinon elaiion* (ῥοδέλαιον, ῥόδινον ἔλαιον), p. 36.17 rose-honey, *rodomeli* (ῥοδόμελι), p. 15–16, p. 64.13, p. 95.11 rosewater, *rodostagma* (ῥοδόσταγμα), p. 111.22–26 rosewater, *hydrosaton/rododrosaton* (Υδροσάτον / in apparatus criticus ῥοδοδρσάτον). On *hydrorosaton*, a mixture of the juice of roses with water and honey, see P. BOURAS-VALLIANATOS, *Innovation in Byzantine Medicine...*, p. 163 n. 75. *Rosaton* (ῥοσάτον < lat. rosatum) was a kind of wine or just a mixture of the juice of roses with wine and honey, ORIBASIOS, *Collectionum Medicarum*, V, 33, 1–5, p. 151–152; see chapter's English trans. A. DALBY, *Flavours of Byzantium...*, p. 181.

<sup>119</sup> SYMEON SETH, *Syntagma*, p. 30.7 bugloss, *Anchusa italica* (βούλωσσον), p. 41.5–13 on *zoulapion* (Περὶ ζουλαπίου), p. 48.1–2 julep of violet, *iosakharon*, *iozoulapon* (ιοσάκχαρον, ιοζούλαπον),

sugar-based potions such as *zoulabi(o)n* and *serabi(o)n* are also mentioned in the eleventh or early twelfth century *Ephodia tou Apodemountos* (Εφόδια τοῦ ἀποδημοῦντος, *Provisions for the Traveller and Nourishing for the Sedentary*), the unedited Greek translation of the Arabic work *Zād al-Musāfir wa-Qūt al-Ḥāḍir* of Ibn al-Jazzār, and is the first significant medical manual in the Greek language to consistently refer to sugar and its use in medical preparations<sup>120</sup>. The dissemination of this text also coincided with the intensification of the mobility and exchange of eastern products in the Mediterranean from the eleventh century onwards. This translation also contributed to the adoption of sugar and named sugar-based potions and other oriental constituents in Byzantine medical practice.

In the *Ephodia*, in addition to direct references to sugar, we also find numerous references to named sugar-based potions such as *zoulabi(o)n* and *serabi(o)n* involving some special ingredient, for example, violet *zoulabion* or pomegranate *serabion*, and also to *oxysa(k)charon*. These may be used as composite drugs on their own or as a base for the administration of other ingredients. Sugar gradually became available in Byzantium<sup>121</sup>.

Later, the *sakharata* (sugar sweets, σαχαράτα), a name that refers to Arabic delicacies like *paloudaki* (a delicacy discussed in this paper's last section), began to spread among the upper social classes and refers to a refined diet corresponding to the period's luxury living standards.

The use of roses, rosewater, and rose oil unguents (*myron*) in cosmetics and therapeutics has been widespread since ancient times. Rose origin products are described in detail by Theophrastos, Dioscorides, Pliny the Elder, and Athenaeos. They mention the famed roses of Mount Pangæus in Philippoi in Macedonia, the rose of Cyrene and Carthage in Africa, the roses of Spain, Præneste, and Campania of Miletus, and the *rodinon myron* from Phaselis, in Asia Minor, near the

p. 66.17 julap of *Melissa officinalis*, *melissofyllon* (μελισσόφυλλον), p. 73.8 julap of water lily, *nymphaiozoularon* (νυμφαιοζούλαρον). On the medieval Arabic medical literature as the source of Seth's items, see G. HARIG, *Von den arabischen Quellen des Symeon Seth*, MJou 2, 1967, p. 248–268, and on the Arabic origin of balm, *Melissa officinalis*' and julap's properties see p. 252, and p. 260. P. BOURAS-VALLIANATOS, *Innovation in Byzantine Medicine...*, p. 142 n. 12.

<sup>120</sup> The unedited Greek translation of the Arabic work Ibn al-Jazzār, *Ephodia tou Apodemountos* (Greek translation of *Zād al-Musāfir wa-Qūt al-Ḥāḍir*): Vaticanus gr. 300, ff. 11r–267r, dated in 1140. T. Miquet emphasizes that the Greek translation is found in more than 48 manuscripts, T. MIGNUET, *Recherches sur l'histoire du texte grec du Viatique du voyageur d'Ibn al-Ġazzār*, Ph.D. Diss., École pratique des Hautes Études, Paris 2019, p. 126; IDEM, *Premiers jalons pour une étude complète de l'histoire du texte grec du Viatique du Voyageur (Εφόδια τοῦ ἀποδημοῦντος) d'Ibn al-Ġazzār*, RHT 12, 2017, p. 59–105, here 74sqq; A. TOUWAIDE, *Translation: a Case-study in Byzantine Science*, Medi 16, 2013, p. 165–170; T. MIGNUET, *La traduction grecque du Viatique du voyageur (Zād al-musāfir) d'Ibn al-Ġazzār et l'une de ses révisions à l'époque paléologue*, [in:] *Translation Activity in Late Byzantine World. Contexts, Authors, and Texts*, ed. P.Ch. ATHANASOPOULOS, Berlin–Boston 2022, p. 125–143.

<sup>121</sup> As *Ephodia* is unedited, I reproduce P. BOURAS-VALLIANATOS, *Innovation in Byzantine Medicine...*, p. 166, p. 113 n. 34, 166, 278.



present-day rose-producing regions of ancient Pisidia in Isparta<sup>122</sup>. Byzantine physicians regularly describe the usage of rose products, but they hardly ever mentioned where the roses came from, with the exception of one case involving Saracen, *sarakēnika*, (σαρακήνικα) or Egyptian, *aigyptia* roses (ρόδα αἰγύπτια). Does this appellation mean roses from Egypt or an Egyptian rose variation?

A remedy with Egyptian roses used in Mauraganos hospital, *xenōn* (ξενών), is described in a fifteenth-century copied manuscript. Mauraganos hospital is identified with Maurianos hospital built by Emperor Romanos Lakapenos (emp. 919–945) in Constantinople and the recipe must date before 1204<sup>123</sup>. A remedy for jaundice of the liver made with a *zoulapion* and numerous other ingredients – amongst them dried purple roses and Saracen and Indian small roots (*rizaria*, *sarakēnikon*, *indikon rizarion*) – is provided by a certain Abram Sarakēnos, a Saracen and Arab head physician (*aktouarios* and also *basilikos archiatros*) of Mangana hospital (*xenōn*, ξενών) in Constantinople and probably living after the eleventh or twelfth century. This remedy provides the Greek translation of the Arabic names of ingredients along with their transliteration into Greek<sup>124</sup>. Although Saracen roses are not specifically mentioned in this instance, it is intriguing that a Saracen physician in Constantinople prepares a *zoulapion*, a remedy made with roses and other Saracen and Indian ingredients. Later, in the thirteenth century, the Byzantine physician Nikolaos Myrepsos mentions *sarakēnika*

<sup>122</sup> THEOPHRASTUS, *Enquiry into Plants*, vol. II, Books 6–9, VI, 6, 4, 38–39, ed. A. HORT, Cambridge, Mass. 1916 [= LCL, 79], cetera: THEOPHRASTOS, *Historia plantarum* (roses of Mount Pangæus, in Philippi in Macedonia and Cyrene); On roses of Præneste and Campania, of Miletus, of Philippi and Mount Pangæus, the “Grecian” rose or “lychnis”, probably “Macedonian” rose, that it is not a rose at all, but one of the Malvaceæ; the “Græcula”, the roses of Cyrenæ, Carthage, and Spain, see PLINY, *Natural History*, vol. VI, Books 20–23, 21, 10, 16–20, ed. W.H.S. JONES, Cambridge 1969 [= LCL, 392], p. 172–175; on the perfume of roses from Phaselis, the reputation of which was afterwards eclipsed by those of Neapolis, Capua, and Præneste, PLINY, *Natural History*, vol. V, Books 17–19, 18, 2, ed. W.H.S. JONES, Cambridge–London 1950 [= LCL, 371], p. 100–101. On roses in antiquity and in the Middle Ages, see W.L. CARTER, *Roses in Antiquity*, *Anti* 14.55, 1940, p. 250–256; A. DALBY, *Food in the Ancient World...*, p. 284; M. TOUW, *Roses in the Middle Ages*, *EBot* 36, 1982, p. 71–83. On rosewater in classical Greece and Rome (1200 BC–400AD) see R.E. MATTOCK, ‘*The Silk Road Hybrids. Cultural Linkage Facilitated the Transmigration of the Remontant gene in Rosa x Damascena, the Damask Rose, in circa 3,500 BCE from the River Amu Darya Watershed in Central Asia, the River Oxus valley of the Classics, to Rome by 300 BCE*’, Thesis submitted for the degree of Doctor of Philosophy, University of Bath 2017, ch. 5.6, p. 97–100.

<sup>123</sup> D.C. BENNETT, *Medicine and Pharmacy in Byzantine Hospitals...*, p. 209 and on Maurianos hospital or *Mauraganos xenon*, p. 141–147; P. BOURAS-VALLIANATOS, *Innovation in Byzantine Medicine...*, p. 26–27.

<sup>124</sup> D.C. BENNETT, *Medicine and Pharmacy in Byzantine Hospitals...*, for the Greek text of remedy p. 204–225 and 29 n. 42 and on Abram p. 21–22, 108, 110, 115, 118. Bennet (p. 45–46, 115), considers that Abram could be a Jew and that his second rank therefore provides no evidence for dating the office of *archiatros* in Constantinople; P. BOURAS-VALLIANATOS, *Innovation in Byzantine Medicine...*, p. 26–27.

(σαρακήνικα) and *aigyptia* roses (σαρακήνικα αιγύπτια) roses in producing salves or plaster and rose decoctions<sup>125</sup>.

What do we know about these Egyptian roses? Egyptian roses were well-known in Roman antiquity; they took six days to reach Rome. They were used in Neroian orgies and costed a fortune for a banquet<sup>126</sup>. Due to the high demand for roses at banquets and festivities, roses that were not accessible in Rome during the winter were transported from Egypt. The poet Martial remarks sarcastically that during the reign of Domitian, the streets smelled of spring due to the abundance of roses and asks that the Egyptians send wheat while the Romans could send them roses<sup>127</sup>. Regarding how rose products were made in Antiquity and Byzantium, rose petals were soaked in water, wine, vinegar, oil, or honey, depending on whether they would be used to make perfume, a flavouring onction or a medical remedy. Preparations having nothing to do with distillation were called *diar(r)odon*, *rhodostakton*, *rodostagma*, and *rodomeli* (διάρροδον, ροδόστακτον, ροδόσταγμα, ροδόμελι), *myron rodinon*, *rodōn* / *rodou myron stigma* / *stagōn* (μύρον ρόδινον, ρόδων/ ρόδου στάγμα/σταγόνων μύρον)<sup>128</sup>. It could be said that some of them are related to the Persian and Arabian rosewaters or changed into *rhodozoulapia* by utilizing sugar instead of honey (*rodomeli*). Do we have any evidence of the cultivation and trading of roses and rose products in Egypt during the period that the Byzantine sources refer to Egyptian roses? Are there any references to comparable

<sup>125</sup> ΝΙΚΟΛΑΟΣ ΜΥΡΕΠΣΟΣ, *Dynameron*, section 421, p. 191 (ρόδα κλειστά, σαρακήνικα), section 87.2, p. 466, and section 46.10–11, p. 574 (ρόδα ἀληθινὰ καὶ ρόδα Αἰγύπτια), and decoction p. 1071. 16 (Αἰγυπτίων ρόδων, τὸ ἀπόξεμα). In Byzantium ἀληθινός means also red, purple, and ἀληθινὰ καὶ ρόδα Αἰγύπτια means red, purple roses, see ἀληθινοπόρφυρος, genuine purple, POxy.114 (II/III A.D).

<sup>126</sup> G. SÜETONIUS TRANQUILLUS, *De vita Caesarum libros VIII et De grammaticis et rhetoribus librum*, Nero, ed. R.A. KASTER, Oxford 2016 [= SCBO], English trans. SÜETONIUS, *The Lives of the Caesars*, Nero, 27, vol. II, ed. J.C. ROLFE, Cambridge, Mass.–London 1914, 1959 (repr. 1997, 1998) [= LCL, 31, 38], p. 130–131; G. KRÜSSMANN, *The Complete Book of Roses*, Portland, 1981, p. 36: *Whole shiploads came directly to Rome from Egypt; this journey took six days*. The fragrance and quality of the Egyptian roses, like many other Egyptian flowers, depended on the season and places of their harvest, THEOPHRASTOS, *Historia plantarum*, VI, 8, 5.

<sup>127</sup> MARTIAL, *Epigrams*, VI, 80, 62–64: *at tu Romanae iussus iam cedere brumae, / mitte tuas messes, accipe, Nile, rosas*.

<sup>128</sup> Just a few examples: GALEN, *De compositione medicamentorum secundum locos libri X*, [in:] *Claudii Galeni opera omnia*, vol. XII, ed. C.G. KÜHN, Leipzig 1826, p. 646.14 (μύρον ρόδινον), p. 766–767 (διάρροδον); ORIBASIOS, *Collectionum Medicarum*, V, 25, p. 142 (ροδόμελι); PAULUS AEGINETA, *Epitomae medicae*, VII, 15, 8, p. 331 (ροδόστακτον). The rose onction oil or rosewater drops, the *rodōn* / *rodou myron stigma* and *rodōn* / *rodou stagōn* and *rodostagma* are mentioned more often in middle Byzantine texts: *Chronographiae quae Theophanis Continuati nomine fertur Liber quo Vita Basilii Imperatoris amplectitur*, 15, ed. I. ŠEVČENKO, Berlin 2011 [= CFHB, 42], p. 56.11–12 (ρόδων στάγμα); *Iosephi Genesis Regum libri quattuor*, 4, 40.10, ed. A. LESMÜLLER-WERNER, H. THURN, Berlin–New York 1978 [= CFHB, 14], p. 90 (ταῖς ἐκ ρόδων σταγούσιν); THEOPHYLACTE D'ACHRIDA, *Lettres*, 14.6, ed. P. GAUTIER, Thessaloniki 1986 [= CFHB, 16.2], p. 175 (Τὸ μὲν γὰρ ἐκ τῶν τοῦ ρόδου σταγόνων μύρον).

medicinal use of Egyptian roses in mediaeval Western sources? Were the Byzantine references to *Sarakēnika* or *Aigyptia* roses related to some Western medical tradition in Italy, Sicily, and Salerno that was influenced by Arabic medicine? Could this assumption be deduced from the works of the Italian Byzantine translators from Arabic, known and used by Byzantine physician Nikolaos Myrepsos, who mentions these roses, and the translator of the work known as the *Ephodia*, both of whom are known to have had Western influences?

During the time period under examination we have some data of pharmaceutical diplomacy and fatimid-Byzantine gift exchange but lack precise data on how Egypt grows and trades roses<sup>129</sup>. Also, there is no mention of Egyptian or Saracen roses being used in medieval Latin medical or other treatises<sup>130</sup>. In contrast, Egypt seems to be importing rose products from Syria. According to Genizah letters, Egypt was not mentioned in the eleventh century as a producer and exporter of rose products as it was in Roman times, but was instead supplied by Syria and Palestine<sup>131</sup>.

Finally I believe that the terms Egyptian roses (ρόδα αἰγύπτια) and Saracen (σαρακήνικα) do not denote any particular type of rose or origin but rather refer to an Arab (and not solely Egyptian) technique commonly employed by Muslims to prepare roses for *zoulapion*. This is significant because Egypt served as a prominent representation of the Saracen Muslim world to the Byzantines throughout the eleventh century. As seen above, Chariton's *Recipe Book* states that *zoulapia* are also called *serabia*, by the Egyptian physicians in their barbaric tongue. Egyptian physicians in this context may refer to Arabs or Muslims in general, and I think the same is true of Egyptian roses.

I have already argued that in the eleventh century, when all these detailed testimonies about the *zoulapion* and especially those mentioned by Symeon Seth who had visited Egypt, first appeared in Byzantine sources, relevant information about rose preparations and their trade appeared also in the letters found among the Cairo Genizah documents. Were Egyptian roses and rose products mentioned in Genizah documents? Were the Saracen or Egyptian roses referenced in Byzantine sources from the eleventh century onwards related to Egypt's established economic ties with Byzantium and thus reflecting the dominant role of Fatimid

<sup>129</sup> Y. LEV, *The Fatimids and Byzantines, 10<sup>th</sup>–12<sup>th</sup> Centuries*, GA 6, 1995, p. 190–208. P. MAGDALINO, *Pharmaceutical Diplomacy: A New Document on Fatimid-Byzantine Gift Exchange*, [in:] *Myriobiblos. Essays on Byzantine Literature and Culture*, ed. Th. ANTONOPOULOU, S. KOTZABASSI, M. LOUKAKI, Berlin 2015 (= BArchiv 29), p. 245–251.

<sup>130</sup> I want to thank my colleague Petros Bouras-Vallianatos for sharing this information. See the paradigm of Southern Italy and Sicily, P. BOURAS-VALLIANATOS, *Cross-cultural Transfer...*, p. 982–988.

<sup>131</sup> In the mid-11<sup>th</sup> century several products among which roses products from Syria–Lebanon imported to Egypt, S.D. GOITEIN, *Letters of Medieval...*, p. 89, 91, 94–95 185, 268, 287. See below the recipes of *Anonymus Kanz* with fresh (that means a species) or dried roses imported from Persia, Iraq, Syria Levantine.

Egypt during this period? Or could the Saracen and Egyptian roses be related to Byzantine knowledge that some rose products, particularly *zoulapia*, were created by Egyptian and Saracen physicians like Abram Sarakenos, a Saracen mentioned earlier? Moreover, the terms ‘Egyptian’ or ‘Saracen’ roses could simply refer to Arab roses rather than roses from Egypt or an Egyptian rose species. However, it should not be ruled out that Byzantium imported dried roses for medicinal purposes from the Arab world, as this is known to occur in many places, most notably Egypt, which imports dried roses (*ward yābis*) from Iraq and Syria, especially their petals (*warāq al-ward*) and rosebuds (*azrār al-ward*) used in cooking dishes and making aromatic preparations<sup>132</sup>. In the fourteenth-century Egyptian cookbook, *the Anonymous Kanz*, a wide variety of fresh or dried roses is mentioned. Dried petals of roses and dried rosebuds – probably imported from Persia (*ward Jūri*), Iraq (*ward ‘Irāqī*), Nisibis of Upper Mesopotamia (*ward Nuṣaybīnī*), and the region of Antioch and Syria (*ward Shāmī*) – are used in many recipes for several preparations<sup>133</sup>. A recipe for wonderful water mentions *Nuṣaybīnī* roses and *Āṣimī* roses, the latter *could be a variety of white mountain roses named after the mountainous province in northeast Syria between Aleppo and Antioch, called al-‘Awāṣim*<sup>134</sup>. The *Anonymous Kanz* often notes: *When it is not the season of fresh roses, take dried Iraqi red roses, and leave them soaking in water overnight*. This specific reference is in a recipe for *sharāb al-ward* (concentrated syrup for rose drink), where the strained liquid of boiled roses is added to the *jullāb* syrup<sup>135</sup>. Consequently, the Saracen and Egyptian roses of the Byzantine sources used also for *zoulapia* are probably dried roses imported from the Arab world, along with sugar and other pharmaceutical ingredients for various preparations. The term ‘Egyptian’ probably gained prominence in Byzantium as an alternative for ‘Arab’ or ‘Saracen’ in the tenth and eleventh centuries of Fatimids but also in the earlier phase, the Aghlabids, when Egypt started to expand in the eastern Mediterranean and acquire a special position in the circulation of luxury goods and Islamic art<sup>136</sup>.

<sup>132</sup> N. NASRALLAH, *Treasure Trove of Benefits and Variety at the Table*, p. 571–572.

<sup>133</sup> *Anonymous Kanz*, p. 431 (701), 439 (721), 442 (724), 449–451 (742–744), and diverse rosewaters made with different roses and on varieties of roses used, N. NASRALLAH, *Treasure Trove of Benefits and Variety at the Table*, p. 550–551, 571–572.

<sup>134</sup> *Anonymous Kanz*, p. 436 (717), and N. NASRALLAH, *Treasure Trove of Benefits and Variety at the Table*, p. 436, n. 64.

<sup>135</sup> *Anonymous Kanz*, p. 259 (367).

<sup>136</sup> M. LEONTSINI, I. ANAGNOSTAKIS, *Food Mobilities...*, forthcoming. See Y. LEV, *The Fatimids and Byzantines...*, p. 190–208 and P. MAGDALINO, *Pharmaceutical Diplomacy: A New Document...*, p. 245–251. On Arabic influences in Byzantium from Aghlabid and Fatimid Egypt see A. BALLIAN, *The Church of Panagia at Hosios Loukas Monastery and the ‘Bordering Saracens’: Arabic Epigraphic Decoration and Byzantine Art*, [in:] *Beyond Byzantium. Essays on the Medieval Worlds of Eastern Christianity and their Arts*. In Honor of Helen C. Evans, ed. J. BALL, Ch. MARANCI, B. RATLIFF, T. THOMAS, De Gruyter forthcoming. See also A. WALKER, *Pseudo-Arabic as a Christian Sign: Monks, Manuscripts, and the Iconographic Program of Hosios Loukas*, [in:] *Ambassadors, Artists, Theologians...*,

Regarding the culinary use of rose products, Arabic cooking frequently uses *ma' ward*, rosewater, and *jullab* in numerous recipes in contrast to Byzantine cuisine, which only mentions rosewater and rose with honey in special preparations. Rose products in Byzantium are mostly utilized in the fields of medicine and cosmetics. In al-Warrāq's cookbook *Kitāb al-Ṭabīkh*, rose products like rose petal syrup made with white cane sugar are used in recipes; in certain cases, it is specified that rose products are prepared with the most fragrant rose variety: the pink roses only from Jur, a city in Persia known for its export of outstanding rosewater (*ma' ward Juri*)<sup>137</sup>. A rose dish called *wardiyya* or *ward murabbā* was a kind of sweet, a *halwā*, or according to Egyptian cookbook *The Kanz*, a rose petal jam made with sugar (*ward murabbā bi-l-sukkar*). In this latter case, *murabbā* designates fruits and vegetables preserved as jam or pickled<sup>138</sup>. According to Genizah letters, in the eleventh century Syria and Palestine produced and exported to Egypt rose products; a Sicilian Jew was involved in the rose-confiture trade and imported rose jam from Syria and Palestine into Egypt and another who lived in Damascus advised the buyer in Fustat on how to keep the confiture from spoiling<sup>139</sup>. The letters also report traded products from Al-Shām (modern Syria) and Lebanon like almonds, roses, dried fruits, and olive oil, as well as quantities of wine from Byzantium and

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p. 153–176. On Byzantine trade with Egypt, see D. JACOBY, *Byzantine Trade with Egypt from the Mid-tenth Century to the Fourth Crusade*, Θη 30, 2000, p. 25–77; IDEM, *Constantinople as Commercial Transit Center, Tenth to Mid-fifteenth Century*, [in:] *Trade in Byzantium. Papers from the Third International Sevgi Gönül Byzantine Studies Symposium*, ed. P. MAGDALINO, N. NECIPOĞLU, I. JEVTIĆ, Istanbul 2016, p. 196. On the Fatimid and Ayyubid Egypt mentality closer to the style of the ancient Mediterranean-Near Eastern culture than to the new religion, P.B. LEWICKA, *Food and Foodways...*, p. 514.

<sup>137</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 27 p. 157, ch. 31 p. 165, the recipe *jullabiyya* (made with rosewater syrup) ch. 92 p. 380, rosewater of Jur (*ma' ward Juri*), ch. 102, p. 423, the recipe for *jalanjabin* (rose petal syrup made with white cane sugar) ch. 125, p. 481. See also the commentaries of N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 552, 753, 773.

<sup>138</sup> Ch. PERRY, *The Description of Familiar Foods...*, p. 416 (*wardiyya*), *Anonymous Kanz*, p. 87 (10), 105 (38), 127 (76), 362 (586) (*ward murabbā*); N. NASRALLAH, *Treasure Trove of Benefits and Variety at the Table*, p. 491, 599; on *ward murabbā* in Egypt, P.B. LEWICKA, *Food and Foodways...*, p. 205 n. 348, and p. 274–275.

<sup>139</sup> S.D. GOITEIN, *Letters of Medieval...*, p. 100, rose marmalade, p. 185, dried plums in 1038; 65 pots of rose marmalade, an order from Egypt to buy *good rose marmalade, such as one prepares for the household*, and p. 268–287 on the bad quality and price of rose marmalade; E. LEV, Z. AMAR, *Practical Materia Medica of the Medieval Eastern Mediterranean according to the Cairo Genizah*, Leiden–Boston 2008, p. 261–266; M. GIL, *Food Commerce in Egypt as Portrayed in Eleventh-century Genizah Letters*, [in:] *Pesher Nahum. Texts and Studies in Jewish History and Literature from Antiquity through the Middle Ages, Presented to Norman (Nahum) Golb*, ed. J.L. KRAEMER, M.G. WECHSLER, Fr.Mc.Gr. DONNER, J. HOLO, D. PARDEE, Chicago 2012, p. 93–102 (99). On medieval marmalade and the use of sugar in cooking, M. OUFELLI, *Le sucre...*, ch. 9 Confisseries et Confitures, and ch. 10 Le sucre dans l'alimentation médiévale, p. 569sq.



Laodicea<sup>140</sup>. In the thirteenth-century Syrian cookbook *Kitāb Waṣlah ilā al-ḥabīb* by an anonymous author, Nisibis in Upper Mesopotamia is mentioned as the only place where roses, rosewater (*ma' warad nasibi*), and rose syrups *jullab* originate<sup>141</sup>. This Syrian cookbook also describes how to make the various types of sour and salty pickles, cucumber pickles, grape pickles, grape pickles with bunches of grapes from *al-baladī al-rūmī al-jabalī* or *min al-rūmī*, i.e., from the Romans land (Byzantium?), and pickles raisin preserves with Nisibin roses<sup>142</sup>. Regarding the use of honey and sugar for preserving foods, in some instances honey was used but according to Lewicka *contemporary-style jams, or preserves made by boiling fruit with sugar, were not common, and the Arabic-Islamic jams (murabbayāt) were in fact limited to a product made of roses that was actually a marinade*<sup>143</sup>.

**Mishmishiyya recipes.** Among the various foodstuffs in Arabic recipes, apricots (*mishmish*), especially dried, have special treatment – in particular those considered the best and imported from Byzantium, al Shām (the Levant, Syria), and Armenia. There is early evidence of exchanges and gifts of various preserved fruits (raisins, dates, plums) between Arabs and Byzantines, as well as how Arabs procured these items from Byzantium and al Shām<sup>144</sup>. However, information regarding the supply of fresh or processed dehydrated fruits intended for specific dishes is rarely provided. There is, however, an exception: the *mishmishiyya* recipe with apricots.

A tenth-century recipe of Ibn Sayyār al-Warrāq, the *mishmishiyya* (apricot stew cooked with chicken), mentions absolutely nothing about the origin of the apricot used<sup>145</sup>. The same cookbook mentions a curious recipe in which a plump chicken is cooked in a *tannūr*, an oven, suspended over a casserole with already-prepared,

<sup>140</sup> M. GIL, *Food Commerce in Egypt...*, p. 97 large quantities of wine from Byzantium and Laodicea and raisin called *ladiqi*, p. 99 roses; E. LEV, Z. AMAR, *Practical Materia Medica...*, p. 261–266 and on juleps, refined and fragrant liquid and for rosewater or sweets mixed with rosewater, p. 562.

<sup>141</sup> *Kitāb Waṣlah ilā al-ḥabīb*, ch. 1.13, p. 12–13, ch. 8.38, p. 216–217 and 8.53, p. 222–223, ch. 10.9, p. 266–267, ch. 10.13, p. 268–269, ch. 10.35 and 36, p. 276–277. Especially in ch. 1.13, p. 12–13 a recipe for *nadd*, (incense cakes), a syrup *julab* is prepared with sugar and Nisibin rosewater; *julaban bi-ma' waradi nasibi* boiled to a thick consistency is mentioned among the many ingredients: *wa ya'aqidu julabani bi-ma' waradi nasibi*. See also *Scents and Flavors*, p. 8, 111, 114, 136, 137, 141, 142, glossary 157.

<sup>142</sup> *Kitāb Waṣlah ilā al-ḥabīb*, ch. 8.44–45, p. 218–219; *Scents and Flavors*, p. 112. See also M. LEONT-SINI, I. ANAGNOSTAKIS, *Food Mobilities...*, forthcoming.

<sup>143</sup> P.B. LEWICKA, *Food and Foodways...*, p. 271–272. On the ways of storing and preserving fruits (grapes, figs, sorb-apples, quinces, dates) in vinegar, sweet wine, water and salt, or cooked with honey, p. 273–276.

<sup>144</sup> On Byzantine preserves of quince and lemon, rose, apple, plum and pear, M. TOUSSAINT-SAMAT, *A History of Food...*, p. 507 with no precise reference to the source. See also on marmalade C.A. WILSON, *The Book of Marmalade: its Antecedents, its History, and its Role in the World Today*, Philadelphia, revised ed. 1999.

<sup>145</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabikh*, ch. 62, p. 290–291.

*jūdhāba* – a kind of apricot jam made with sugar, saffron, and bread<sup>146</sup>. Roughly contemporary to these recipes, the best apricots are considered to be Armenian; Ibn Sina (Avicenna) recommends them for good health<sup>147</sup>. If this is not a literal translation of the Greek *Armeni(α)kon* or *Armenion* (Ἀρμενι(α)κόν, Ἀρμένιον) for apricot used by Dioscorides (Ἀρμενιᾶκά βρεκόκκια) and Galen, physicians well-known to him, this means that indeed a variety of apricots from Armenia and Byzantium was considered the best<sup>148</sup>. In the western Islamic regions, the apricot was called *burqūq*<sup>149</sup> and *al-birqūq*, through Byzantine Greek *b(e)rikokkia* < *praikokkia* (βρεκόκκια, βερικόκκια, πραικόκκια), a word derived from the Latin (*malum*) *praecoquum*<sup>150</sup>.

Some dishes of later date were called *mishmishiyya* due to the resemblance of the stew's meatballs to apricots, which were stuffed with a sweet almond or prepared with fresh green apricots or their juice<sup>151</sup>. A recipe in a thirteenth-century cookbook suggests using dried apricots as a better option for stew with meat, specifically the *qamar al-dīn min* variety from *al-rūm aw al-madina*, i.e., imported from or made in *Rūm* (Byzantium or former Byzantine territories) or *Madina*<sup>152</sup>. If this variety of apricot was not available, the recipe recommended importing it. This variety was also called the *mishmish lawzī*, meaning “almond apricot”, whose kernels taste like sweet almond. According to Nasrallah, one of Ibn al-Adīm's thirteenth-century apricot stews does suggest using *qamar al-dīn* which is made in Byzantium or *Madina* and *the key word in this recipe is yu'mal 'made' as it indicates that the apricots were treated in a certain way, quite likely made into qamar al-dīn apricot sheets, as we know them today*<sup>153</sup>. This *qamar al-dīn* variety was also produced in Ispahan but mainly exported from *Rūm* to Egypt for processing

<sup>146</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 92, p. 374–375.

<sup>147</sup> N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 635, with reference to *The Canon of Medicine of Ibn Sina (317)*, *Al-Qanun fi 'l-ibb*, <http://www.alwaraq.net> [30 VIII 2024].

<sup>148</sup> For the name of apricot see DIOSCORIDES PEDANIUS, *De materia medica*, I, 115, vol. II, p. 109.1–2: καλούμενα δὲ Ἀρμενιᾶκά, Ῥωμαιστὶ δὲ βρεκόκκια, εὐστομώτερα τῶν προειρημένων ἐστίν; GALEN, *De alimentorum facultatibus*, II, 20, 1–2, 288, 1–21.

<sup>149</sup> N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 627, although *burqūq* in western Islamic regions usually means cherries (*ibidem*, p. 636–637), *qārasiyā*. The word *qārasiyā*/*qārasiya* < from the Greek *kerasion* (κεράσιον) pl. *kerasia*. This confusion in Arabic is similar to the variety of names of relevant fruits in Greek sources where, in addition to their other names, the adjective names Persian, Armenian, Damascene designate peach, apricot, plum respectively.

<sup>150</sup> M.A. POWELL, *Classical Sources and the Problem of the Apricot*, BSA 3, 1987, p. 153–156; J. DIETHART, E. KISLINGER, *Aprikosen und Pflaumen*, JÖB 42, 1992, p. 20.

<sup>151</sup> According to A.J. ARBERRY, *A Baghdad Cookery Book...*, p. 48–58 the *Kitāb al-Ṭabīkh* (*The Book of Dishes*), written in 1226; Ch. PERRY, *The Description of Familiar Foods...*, p. 318, 343, 356; *Kitāb Waṣlah ilā al-ḥabīb*, 6.134, p. 138–139.

<sup>152</sup> *Kitāb Waṣlah ilā al-ḥabīb*, 6.135, p. 138–139 (where *qamar al-dīn min al-rūm* is translated apricot from Byzantium). See also *Scents and Flavors*, p. 72.

<sup>153</sup> On sweet –kerneled apricot drink and snacks, *Kitāb Waṣlah ilā al-ḥabīb*, 2.7–8, p. 30–31; N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 635.

(probably dried or apricot leather). Ibn Batutta reports that in the early fourteenth century, Ispahan is rich in fruits, among them being apricots of unrivalled quality which they call *qamar al- dīn*; the people there dry these apricots and preserve them, and their kernels when broken open disclose a sweet almond<sup>154</sup>. Batutta further reports that in Antalya in *Bilad al-Rūm* called after the Rūm is produced the wonderful apricots called *qamar al-dīn*, in whose kernel there is a sweet almond. This fruit is dried and exported to Egypt, where it is regarded as a great luxury<sup>155</sup>.

Regarding Byzantine sources, there is limited information on apricot production and export, but it is reasonable to conclude that apricots were grown and processed in Syria, the Caucasus, Armenia, and eastern Asia Minor. Although there is some confusion regarding the Byzantine names of the apricot and its varieties, the apricot has been cultivated since the Roman and Early Byzantine eras in eastern Asia Minor, Antioch, and Armenia (hence, one of the names *armenia* or *armeniaka*)<sup>156</sup>. Although methods of preservation and consumption are not given in detail, apricots are frequently mentioned by all physicians, even in *Geoponica*, which gives methods of cultivation, regardless of whether they do not devote a special chapter to them like other plants<sup>157</sup>. There is important information regarding consumption that was surprisingly never used by the research because it was considered a play on words, but it matches *qamar al- dīn / mishmish lawzī*, or almond apricot, which was exported from Byzantium and the kernels when broken open disclose a sweet almond. John Mauroπους (990–1092), who knew the plant cultivation of the Armenian area very well as bishop of Euchaita, mentions: *the (kernel) seed of apricot (kokkos berikokkon, κόκκος βερικόκκον) is consumed during summertime* (i.e., when the fruit is ripe)<sup>158</sup>. Also Symeon Seth, who is roughly contemporary of John Mauroπους, in his treatise *Syntagma* dedicates an entry to the properties of apricots, which he also calls *armenia* and considers

<sup>154</sup> IBN BATTUTA, *The Travels of a.d. 1325–1354. Translated, with Revisions and Notes*, vol. II, from the Arabic text ed. C. DEFRÉMERY, B.R. SANGUINETTI, H.A.R. GIBB, C.F. BECKINGHAM, London–Cambridge 1962 (cetera: *The Travels of Ibn Baṭṭūṭa*), p. 295.

<sup>155</sup> *The Travels of Ibn Baṭṭūṭa*, vol. II, 260, p. 418. Batutta explains the name *Bilad al-Rum*: because it used to be their land of Rum in older times, and from it came the ancient Rum and the Yunanis [Greeks] and later on it was conquered by the Muslims, but in it there are still large numbers of Christians, *The Travels of Ibn Baṭṭūṭa*, vol. II, 255, p. 415. For sweetmeats manufactured in Syria into which pistachios and almonds were added and the apricot paste (*qamar al-din*) manufactured at Damascus, see *The Travels of Ibn Baṭṭūṭa*, vol. I, 142, p. 91 n. 92, 186, p. 117 n. 178; N. TRÉPANIÉ, *Foodways and Daily Life in Medieval Anatolia. A New Social History*, Austin 2014, p. 88, 171 n. 3, 195.

<sup>156</sup> I. ΚΑΛΑΠΕΡΗΣ, *Τροφὰι καὶ ποτὰ εἰς πρωτοβυζαντινοῦς παπύρους*, ΕΕΒΣ 23, 1953, p. 706; J. DIET-HART, E. KISLINGER, *Aprikosen und Pflaumen...*, p. 75–78; G. SIMEONOV, *Obst in Byzanz...*, p. 28–30.

<sup>157</sup> G. SIMEONOV, *Obst in Byzanz...*, p. 30.

<sup>158</sup> JOHN MAUROPOUS, *Etymologica nominum*, 434, [in:] R. REITZENSTEIN, *M. Terentius Varro und Johannes Mauropus von Euchaita: eine Studie zur Geschichte der Sprachwissenschaft*, Leipzig 1901, p. 4–18: Βορᾶς δὲ κόκκος βερικόκκον ἐν θέρει. *Kokkos* means grain, seed, kernel, but it could be used paretymologically instead of fruit.

easy to digest<sup>159</sup>. Therefore, the export of an exceptional variety of processed dried sweet kernel apricots called *Armenia* from Byzantium and Syria to the Arab world must have been the continuation of a long-standing practice. According to this tradition, as already mentioned, in Roman times, as stated by Galen, Syria was the location of the export of processed fruits such as the quince cake – a product so stable that it was transported to Rome in containers. This mobility was multiplied due to the densification of the exchange networks that promoted items prepared with sugar referenced among other familiar preparations in Byzantine literature, while a series of recipes or technical details were recorded only in Arab cookbooks.

### Two exemplary Byzantine delicacies from the Muslim world: the sweet *paloudakin* or *apalodaton* (*fālūdhaj*) and the salty fish *Libysia*

**Paloudakin.** Certain prepared products from the East are mentioned by their Arabic names transliterated into Greek in Byzantine literary texts, obviously indicating their diffusion between the two worlds. The acquaintance with the Arabic names of such products testifies to the expanded mobility that promoted such transmission, at least among the elites of Constantinople. One of these products is called *paloudakin*, the *fālūdhaj* (hereafter *paludag*) of Persian-Arab origin, being phonetically closer to Persian *pāludā* (meaning, gilded, clear, flummery, translucent, and jelly), significant for the Byzantine borrowing<sup>160</sup>. *Paludag* and *khabiṣ* were not considered Arab food but luxury dishes of Persian origin, the food of Chosroes<sup>161</sup>. *Paludag* is a refined variation of *khabiṣ* (the pudding sent to Nikephoros by Harun al Rashid)<sup>162</sup>.

Byzantine texts confirm that this sweet was known in ninth-century Byzantium and clearly show how Arab-Persian food and tastes were adopted, calling it the Sarcenic sweet, *Sarakēnikon* (Σαρακηνικόν). This Sassanid sweet delicacy, a condensed jelly-like pudding, was made with starch, honey, or sugar, and adapted by Abbasids in Baghdad as a confection<sup>163</sup>. Its basic ingredients were boiled over a slow fire and stirred continuously until dissolved, with rosewater and almonds then added to create a sweet like today's transparent *loukoumi*. Ibn Sayyār al-Warrāq mentions several recipes in a chapter entitled *Fālūdhaj condensed puddings, golden and*

<sup>159</sup> SYMEON SETH, *Syntagma*, p. 27.21–22: Βερίκοκκα τὰ λεγόμενα Ἀρμένια. ἡ τοιαύτη ὀπώρα εὐφθαρτός ἐστι.

<sup>160</sup> M. RODINSON, *Studies in Arabic Manuscripts...*, p. 152 n. 2; N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 392 n. 48, p. 595–596; M. MAVROUDI, *A Byzantine Book on Dream Interpretation...*, p. 71 n. 39; B. KİTAPÇI BAYRI, *Warriors, Martyrs, and Dervishes...*, p. 83–85. See also P.B. LEWICKA, *Food and Foodways...*, p. 310–311.

<sup>161</sup> M. RODINSON, *Studies in Arabic Manuscripts...*, p. 151, and 152 n. 2 on the recipe and its origin.

<sup>162</sup> N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 595–596.

<sup>163</sup> On the expansion of sugarcane cultivation from India and Iran to Iraq, Syria, and Egypt, S. TSUGITAKA, *Sugar in the Social Life...*, p. 15–25.

*translucent, thick and chewy*<sup>164</sup>. The colors of *paludag* could vary. In giving the basic recipe, al-Warrāq adds: *You have the option [of making the pudding yellow] by adding some saffron to the starch liquid before using it*<sup>165</sup>. The *Dreambook of Ahmet* referred to it as an already-known *glykysma* (γλύκυσμα): *Saracen sweet, glykysma Sarakēnikon* (γλύκυσμα Σαρακηνικόν), *the so-called paloudakin* (παλουδάκιν)<sup>166</sup>. The term “*glykysma*” (γλύκυσμα) was infrequently employed in Ancient and Middle Byzantine literature to refer to a sweet confection or beverage. In Late Byzantium it was recognized or associated with the Arabic recipes for sugar-based *glykysmata*, the *jawārishn*, and in Greek *tzouarisia* (τζουαρίσια)<sup>167</sup>. In the twelfth century, Ptochoprodromos mentions *paludag* as *apalodaton* (ἀπαλοδάτον), although in the first edition of the text this was considered a delendum as a later addition in the same verse along with references to other sweets, *granata* and *sakharata*, but the more recent edition adopted it<sup>168</sup>. In Ptochoprodromos, the Arab-Persian *paludag* was adapted to something more familiar and comprehensible to the Byzantines and became *apalodaton* (ἀπαλοδάτον) and thus interpreted combined with *hapalos* (ἀπαλός, fine, soft, delicate)<sup>169</sup>. *Apalodaton*, meaning the fine, soft sweet, fits perfectly next to the luxurious delicacies consumed in the monasteries where the abbots lived a tender life, according to Ptochoprodromos’s criticism of the abbots.

In the *Dreambook of Ahmet*, the person who dreams that he is eating this Saracen sweet will find sickness because of its yellow color. In Ptochoprodromos the

<sup>164</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 93, p. 382–387. On use of sugar in cooking in Abbasid Caliph court, S. TSUGITAKA, *Sugar in the Social Life...*, ch. 7 *Cooking Innovations in Medieval Islam*, p. 140–169.

<sup>165</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 93, p. 382. Saffron or *bustān abrūz* (*bustān abrawīz*), houseleek, were used and in other recipes. *Bustān abrūz* (*bustān abrawīz*) was a substitute for saffron and mixed with saffron for a bright yellow color, N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 762–763.

<sup>166</sup> *Achmetis Oneirocriticon*, ed. F. DREXL, Leipzig 1925 [= BSGR], p. 198.3–5: γλύκυσμα σαρακηνικόν τὸ λεγόμενον παλουδάκιν; M. MAVROUDI, *A Byzantine Book on Dream Interpretation...*, p. 71–73.

<sup>167</sup> P. BOURAS-VALLIANATOS, *Cross-cultural Transfer...*, p. 100 n. 188, p. 104. See also above the presentation of *zoulapin*.

<sup>168</sup> *Prochoprodromos*, poem IV, 329–330, p. 157: καὶ καρυδάτον ὀλιγὸν καὶ κυδωνάτον χύτραν/ γράνατα σαχαράτα τε καὶ τὸ ἀπαλοδάτον. See also G. ΣΙΜΕΟΝΟΥ, *Obst und Süßspeisen...*, p. 214; Φ. ΚΟΥΚΟΥΛΗΣ, *Βυζαντινῶν Βίος καὶ Πολιτισμός*, vol. V, Ἀθήναι 1952, p. 190–191 noted that the word exists as *palōdaton* (παλωδάτον) in a Ptochoprodromos manuscript and referred to Korais’s comments. However, Korais gave *apalōdaton* (ἀπαλωδάτον), without adopting it in his edition of the poem stating that this word exists in another manuscript, A. KORAI, *Atakta*, vol. I, Paris 1828, p. 229. For these omissions in the editions of Prochoprodromos see M. MAVROUDI, *A Byzantine Book on Dream Interpretation...*, p. 71 n. 39.

<sup>169</sup> However, A. KORAI, *Atakta*, vol. I, p. 229 associated the word with *apion* (ἄπιον, pear), and believed that *apalodaton* is an erroneous copy of the manuscript that uses instead of *apidaton* (ἀπιδάτον) or the *propoma apiaton* (ἀπιάτον) made with pears, a drink taken before meals, cited by ALEXANDER OF TRALLES, *Therapeutica*, vol. II, p. 341.16.



name *apalodaton* refers to its soft and beautiful appearance. *Dreambook of Ahmet* mentions the *paloudakin* in an elliptical way, saying merely that it was a Saracen sweet and interprets it as a prediction for sickness, considering that Byzantine readers in the ninth century were already well-aware that *paloudakin* is yellow by the color of honey and a starch candy of sugar dissolved with rosewater. This suggests Byzantine readers were familiar with this sweet<sup>170</sup>. However, this does not mean that the Byzantine *paloudakin* followed a specific recipe. Even today, *paludag* is the name used for several different sweets in the East, so Byzantine *paloudakin* could be a kind of sweet resembling the translucent *luqm*.

Consequently, the fact that the Byzantines had long embraced the Arab-Persian sweet *paludag* attests to the gradual dissemination of sweet taste preferences based on sugar, which extend beyond honey to include sweet fruits and syrups made from condensed must, a practice dates to antiquity. I recall once more the wine referred to by Eustathios of Thessaloniki, a special honey wine from *Armeniakē Melitinē*, known also to the ancients as *meliēdēs* wine (μελιηδής), a wordplay with honey, *meli* (μέλι) and *Melitinē*, as well as the sweet-like honey *Libysia* (see below), an adjectiv underlining the sweetness that is only compared to honey<sup>171</sup>. But this time, the sugar-sweet support of Arab confectionary and cuisine, as also indicated by the confection *sakharata*, had gradually altered or enriched and enhanced the taste of sweetness in Middle Byzantium. *Sakharata* could also include the many varieties of *fānidh*, pulled taffy, chewy sugar-candy, usually shaped into small discs<sup>172</sup>.

Sugar (σάκχαρ or σάκχαρι, σάκχαρις < Persian *shakar* and Arabic *sukkar*, from Sanskrit *sharkara*) was known since ancient times as “honey without bees” but was not widespread. For example, Galen and other physicians who mention it as an ingredient in many preparations considered it a product of India and Arabia and equated it with honey, which they considered less sweet. Consequently, apart from the name, the Eastern and mainly Saracen *sukkar*-based sweets consistently reminded the exotic origin of the preparations and the Saracen origin of the relevant ingredients more than other spices.

Another similarity of sugar but this time with salt leads us to the next topic, with which I will conclude this paper. Archigenes, a Greco-Syrian physician (first and second centuries AD). says that the Indian salt, which, in colour and consistency is like the common salt, but which resembles honey in taste, when chewed

<sup>170</sup> M. MAVROUDI, *A Byzantine Book on Dream Interpretation...*, p. 71–73.

<sup>171</sup> On the Homeric origin of honey-sweet Maroneios wine, I. ANAGNOSTAKIS, *The Sweet Wine of Bithynia in the Byzantine Era*, [in:] *Of Vines and Wines. The Production and Consumption of Wine in Anatolian Civilizations through the Ages*, ed. L. THYS-SENOCAK, Leuven 2017, p. 100–103. For more about grape, raisin, and wine from Anatolian highlands, Nisibis, and from *Armeniake Melitine*, see M. LEONTSINI, I. ANAGNOSTAKIS, *Food Mobilities...*, forthcoming.

<sup>172</sup> Of its varieties: N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 596–597.

to the size of a lentil, or, at most, of a bean, moistens greatly<sup>173</sup>. Dioscorides (first century AD) mentions that there is a kind of coalesced, crystalline honey called sugar found in reeds in India and Arabia the happy, similar in consistency to salt and brittle] to be broken between the teeth like salt<sup>174</sup>. Pseudo-Alexander of Aphrodisias (first/second century AD) also relates that the sugar of India is congealed honey, like the honey that congeals from the dew in Lebanon and is like a grain of salt, white, friable, and sweet<sup>175</sup>.

**Libysia.** If, until now in this paper, the majority of reports on ready-made preparations provided only the standard generalities about their origin, while information on their exact route was lacking, this is not the case for the salted fish from Egypt's Nile called *Libysia*, meaning fish from Libya/Africa. In addition, we have a detailed description of their flavor, which is uncommon for fish, as well as on how their sauce is made. These tasty salty fish are mentioned in a letter written by Michael Italikos (c. 1090? – before 1157), as a response to an unnamed friend in the form of a rhetorical account expressing gratitude to his correspondent for sending him this gift of salted fish from Egypt via Attaleia<sup>176</sup>.

Michael Italikos was a medical instructor, *didaskalos tōn iatrōn*, (διδάσκαλος τῶν ἰατρῶν) at the Pantokrator hospital in Constantinople and after 1147 was ordained archbishop of Philippopolis. The letter was possibly sent from Constantinople to the *logothetēs tou dromou* (λογοθέτης τοῦ δρόμου), Stephanos Melēs (hereafter Meles), a friend, who had accompanied Emperor John II Komnenos (1118–1143) on the campaign in Cilicia and Syria (1137–1138)<sup>177</sup>. *Libysia* could

<sup>173</sup> Ἀρχιγέννης δὲ φησιν· καὶ ὁ ἄλς ὁ Ἰνδικός, χροῖα μὲν καὶ συστάσει ὁμοίος τῷ κοινῷ ἄλι, γεύσει δὲ μελιτώδης, φακοῦ δὲ μέγεθος ἢ τό γε πλείστον κνάμου, διατρωχθεὶς σφόδρα καθυγραίνειν δύναται, PAULUS AEGINETA, *Epitomae medicae*, II, 53, p. 122.1–4.

<sup>174</sup> DIOSCORIDES PEDANIUS, *De materia medica*, II, 82, p. 167.4–9: καλεῖται δὲ τι καὶ σάκχαρον, εἶδος δὲ μὲλιτος πεπηγός ἐν Ἰνδία καὶ τῇ εὐδαίμονι Ἀραβίᾳ, εὐρισκόμενον ἐπὶ τῶν καλάμων, ὁμοίον τῇ συστάσει ἄλοι καὶ θραυόμενον ὑπὸ τοῖς ὀδοῦσι καθάπερ οἱ ἄλεις. See P. BOURAS-VALLAINATOS, *Cross-cultural Transfer...*, p. 968 n. 22.

<sup>175</sup> PSEUDO-ALEXANDER OF APHRODISIAS, *Problemata* – PSEUDO-ARISTOTELES (PSEUDO-ALEXANDER), *Supplementa Problematorum. A New Edition of the Greek Text with Introduction and Annotated Translation*, ed. S. KAPETANAKI, R. W. SHARPLES, Berlin 2006 [= Per, 20], 92.6–7: Τὸ δὲ σάκχαρον παρὰ τοῖς Ἰνδοῖς οὕτω λεγόμενον μελίτος ἐστὶ πῆξις, τοῦ ἡλίου τὴν ἐν τῷ ἀέρι δρόσον πηγνύοντος ἐπὶ τὸ γλυκύ, ὥσπερ καὶ ἐν τῷ ὄρει τῷ Λιβάνῳ καλουμένῳ γίγνεται τοιοῦτον· ἐστὶ δὲ ὁμοίον χόνδρῳ ἄλατος, λευκὸν εὐθρυπτον γλυκύ. ἐστὶ δὲ ῥυπτικῆς καὶ αὐτὸ δυνάμειος ὁμοίως τῷ μέλιτι τῷ μετέχειν ἰχθυοειδοῦς τινας ῥύψεως, ὅθεν καὶ ἐψόμενον καὶ τοῦτο μεταβάλλον οὐκέτι μὲν σμήχει ὡς τὸ ἀνεφθόν. P. BOURAS-VALLAINATOS, *Cross-cultural Transfer...*, p. 968 n. 22. The history from the Red Sugar to refined white Sugar, S. TSUGITAKA, *Sugar in the Social Life...*, p. 33–50.

<sup>176</sup> MICHEL ITALIKOS, *Lettres et discours*, letter no. 29, ed. P. GAUTIER, Paris 1972 [= AOC, 14], p. 161–163 (cetera for text: MICHAEL ITALIKOS, *Letters*, and for commentary: P. GAUTIER, *Michel Italikos*); B. BALDWIN, *Content, and Contemporaneity in Michael Italicos*, B 62, 1992, p. 110, 116–117; O. DELOUIS, *La Vie métrique de Théodore Stoudite par Stéphane Mélès (BHG 1755)*, AB 132, 2014, p. 28.

<sup>177</sup> P. GAUTIER, *Michel Italikos*, p. 161 n. 2. On Stephanos Meles, *logothetēs tou dromou* and his family origins see O. DELOUIS, *La Vie métrique...*, p. 27–33; also see M. JEFFREYS et al., *Prosopography of the*

have been sent to Michael Italikos by Stephanos Meles, whose name prompts a wordplay with honey, *meli* (μέλι), as well as the sweet-like honey *Libysia*, called *meliēdeis* (μελιηδεῖς), that were sent to Constantinople via Attaleia<sup>178</sup>. Italikos maintains correspondence with Stephanos Meles to whom he has sent other letters addressed by name, with the same pun also used in these letters. Therefore, it is highly probably that Stephanos Meles accompanied John Komnenos while he was staying in Attaleia during the operations against Syria.

According to Italikos, the sender of the letter and sender of the Egyptian fish either procured the *Libysia* himself while in Attaleia and took them with him on the overland return to Constantinople or sent them by sea from Attaleia<sup>179</sup>. According to Italikos, whether sent by land or sea, as a good friend the sender did not selfishly keep the fish for himself but shared them. It is true that no other specifications on the route of the gift are provided or the exact location of the sender (Meles). In any case, information is exceptional as to the handling of this type of fish from Egypt to Byzantium and the route from Attaleia to Constantinople. In addition, Italikos expressed the desire to acquire the recipe for their preparation as an excuse to allude to their special flavor and relate this savory delicacy to a sweet sense, implying that this happened because of their Egyptian or Arabic origin, given that they are Egyptian fish.

What do Arabic cookbooks mention about pickled, salty, or dry fish and their sauces (*sals*) and what was the fish trade between Byzantium and the Islamic world? Finally, how does Italikos describe the salty *Libysia* in more detail? The name, variation, and trade of pickled or fresh fish, as well as fish products such as *garos-murrī*, *ṭirriḳh*, (< Gr. *tarichos*, τάριχος), *baṭāriḳh* or botargo (< Gr. *abgotarichon*, ἄβγοτάριχον), and caviar are particularly complex; they have been the subject of numerous studies and thus will not be discussed here despite the fact that they can provide information for intercultural and economic exchange and complex mobilities<sup>180</sup>. In Arab cookbooks, the origin of the fish is rarely mentioned, and

*Byzantine World*, 2016, London 2017, entry no 25001 Stephanos Meles, logothetes of the dromos, Stephanos, <http://pbw2016.kdl.kcl.ac.uk/person/Stephanos/25001/> [31 VII 2023]. In 1137 Stephanos Meles received three letters from Michael Italikos (*Prosopography of the Byzantine World*, no. 20130), at least two probably while with the army in Attaleia or Cilicia; in one he was thanked for the exotic fish; in all the letters he was asked for promotion, while one complained about preference shown to *Nikephoros* (*Prosopography of the Byzantine World*, no. 17003).

<sup>178</sup> MICHAEL ITALIKOS, *Letters*, nos 20, 21, 40 and P. GAUTIER, *Michel Italikos*, p. 44–45, p. 161 n. 4; O. DELOUIS, *La Vie métrique...*, p. 29.

<sup>179</sup> This interpretation is proposed by P. GAUTIER, *Michel Italikos*, p. 160.

<sup>180</sup> On these terms, especially *tarichos* and *tirriḳh*, see M. LEONTSINI, I. ANAGNOSTAKIS, *Food Mobilities...*, forthcoming, and for the rich bibliography, D. GEORGACAS, *Ichthyological Terms for the Sturgeon and Etymology of the International Terms Botargo, Caviar and Congeners. A Linguistic, Philological, and Culture-Historical Study*, Athens 1978; D. MYLONA, *Fish-Eating in Greece from the Fifth Century B.C. to the Seventh Century A.D. A Story of Impoverished Fishermen or Luxurious Fish*

when it is, it typically refers to fish from rivers and lakes, such as the salted *ṭirriḳh* (the Greek *tarichos*) from Lake Van in Armenia, the fish of Euphrates, Tigris, and Nile, and the fish of the Tigris were regarded as being of the best quality and the fish of both the Euphrates and Tigris are considered superior to the Nile fish<sup>181</sup>. The Istanbul manuscript, an adaptation of al-Warrāq, *Kitāb al-Ṭabīḳh*, probably written in 1297 by an Egyptian, mentions the Nile and Egyptian variety as tasty, large, and fatty fish<sup>182</sup>. Arab cookbooks frequently mention salted and dried fish, but never such a fish similar to Egyptian *Libysia* sent to Byzantium. The only reference to preserved Byzantine food is found in one of the numerous later manuscripts of *Kitāb Waṣlah ilā al-ḥabīb* which mentions *taqḍid laḥm ‘amal ar-Rūm*, the drying of meat in the style of *Rūm* translated in the Greek style, undoubtedly in the Byzantine style<sup>183</sup>. However, it is probable that a Byzantine Jew traded preserved foods in Egypt, but there is only evidence for salted Nile fish with their *baṭāriḳh*, botargo, i.e., their spawn not removed<sup>184</sup>.

The varied categories of the fresh or salted Nile fish for cooking, except those already mentioned in the cookbooks, are also attested to in Coptic texts and the documents of the Cairo Geniza collection dating in the Fatimid period<sup>185</sup>. From the fish and seafood we know were consumed by the Egyptians during the times that Italikos received the *Libysia* fish from Egypt, it is helpful for our research to mention the staple foods of the common people, the *ṣīr*, *absāriyya*, and *dallīnas* ‘river mussels’. Despite the prohibitions of the new religion, Egyptians continued to eat river mussels *ad-dallīnas* and fish without scales. *Ad-dallīnas*, known also as *umm al-khulūl*, was a staple food of the common people as *Egyptians ate little*

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*Banquets?*, Oxford 2008 [= BAR.IS, 1754]; S. GRAINGER, *Garum and Liquamen...*, p. 247–261. For the similar Hebrew word *tarit* and diverse suggestions to the origin, S. WEINGARTEN, *Fish and Fish Products...*, p. 240–241; on *tarichos*, understood to be tuna see S. GRAINGER, *The Story of Garum...*, p. 178. See also P.B. LEWICKA, *Food and Foodways...*, p. 218–223.

<sup>181</sup> IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīḳh*, ch. 11, p. 112. N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 728: *tirriḳh* a span long fish, caught in Lake Van in Armenia, brought to Baghdad already salted and dried; P.B. LEWICKA, *Food and Foodways...*, p. 222–223.

<sup>182</sup> N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 7–8, 725–726.

<sup>183</sup> M. RODINSON, *Studies in Arabic Manuscripts...*, p. 145 n. 180; P.B. LEWICKA, *Food and Foodways...*, p. 189 n. 263. See above notes 67 and 68.

<sup>184</sup> *A Mediterranean Society. The Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza*, vol. IV, *Daily Life*, Berkeley–Los Angeles–London 1983/1999, p. 250–251. On the Byzantine Jew merchant operating in Attaleia among other co-religionists see K. DURAK, *The Use of Non-commercial Networks...*, p. 435, 438. W. VAN NEER, D. DEPRAETERE, *Pickled Fish from the Egyptian Nile: Osteological Evidence from a Byzantine (Coptic) Context at Shanḥūr*, RPal 10, 2005, p. 159–170.

<sup>185</sup> S.D. GOITEIN, *A Mediterranean Society. The Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza*, vol. I, *Economic Foundations*, Berkeley–Los Angeles–London 1983/1999, p. 126–127 n. 84–86; IDEM, *Letters of Medieval...*, p. 19, 117. On Coptic dishes of Nile River fish, D. WAINES, M. MARIN, *Muzawwar...*, p. 294–295.

meat, but consumed a lot of *dallīnas* ‘river mussels’, *ṣīr* ‘anchovies’, *ṣaḥnāt* (a condiment of small, crushed salt-cured fish), *ḥālūm* cheese, and bread<sup>186</sup>. According to a curious Egyptian *Tale of an Anonymous* from c. 15<sup>th</sup> Cairo, *The Delectable War between Mutton and the Refreshments of the Market-Place*, among the savory dishes served are the *dallīnas* in oil and lemon sauce: salted courses, such as the small salt fishes of Alexandria, salted sparrows, pilchards of *Sinbāt*, and the round-shaped fishes and turbot preceded by the pickled fish, the large fishes and the *Dallīns* fish immersed in oil and lemon water<sup>187</sup>. The *ad-dallīnas* are the *tellinē* (τελλίνη) mentioned by Athenaios, Xenocrates of Aphrodisias and the vulgar *stellis* pl. *stellinai* (στέλλις, στελλίνες) mentioned by Cyranides; Byzantine physicians also mention the pickled *tellinai*, *tarichērai tellinai* (ταριχηραί τελλίνοι), small bivalve marine molluscs<sup>188</sup>. Especially Athenaios from Egyptian Naukratis in Canopic branch of the Nile river, south-east of Alexandria, says:

*tellis* or *tellinē* (τέλλις, τελλίνη) has a pleasant sweet flesh/meat and it is probably what the Romans call *mitlon* (μίτλος, lat. *mitulus*), mussel [...] of *tellinā* there are numbers in Canopus, and they are very common at the place where the Nile begins to rise up to the higher ground. And the thinnest of these are the royal ones, and they are digestible and light, and moreover nutritious. But those which are taken in the rivers are the sweetest<sup>189</sup>.

In Oribasius’s synopsis of a work by Xenocrates on marine creatures the following is mentioned:

*Tellinai* relax the stomach; they are born in sandy places and on coasts beaten by the waves. River *tellinai*, for example those of Egypt, are larger and more succulent than others. Boiled, they are sweet, and the broth that is made from them relaxes the stomach. They are sprinkled with salt when they are closed, and they attract moisture through the shell; they are washed with cold water, and eaten with oil, vinegar and mint, or rue. For those who want to relax their stomach, we prepare them with simply seasoned green vegetables. The best season to eat them is spring<sup>190</sup>.

<sup>186</sup> P.B. LEWICKA, *Food and Foodways...*, p. 131, 223–225; N. NASRALLAH, *Treasure Trove of Benefits and Variety at the Table*, p. 31–32.

<sup>187</sup> J. FINKEL, *King Mutton, A Curious Tale of the Mamlūk Period*, ZSVG 9, 1933–1934, p. 13.3–7. P.B. LEWICKA, *Food and Foodways...*, p. 60, 224–225.

<sup>188</sup> *Die Kyraniden*, IV, 61, ed. D.V. ΚΑΙΜΑΚΕΣ, Meisenheim am Glan 1976. For *tarichērai tellinai* (ταριχηραί τελλίνοι) see the Byzantine physicians who copy Galen, AETIOS OF AMIDA, *Sixteen Books on Medicine*, II, 192, vol. I–IV, ed. A. OLIVIERI, Leipzig 1935 [= CMG, 8.1], p. 222; PAULUS AEGINETA, *Epitomae medicae*, VII, 3, p. 265.13–15.

<sup>189</sup> ATHENAIOS, *The Deipnosophists*, III, 31, 40: κόγχος, ἂν τέλλιν καλέομες. ἐστὶ δ’ ἄδιστον κρέας. τὴν τελλίναν δὲ λεγομένην ἴσως δηλοῖ, ἣν Ῥωμαῖοι μίτλον ὀνομάζουσι [...] τελλίνας γίνονται μὲν ἐν Κανώβῳ πολλαὶ καὶ ὑπὸ τὴν τοῦ Νείλου ἀνάβασιν πληθύνουσιν. ὧν λεπτότεραί μιν εἰσὶν αἱ βασιλικαὶ διαχωρητικαὶ τε καὶ κοῦφαί, ἔτι δὲ καὶ τρόφιμοι, αἱ (10) δὲ ποτάμια γλυκύτεραι.

<sup>190</sup> ORIBASIOS, *Collectionum Medicarum*, II, 58, 116–122: τελλίνας ἢ ξιφύδρια διαχωρητικὰ κοιλίας γίνονται δ’ ἐν ἀμμώδεσι χωρίοις <καὶ> κυμαίνουσιν αἰγιαλοῖς, αἱ δὲ ποτάμια μείζους καὶ πολυχυμώ-



We have chosen to present in more detail the *tellinai* in addition to their relationship with Egypt and their possible etymological origin from corresponding Greek words. Along with *ḥirriḳh*, *baṭāriḳh* (botargo or bottarga), *absāriyya*, *ṣīr*, *murri* (and Egyptian *mulūḥa*, “a kind of Arabic-Islamic equivalent of *garum* with negative connotations”<sup>191</sup> like *dallīnas*), provide a vivid representation of the seafood and salted fish that always were produced and consumed in Egypt. The *Libysia* fish also belongs to this Egyptian production, as reported by Greek sources. These sources (especially Italikos) provide information on the preparation methods, the salt used, and the other ingredients of similar sauces, and emphasize the natural sweetness or added saltiness of the cured food. That *dillīnas*, this staple food for the common people, was forbidden by Islam reinforces, among other things, the assertion that Ayyubid and Fatimid Egypt in some cases were closer to the style and food consumption of the ancient and, particularly, Greco-Roman Mediterranean-Near Eastern culinary culture than to the new religion<sup>192</sup>.

Various types of fish, the little salt fish *ṣīr*, probably similar to *Libysia*, and other pickled fish were very popular and transported from Alexandria to Old Cairo<sup>193</sup>. Some of these salted or pickled small fish were sent as presents or traded by Jewish and Egyptian merchants. It is likely not coincidental or a mere figure of speech that Italikos, when speaking of the *Libysia* that arrive in Attaleia, compares them to the fish of the Jews, who, according to Biblical testimony, kept the memory of the abundance and excellence of Nile fish they consumed before leaving Egypt<sup>194</sup>.

*Libysia* may have been a popular delicacy. They were not valued just by Michael Italikos but possibly by a wider consumer public, always of a higher social class. But how does he describe and compare these Egyptian fish with the Byzantine ones from Constantinople? This is one of the rare, detailed descriptions of salted fish in a letter. Italikos did not know the kind of fish and considered it a kind of *aphyai*, anchovies (ἀφύας ἰδῶν εἴποι τις), or at least a fish resembling *aphyai*<sup>195</sup>.

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τεραι, ὡς αἱ ἐν Αἰγύπτῳ. αἱ δ' ἐψηθεῖσαι γλυκεῖαι, ὧν ὁ ζωμὸς λύνει κοιλίαν. μεμυκῖαι δ' ἀλί πάσσο-  
νται καὶ διὰ τῶν ὀστράκων ἔλκουσιν ἰκμάδα. πλύνονται ψυχρῶ καὶ μετ' ὀξειλαίου ἢ ἡδυόσμου ἢ καὶ  
πηγάνου ἐσθίονται. τοῖς δὲ βουλομένοις λύνει κοιλίαν μετὰ λαχάνων λιτῆ ἀρτύσει σκευάζονται. ἀκ-  
μαῖαι δὲ βρωθεῖσαι ἔαρος κάλλιστα. On Egyptian shellfish and generally on crustaceans, W.J. DAR-  
BY, P. GHALIOUNGUI, L. GRIVETTI, *Food: The Gift of Osiris*, vol. I, London–New York–San Francisco  
1977, p. 415–416; C. WISSA-WASSEF, *Pratiques rituelles...*, p. 344.

<sup>191</sup> C. WISSA-WASSEF, *Pratiques rituelles...*, p. 342–343. P.B. LEWICKA, *Food and Foodways...*, p. 220:  
*mulūḥa* seemed to invoke negative connotations. Presumably because of its relatively offensive smell  
and sight, possibly because of its association with the religiously motivated diet of the Copts.

<sup>192</sup> P.B. LEWICKA, *Food and Foodways...*, p. 223.

<sup>193</sup> S.D. GOITEIN, *A Mediterranean Society*, vol. I, p. 126.

<sup>194</sup> MICHAEL ITALIKOS, *Letters*, no. 19, p. 161.12–15. A similar connection is made by S.D. GOITEIN,  
*A Mediterranean Society*, vol. I, p. 126.

<sup>195</sup> MICHAEL ITALIKOS, *Letters*, no. 19, p. 161.16–18: Ταῦτα δὲ τὰ ἰχθύδια μικρότατα μὲν εἰς μέγεθος,  
ἀφύας ἰδῶν εἴποι τις, ἡδύτερα δὲ τῶν ἄλλων καὶ τῶν παρ' ἡμῖν θαυμαζομένων εἰς ὄγκον σώματος.  
P. GAUTIER, *Michel Italikos*, p. 162 n. 5.

It should be noted that the term *aphyē* (ἀφύη usually in plural *aphyai*, ἀφύαι), a sort of anchovy or sardine or various fry small fishes, was always used in the Middle East. Etymologically the anchovy is believed to derive rather from *aphyē* (ἀφύη > Latin *apua* \**apiu(v)a* > Ital. *acciuga*) or from Basque *anchu* “dried fish”. In Talmudic literature *afitz* (or *afyan*) is a tiny, immature fish identified with the Greek *aphyai*, which refers to many little fish cooked often<sup>196</sup>. It is possible that Italikos’s comparison of *Libysia* to the Byzantine *aphyai* is not a mere coincidence, as *šīr* is considered a salt-cured anchovy and in its fresh state is called *absāriyya*, and in Kanz’s English translation it is always rendered as salt-cured anchovy<sup>197</sup>. I believe, therefore, that *Libysia* sent to Italikos were the salty *šīr*, probably like the *šīr* and its products sent as a present from Alexandria to Old Cairo with tuna in a glass jar, the *Qatarmiz šīr mathun*, minced pickled fish<sup>198</sup>.

It has been proposed that *šīr*, anchovies, is the Coptic *tjir*, an Egyptian loanword from the Canaanite language (in Hebrew *tzur*, brine) and in the Talmudic literature *tzir*, the salty liquid from pickling fish, that can also refer to locust pickle<sup>199</sup>. The Greek *tsiros* or *tzeros* (τσίρος, τζήρος, τζῦρος) could be the Byzantine equivalent (probably a loan term) of this salted fish named in different languages Arabic, Coptic, Hebrew *šīr*, *tjir*, *tzir* and appeared in Byzantine texts only from the 12<sup>th</sup> century onward to describe a sun-dried or salty little fish, mainly a little *skombros*, chub mackerel (σκόμβρος). While an improbable etymology has been proposed by Korais based on the ancient *kirris/kēris* (κιρρίς, κηρίς), a species of wrasse, it is likely that *tsiros* is a borrowed name for a small dried or salty fish. This has been the case with the loanwords of other cured fish after the 12<sup>th</sup> century like *lakerta* and *renga*, herring (λακέρτα, ρέγκα)<sup>200</sup>. It is possible that *tsiros* is related – at least in terms of its name and methods of pickling and consumption – to *šīr* and the *Libysia*. Mackerels, *skoumbria* (σκουμπρία), and the lean, salted, or sundried probably mackerel called *tsiros* (τσίρος) were a widely consumed food. Those mentioned together by Ptochoprodromos were obviously cooked (mainly fried) or just salted fish that the poor searched in vain to find in the empty chest/ cupboard

<sup>196</sup> S. WEINGARTEN, *Fish and Fish Products...*, p. 235–245.

<sup>197</sup> See typical examples with commentary, *Anonymous Kanz*, p. 199–200 (242–245), N. NASRALAH, *Treasure Trove of Benefits and Variety at the Table*, p. 199 n. 17: *This small fish is used already salt-cured. When consumed fresh, it is referred to as absāriyya. It looks like a sardine. However, šīr is sometimes used to designate fresh anchovies, when they are destined for salt curing and made into condiments.*

<sup>198</sup> S. D. GOITEIN, *A Mediterranean Society*, vol. I, p. 126 n. 85: *Qatarmiz šir mathun*: TS 12.254v.

<sup>199</sup> Hebrew *tzur*, brine, according the transliteration of Ch. PERRY, *The Description of Familiar Foods...*, p. 281–282. S. WEINGARTEN, *Fish and Fish Products...*, p. 240–242.

<sup>200</sup> A. KORAI, *Xenokratous kai Galēnou Peri tēs apo tōn enydrōn trophēs*, Paris 1814, p. 82, 210; IDEM, *Atakta*, vol. I, p. 74; K. KRUMBACHER, *Das mitteligriechische Fischbuch*, SBAW 3, 1903, p. 368: *mir nicht wahrscheinlich*. This etymology however is given in many dictionaries without further development. On foreign fish imported in Byzantium and the terms *lakerta* and *renga*, S. LAMPROS, *Theologakis*, NE 7.4, 1910, p. 353.

of kitchen<sup>201</sup>. Twenty *skoumbria pasta* (σκουμπρία παστά), salted mackerels, and sixteen *tsiros* are also mentioned together by Ptochoprodromos as ingredients in the *monokythron* soup<sup>202</sup>. If these two instances of *tsiros* and *skoumbria* mentioned by Ptochoprodromos do not imply that these two common lean small salty and dried are the same fish, it suggests that they are two distinct species of fish, and the *tsiros* mentioned could be a small, lean fish similar to *ḫīr*, *tjīr*, *tzīr*, an *aphyē* (ἀφύη), an anchovy<sup>203</sup>.

Italikos and the sender of fish likely avoid using the barbaric vernacular name for a fish product such as *tsiros* that is gradually widely adopted and passed into the Byzantine diet describing various small salted or sundried fish. Of course, Byzantine *tsiros* prevailed to denote mainly a small, lean sundried or smoked mackerel, while the Egyptian *ḫīr* was finally considered to be a salted, brined fish and not unsalted, dried, and rock-hard<sup>204</sup>. Although the masculine *ichthys* (ἰχθύς), fish, is used throughout the letter, *Libysia* is a neutral plural adjective, which is an attribute of a neutral noun, probably the aforementioned little fish, the neutral *ichthydia* (ἰχθύδια μικρότατα) or more likely of the Greek demotic for fish *opsaria* or *opsaridia* (ὀψάρια, ὀσαρίδια), a word very close to *absāriyya* and *bisāriyya*, the fresh *ḫīr* and probably in Greek *tsiros*. It should be noted that, as already mentioned, in the versions of the *garos/liquamen* recipe saved in the *Geoponika*, small fish like the Egyptian *ḫīr*, anchovy, or *opsaridia* (λεπτὰ ὀσαρίδια), the Egyptian *absāriyya* (?), were mixed with quantities of salt<sup>205</sup>. All these *ichthydia*, *opsaria* or *opsaridia* (ὀψάρια, ὀσαρίδια), *absāriyya* among which mackerel and anchovies are mentioned, could be related to *ḫīr*, anchovy, and *Libysia*, and in fact Italikos emphasizes their similarity (Ταῦτα δὲ τὰ ἰχθύδια μικρότατα μὲν εἰς μέγεθος, ἀφύας ἰδὼν εἴποι τις). The name *Libysia* may have been invented by the sender, who only specifies the origin of fish. Moreover, in an effort to avoid a barbarian name, Italikos refer to them as “fish from Libya”, i.e. from Africa, because, as he says, Egypt rules all of Libya<sup>206</sup>.

<sup>201</sup> Ptochoprodromos, poem III, 94: καὶ παλαμιδοκόμματα καὶ τσίρους καὶ σκουμπρία.

<sup>202</sup> Ptochoprodromos, poem IV, 214: σκουμπρία παστά κὰν εἴκοσι καὶ τσίρους δεκαεῖσι. On *monokythron*, see above note 31 and below 203.

<sup>203</sup> On Byzantine sources and uses of *tsiros* or *tzēros*, F.H. TINNEFELD, *Zur kulinarischen Qualität...*, p. 164, 165, and *lakerta*, p. 167–168. On the *monokythron*, see above note 31, and Ptochoprodromos, poem II, 104–106, poem IV, 201–217, p. 115, 149–150. See also on line I. ANAGNOSTAKIS, *Chrysothemis*, entries *skoumbria* (Σκουμπρίν, σκόμβρος), *tsiros* (Τσίρος, τζήρος, τζύρος).

<sup>204</sup> Ch. PERRY, *Medieval Arab Fish: Fresh, Dried and Dyed*, [in:] M. RODINSON, A.J. ARBERRY, Ch. PERRY, *Medieval Arab Cookery...*, p. 484; IDEM, *The Description of Familiar Foods...*, p. 281, 405 n. 2. The *ḫīr* was not a stone-dried but a salted and brined fish, P.B. LEWICKA, *Food and Foodways...*, p. 218–219.

<sup>205</sup> *Geoponica sive Cassiani Bassi*, XX, 46, p. 528–529. English trans. A. DALBY, *Geoponika. Farm Work...*, p. 348–349.

<sup>206</sup> MICHAEL ITALIKOS, *Letters*, no. 19, p. 162: τὰ Λιβύσια· οὕτω γὰρ καὶ αὐτὸς ἐπὶ λέξεως εἶρηκας τοῦνομα τῶν ἰχθῶν, ὅσα Λιβύη τρέφει καὶ φέρει ζῶα ἐκεῖθεν προσονομάζεσθαι, ἢ ὁ ἐπὶ τῇ καμήλῳ

*Libysia* are not like the large and fatty fish of Constantinople, characterized as abundant in flesh, *polykreōs* (πολύκρεως), contrary to these fish of the Nile (Νειλῳι ἰχθύες), which are very small (μικρότατα) and of sweet flesh, *glykykreōs* (γλυκύκρεως), tasting of honey, *meliēdeis* (μελιηδεῖς)<sup>207</sup>. The letter emphasizes that despite their preservation in salt for a long time, they always retain the sweetness of their flesh and are sweeter than even the most delicious birds – partridge or francolin and pheasants. The adjectives by which Italikos designated *Libysia* are of particular interest as they are almost never or rarely used in describing fish.

The epithet *polykreōs* was not used for fish and referred to pagan dietary excess and its negative connotations, whereas *glykykreōs* instead of *hēdykreōs* (ἡδύκρεως)<sup>208</sup> is found only in Athenaeos, quoting a passage by the writer of mimes Sophron (fifth century BC), who referred to the *sōlēn*, the shell-fish, and marine bivalve mollusc, a κογχύλιον, a kind of small mussel or cockle<sup>209</sup>. The epithet *meliēdēs* (μελιηδής) was used only for wine, fruit, and dairy, rarely for water, but never (at least I haven't found any references) for fish or meat. It is preferred here probably either as a pun on the sender's name or because being sweet like honey also referred to delicious or tasty, *nostimos* (νόστιμος) and meant succulent, nutritious, emphasizing at the same time the antiquarian notion of the Homeric sweet return trip to the homeland, *noston meliēdea* (νόστον δίζηαι μελιηδέα, *Odyssey*, XI, 100) that gave the Byzantine and modern Greek notion of tasty, *nostimos*. In his *Commentaries*, Eustathios of Thessaloniki explains how the sweetness to return home, *nostos* (νόστος), results in the creation of the adjective *nostimos* which also describes any salty and tasty, *meliēdēs* food offered to friends, as salt is a symbol of friendship<sup>210</sup>.

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ὄρνις καὶ ἐν τῇ ὄρνιθι κάμηλος, ὁ παρὰ τοῖς παλαιοῖς θαυμαζόμενος στρουθὸς Λιβυκός. Αἴγυπτος μὲν γὰρ ἀπάσης Λιβύης κρατεῖ, τῶν δ' ἐν Αἰγύπτῳ ζῶων ὅτιπερ κράτιστον τὰ Λιβύσια, ἃ καὶ ὡς παρὰ σοῦ καὶ ὡς Αἰγυπτόθεν σταλέντα ὑπερηγάμην. According P. GAUTIER, *Michel Italikos*, p. 162 n. 5: *est-il un term dont se servaient les pêcheurs ou une invention du correspondant d'Italikos?*

<sup>207</sup> MICHAEL ITALIKOS, *Letters*, no. 19, p. 161.16–20.

<sup>208</sup> The adjective ἡδύκρεως is applied by Aristoteles and rarely by the Byzantines to designate only oily fish and pork. In another letter Michael Italikos used the word to designate a pig, MICHAEL ITALIKOS, *Letters*, no. 42, P. GAUTIER, *Michel Italikos*, p. 237–238. See the commentary on this letter by CHR. ANGELIDI, I. ANAGNOSTAKIS, *La concezione bizantina del ciclo del latte (X–XII secolo)*, [in:] *Latte e latticini aspetti della produzione e del consumo nelle società mediterranee dell'Antichità e del Medioevo. Atti del Convegno Internazionale di Studio del Progetto MenSALe, Atene 2–3 ottobre 2015*, ed. I. ANAGNOSTAKIS, A. PELLETTIERI, Lagonegro 2016, p. 147–157. Michael Psellos called the fish *yska* ἡδύκρεων, a fat fish of lakes or river, see on line I. ANAGNOSTAKIS, *Chrysothemis* entry ὕσκα.

<sup>209</sup> ATHENAIOS, *The Deipnosophists*, vol. I, p. 200.21–3: σωληνές θην τοῦτοί γα, γλυκύκρεον κογχύλιον.

<sup>210</sup> *Eustathii archiepiscopi Thessalonicensis commentarii ad Homeri Odysseam*, vol. I, ed. G. STALLBAUM, Leipzig 1825 (repr. Hildesheim 1970), p. 203–204: φιλίας οἱ ἄλες σύμβολον. διὸ καὶ τοῖς ἐπιξενουμένοις παρετίθεντο πρὸ τῶν ἄλλων βρωμάτων ἢ διὰ τὸ τῆς φιλίας νόστιμον καὶ παράμονον παραμονῆς γὰρ αἴτιος πολλοῖς τῶν σωματῶν καὶ ὁ ἄλς, and p. 401.33: Εἰ δὲ μελιηδής ὡς ἐρρέθη ὁ νόστος, εἰκότως καὶ τὸ κατὰ τρυφήν ἡδὺ νόστιμον λέγεται. On *nostimos*, Φ. ΚΟΥΚΟΥΛΗΣ, *Βυζαντινῶν Βίος...*, p. 41 n. 9.

It is interesting that we are provided with both the preparation of the small fish and all the flavorings added for a sauce. This procedure constitutes an art of cooking and seasoning, an *opsartysia* (ὄψαρτυσία). The term describes a recipe, a certain way of preparation and serving food that Italikos, actually mentioned on his own initiative. He says that because these salted fish *are so sweet, they won't taste any better even if you rinse them with lukewarm water and sprinkle them with salt and vinegar. And, because you didn't even send me a basic sauce recipe, I prepared them for my table exactly as you sent them, without rinsing them, simply sprinkling them with a little oil, adding thyme and various dried aromatic mint plants*<sup>211</sup>.

It is interesting to assume, within the limits of the rhetorical scheme, that Michael Italikos sought an idea for a recipe for the preparation of these Egyptian fish, maybe Egyptian or Arabic. However, in the end he used a popular recipe using oil, thyme and various dried aromatic mint plants. I must note that it is quite strange that the Byzantine sources, when not repeating the ancient ones, barely mention the preparation or the Byzantine fish sauces. On the contrary, the number of Arabic recipes is amazing. Arabic cookbooks recorded sauces to accompany salted fish, and this makes us wonder if this was implied by Italikos for the Egyptian *Libysia*. The Palestinian Talmud described ways of cooking and problems of preparation of salted fish – some from Egypt like the Nile perch imported to Palestine<sup>212</sup>. Arabic cookbooks provide separate special sections on recipes and fermented or unfermented sauces (*murrī*, *ṣibāgh* and *ṣalṣ*) for fresh, pickled, or salted fish, *tirrikh*, and whole or soft salty fish<sup>213</sup>. One may wonder if Italikos was asking the Egyptian fish provider from Attaleia to send him a sauce recipe like those Arabic fish *ṣalṣ* that were probably widely known in Cilicia and Syria. One of the many fish sauces listed in the Baghdad Cookbook of Al-Warrāq, *Kitāb al-Ṭabīkh*, could be suitable for fish like *Libysia* that travellers bring on trips: *A recipe for ṣibāgh to use when traveling and at home*<sup>214</sup>.

<sup>211</sup> MICHAEL ITALIKOS, *Letters*, no. 19, p. 161–162: καὶ εἰ μὴν τις ἀποπλύνει ὕδατι χλιαρῷ καὶ ὄξους ἐπεμβάλλοι καὶ ἄλατος ἐπιρράνοι, οὐκ ἂν νοστιμωτέρους τοὺς ἰχθύας ἐργάσαιο διὰ τὴν ἄκραν γλυκύτητα. Σὺ μὲν οὖν μοι οὐδὲ τὴν ὄψαρτυσίαν ἐδήλωσας τούτων καὶ ταῦτα φαύλην οὕτω τυγχάνουσαν καὶ ἀπλήν· ἐγὼ δ' ὅπως ἂν εἰς τράπεζαν ἔλθοιεν ἐπιτήδειοι αὐτομάτως ἐξεύρηκα, προσεπιπραίνων καὶ ἐλαίου μικρὸν τι καὶ θύμου προσεπιπάττων καὶ ξηρῶν ἡδυσώμων.

<sup>212</sup> S. WEINGARTEN, *Fish and Fish Products...*, p. 243.

<sup>213</sup> Ch. PERRY, *Medieval Arab Fish...*, p. 477–486; IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 33, p. 176–181 dishes of fresh fish and salted sea fish, ch. 34, p. 182–184 dips and sauces (*ṣibāgh*) for roasted fish, and p. 180–181 the extravagant fish dish made for al-Rashid, a sour and cold dish of gellied fish made with more than 150 fish tongues and N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 180 note 14, and on fish-based fermented sauces and condiments and *tirrikh* p. 728; Ch. PERRY, *The Description of Familiar Foods...*, p. 387–394, and on *tirrikh*, dried up, and the Greek word *tarikhos*, p. 281.

<sup>214</sup> According to the recent edition of Syrian *Kitāb Waṣlah ilā al-ḥabīb. Scents and Flavors*, p. XXXI, XXXV: *Fresh fish are completely absent in this cookbook but there are sauces or condiments made with salt fish called ṣalṣ which automatically suggests the European word salsa... learned by the Crusaders,*



This information about the reception of foodstuffs from Arabic-Islamic world in the Middle Byzantine era suggests not only the introduction of new demand for sophisticated and luxury products, linked to new practices and choices but also new perspectives on the reception of ideas and their implementation. The mobility profile that emerged within the new exchange frameworks developed between the Islamic and Byzantine worlds was largely related to the movement of products through the Arab Muslim-controlled centers and channels of communication. The intensified mobility between Constantinople and northern Syria and Cilicia was also related to the conquest of some lands by the Byzantines and their growing interest in maintaining a stable position in the eastern Mediterranean.

Finally, it can be assumed that even in a letter concerning salty fish – and regardless of the wordplay on the sender's name, Meles – the concept of sweet in the taste of delicious or flavorful prevails in Byzantium even for the salty, in this case the *libysia* – an old notion but reinforced by the influence of Arab notions of the superior significance of sugar's sweetness. I consider the fish *libysia* and the *paloudakion* as exceptional examples of the imported preparations mentioned in the Byzantine literary sources. People who describe or use medical materials are more open to eastern preparations. However, all the cases are indicative of the mobility that becomes more intense from the tenth century. This movement concerns many more things, as already noted in other cases. These data show a dynamic mobility that revolved around Constantinople, according to the sources studied, and reveal dietary needs formed across the borders of the empire, although the routes along which they moved were not mentioned at all. Behind this information, however, are intellectuals who offered an outline of exchanges in materials and ideas with awareness of the value of open exchange and mobility<sup>215</sup>.

It's worth noting that in Arabic cookbooks some seasoning salts are referred to as *Milḥ hilū*, literally, 'sweet salt' or *Milḥ 'adhb* pleasant-tasting salt, free of bitterness since they give the food a sweet rather than bitter flavor<sup>216</sup>. I consider *Milḥ hilū*, 'sweet salt', the equivalent of Greek *hals/halas hēdyntēr*, salt sweetening (ἄλας/ ἄλας ἡδυντήρ)<sup>217</sup>. Studying these concepts and similarities of sweet-sour and sweet-salt cuisine in Byzantium and the medieval Islamic world would be in-

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and fish sauces ch. 8, 59–61, p. 228–229, 64–65, p. 230–231. The *recipe for ṣibāgh to use when traveling and at home* IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 34 (dips and sauces *ṣibāgh* for roasted fish), p. 183.

<sup>215</sup> N. DROCOURT, *Arabic-speaking Ambassadors in the Byzantine Empire (from the Ninth to Eleventh Centuries)*, [in:] *Ambassadors, Artists, Theologians...*, p. 57–70.

<sup>216</sup> N. NASRALLAH, *Annals of the Caliphs' Kitchens...*, p. 433 n. 4, p. 578.

<sup>217</sup> *Pollucis onomasticon*, VI, 71, 6, vol. I–II, ed. E. BETHE, Leipzig 9.1: 1900, 9.2: 1931 [= LG, 9.1–2]: ἐκαλοῦντο δὲ καὶ οἱ ἄλας ἡδυντήρες διὰ τὸ ἡδύνειν; *Photii patriarchae lexicon*, vol. II, (E–M), letter ἔτα 61.1, ed. C. THEODORIDIS, Berlin–New York 1998: ἡδυντήρες· ἄλες. See also on line I. ANAGNOSTAKIS, *Chrysothemis*, entries Ἄλας, ἄλες and Ἡδυσμα, ἡδύνω.

triguing. Although the preference for sweet-sour taste is quite obvious in Byzantium, according to a scholar's opinion, *the medieval Arab palate disliked any sourness in sweetmeats, the reason so few fruits are used in pastries*, and the sweet-sour taste is only appropriated with meat but not in a free-standing confection<sup>218</sup>. The most typical example is the favorite Arabic dish *sikbāj*, a recipe with beef or fish in vinegar-honey sauce<sup>219</sup>. There were even substitutes to provide sweetness like the *nayda* used by Arabs, "a sort of ersatz sugar" of the poor without sugar and honey<sup>220</sup>. The research on Byzantines' use of substitutes to provide sweetness will undoubtedly yield rich results. Likewise, the research on counteracting salt with honey and sugar, a practice not generally followed by the Middle Eastern cooks, would be extremely interesting to study in the Byzantine sources<sup>221</sup>. A special investigation into the combination of salt and honey in veterinary and medical recipes and the use of Egyptian salt (Αιγύπτου or αιγύπτιον ἄλας)<sup>222</sup> would also be instructive and helpful, much like the numerous historical studies on food preservation through curing methods that aside from smoking, seasoning, and cooking, also require the addition of sugar or salt<sup>223</sup>.

This pleasant taste given by salt or sour and considered as sweet or honey is equally common in ancient Greek and Byzantine dietary and culinary concepts. So *Libysia* are of sweet flesh and honey-tasting, retaining this sweetness despite their preservation in salt for a long time. Greek sources across time using the gastronomical and metaphorical view of taste for the *hēdysmata* (ἡδύσματα), seasonings from the *hēdys* (ἡδύς sweet, pleasant), state that the salt is par excellence *hēdysma*, (sweetening) or *halas hēdyntēr* (ἄλας ἡδυνητήρ, salt sweetening), and the sour, bitter, or salty can also be called sweet or vice versa either as an *antiphrasis* or as a *euphemisme*, i.e. by using words of good sense in place of those of a contrary sense. For example, it is given as *antiphrasis when we say instead of Saracen white or silver and we call vinegar sweety, glykadin* (κατὰ ἀντίφρασιν, ὥσπερ λέγομεν τὸν

<sup>218</sup> Ch. PERRY, *The Description of Familiar Foods...*, p. 283 referring to *fālūdhaj*. On sweet-sour meat dishes, IDEM, *A Thousand and One 'Fritters'...*, p. 487–496. P.B. LEWICKA, *Food and Foodways...*, p. 283.

<sup>219</sup> *Anonymous Kanz*, p. 195 (235) fish *sikbāj*, and p. 201 (249) recipe for *al-samak al-sikbāj*, fish in vinegar-honey sauce. See also P.B. LEWICKA, *Food and Foodways...*, on fish à la *sikbāj*, p. 215.

<sup>220</sup> P.B. LEWICKA, *Food and Foodways...*, p. 218.

<sup>221</sup> On counteracting salt with honey and sugar by the Middle Eastern cooks, P.B. LEWICKA, *Food and Foodways...*, p. 297 and for meat p. 215.

<sup>222</sup> There are mentions in the *Corpus Hippocraticum* and a Middle Byzantine text by EUSTATHIOS OF THESSALONIKI, *Commentary on Homer's Odyssey*, vol. I, p. 170. On the salt in Egypt see also, W.J. DARBY, P. GHALIOUNGUL, L. GRIVETTI, *Food: The Gift...*, vol. I, p. 443–452; P.B. LEWICKA, *Food and Foodways...*, p. 206–297.

<sup>223</sup> See selectively *Food Preservation from Early Times...*; B.A. NUMME, "Historical Origins of Food Preservation". National Center for Home Food Preservation May 2002, <https://nchfp.uga.edu/re-sources/entry/historical-origins-of-food-preservation#gsc.tab=0> [15 V 2024]. *Cured, Fermented and Smoked Foods. Proceedings of...*

Σαρακηνὸν λευκὸν καὶ ἀργυροῦν καὶ τὸ ὄξος γλυκάδιον)<sup>224</sup>. It is worth noting that in some Arabic recipes *ħall* (sugar syrup) is mistaken for *khall* (vinegar), and in Al-Warrāq, *Kitāb al-Ṭabīkh*, a *khall* *‘adhḥ* sweet vinegar, pleasant and smooth-tasting vinegar is frequently mentioned<sup>225</sup>.

It is commonly believed, mainly in popular publications, that traditional Middle Eastern food uses less salt than other cuisines. Depending on the region this is probably true because salty meals can increase thirst in arid climates so Middle Eastern cuisines may employ spices, herbs, and other condiments, especially sugar, to minimize the use of salt. However, in both of the cuisines studied, sweet, salty, and sour ingredients are basic categories for storing and preserving as well as for taste that are prevalent, either naturally in the products used in cooking or purposefully sought after and obtained in a number of ways. But this may be an obvious and not at all original conclusion if we did not find the dynamics of a new sweetener like sugar and its equating with salt and the frequent multiple usage both of them in such an exuberant display of recipes, identical or different, in the Byzantine or Muslim world of the Middle Ages. The groundwork for the “invasion” of *sukkar* (sugar) from the Arab world into Byzantium and West with these culinary and medical “inventions” had already been laid by commercial, political, culinary, and medical needs or priorities as well as by the exotic perception of its similarities to the very familiar salt by scholars and the common people. In addition to its similarity in taste to honey, must syrup, molasses, and other juice syrups, the unusual crystallised sugar resembled the omnipresent salt, and any sweet agent like honey and sugar was similar to salt used for safe food. This made it the food seasoning par excellence, *hēdysma*, and “sweetener”, the *milḥ hilū*, ‘sweet salt’. Furthermore, both sugar and salt frequently confuse us today in our kitchen by their similar refined crystalline consistency and, just as in antiquity, sugar equates to a grain of salt and both may tastefully “be broken between the teeth!” So, similarities in concepts of cooking, recipes, and use

<sup>224</sup> ATHENAIOS, *The Deipnosophists*, II, 76, vol. I, p. 158.13–14: ὄξος. τοῦτο μόνον Ἀττικοὶ τῶν ἡδυσμάτων ἦδος καλοῦσι; *Scholia Graeca in Odyseam. Scholia ad libros α–β*, Book 2 hypothesis-verse 11i. 1–2, vol. I, ed. F. PONTANI, Rome 2007 [= Ple, 6.1]: κατὰ ἀντίφρασιν, ὡσπερ λέγομεν τὸν Σαρακηνὸν λευκὸν καὶ ἀργυροῦν καὶ τὸ ὄξος γλυκάδιον; *Scholia in Oppianum*, hypothesis-book I, scholion 130, line 7, ed. U.C. BUSSEMAKER, [in:] *Scholia et paraphrases in Nicandrum et Oppianum in Scholia in Theocritum*, Paris 1849, p. 269: ἀντίφρασις ἢ ἐναντία φράσις, ὡς τὸ εἰπεῖν τὸ γλυκὸν πικρὸν καὶ τὸ ὄξος γλυκάδιον.

<sup>225</sup> N. NASRALLAH, *Treasure Trove of Benefits and Variety at the Table*, p. XII: in some cases *ħall* ‘sugar syrup’ is mistaken for *khall* ‘vinegar’. See also P.B. LEWICKA, *Food and Foodways...*, p. 276 n. 709, and p. 283 n. 745 who states that in *The Kanz* a recipe is titled *popular way of preparing quince in vinegar* although vinegar, probably by mistake, is not mentioned, and a recipe called for “*khall*”, “vinegar”, instead for “*ħall*”, sugar “solution”. On *khall* *‘adhḥ*, N. NASRALLAH, *Annals of the Caliphs’ Kitchens...*, p. 577, and use IBN SAYYĀR AL-WARRĀQ, *Kitāb al-Ṭabīkh*, ch. 23, p. 150, ch. 40, p. 202 (*making binn al-sakārij*), p. 204 (*making kamākḥ of capers [kabar]*), ch. 46, p. 233 (*a recipe for a cold dish of beans*).

of some culinary agents studied in this paper, demonstrate intercultural borrowings and interculinariness between the two cuisines.

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**Ilias Anagnostakis**

Institute of Historical Research, Section of Byzantine Research  
National Hellenic Research Foundation (Athens)  
Vassileos Konstantinou 48  
Athens 11635, Greece  
[eanagno@eie.gr](mailto:eanagno@eie.gr)