Universiteit Leiden
The Netherlands

A matter of taste: the experiment of a 'Byzantine food-lab' placed in socio-historical context

Vroom, J.A.C.; IJzendoorn, M.W. van; Nieuwkoop, M. van; Post, K.; Vroom, J.; Waksman, Y.; Oosten, R. van

Citation

Vroom, J. A. C., IJzendoorn, M. W. van, Nieuwkoop, M. van, & Post, K. (2017). A matter of taste: the experiment of a 'Byzantine food-lab' placed in socio-historical context. In J. Vroom, Y. Waksman, & R. van Oosten (Eds.), *Medieval and Post-Medieval Mediterranean Archaeology* (pp. 323-352). Turnhout: Brepols Publishers. doi:10.1484/M.MPMAS-EB.5.113489

Version:	Publisher's Version
License:	Licensed under Article 25fa Copyright Act/Law (Amendment Taverne)
Downloaded from:	https://hdl.handle.net/1887/3721927

Note: To cite this publication please use the final published version (if applicable).

* * *

A matter of taste: The experiment of a 'Byzantine food-lab' placed in socio-historical context

Joanita Vroom, Mink van IJzendoorn, Marten van Nieuwkoop & Katelin Post

*

INTRODUCTION

The central themes of *Medieval MasterChef* are European and Mediterranean Medieval and Post-Medieval eating habits and food practices, explored through a range of different archaeological methods and approaches.[1] In this scope, our experimental survey of modern appreciation of Byzantine tastes is perhaps a bit off-beat, but we hope that it may prove to be a genuine contribution to this discussion on food in the past. The following text presents a study which combines ethno-archaeological theory with experimental research, in an effort to comprehend today's view on Byzantine foodways.

The main research questions of this study can be formulated as follows: How do present-day Europeans appreciate the Byzantine dishes and drinks that were prepared during these special events, and, in particular, how do they relate the Byzantine cuisine to social status? What are their assumptions about Medieval, and specifically Byzantine, recipes? And, finally, how do these views relate to anthropological and historical examples of supra-cultural experiences of dining habits and food consumption?

Consequently, the aim of this article is to discuss the interview data obtained during the 'Byzantine food-lab', which was part of an experimental-archaeological *Crafts Market* in 2014 in the city of Leiden, The Netherlands (Figs. 1, 2a-c).[2] We have tried to frame these results in the above-mentioned research questions. The food-lab experiment was received very enthusiastically by the visitors (over 300 participants), so much so that it generated enough results to devote an article to. The interview questions, which were answered by the public visiting the food-lab, will be explored in this article, together with ideas and theories relevant to concepts of taste, luxury food, social

Medieval MasterChef, ed. by Joanita Vroom, Yona Waksman, Roos van Oosten, Medieval and Post-Medieval Archaeology Series 11 (Turnhout, 2017), pp. 323-352 (+ plates p. 399) © BREPOLS PUBLISHERS 10.1484/M.MPMAS-EB.5.113489

status and the interfaces between these. We have tried to compare this data with what we know about the Byzantine concept of dining in the past. In order to achieve this, we have also framed the findings in an ethno-archaeological and historical context.

To meet these research aims and discuss our results, we have divided this article in five interrelated parts. Firstly, we explore current theoretical concepts of taste, luxury food and social class. Secondly, we set out to give a short historical background about Byzantine diet and eating habits (ca 4th-15th centuries), as these are sometimes expressed in contemporary written sources, pictorial evidence and archaeological data. Thirdly, we present the methodology used for the interviews. Fourthly, the Late Antique and Byzantine recipes and the ingredients used for the experiment are presented. Fifthly, we discuss in detail and propose an interpretation of the interview results through several graphs and tables before we reach our final conclusion.

TASTE, LUXURY AND SOCIAL STATUS

One important objective of this study is to shed light on the assumptions people currently make about the relationship between Byzantine cuisine and social status. Within this framework, the concept of 'luxury' is important. Historically and temporally, there were many occasions during which a great amount of effort was put into obtaining, producing and consuming luxury food. Luxury food did, and still does, play a major role in socio-economic and even political relations.[3] It was, therefore, hardly a surprise that the theme 'luxury' emerged during the Byzantine food-lab.

In order to define the correct meaning of 'taste', we have to distinguish between two seperate aspects. First, the biological sensations that begin in the body through contact with food and drinks and, second, the cultural, collective evaluation that a particular society places on the gustatory experience. (This socio-cultural aspect is caparable to the working of 'taste' in gastronomy art, literature, architecture, theatre, music etc).[4] This last phenomenon is also known as 'good taste'. As a matter of course, we use the first physiological meaning of 'taste' throughout our article, which may include the sensations via the taste buds in our mouths (taste), by the sense of smell (aroma) and by the combination of both (flavour).[5]

Furthermore, the term 'luxury' was frequently used by participants in our interviews to describe certain food and drink items. But what made some foods luxurious? Luxury food has distinct features which consequently lead this to stand out from 'normal' food; this included refinement in taste, texture or contents of certain ingredients.[6] They were non-essential and the primary motive in obtaining these goods was for the purpose of pleasure and enjoyment. The production and consumption of luxury food has many socio-cultural and political connotations.[7]

To add the taste of luxury to food, there needed to be a qualitative refinement of a basic good. The French social anthropologist Pierre Bourdieu made a distinction between 'tastes of necessity' and 'tastes of luxury'.[8] In this way, he handled the same dichotomy as the Dutch archaeo-botanist, Marijke van der Veen, between what is a basic 'necessity' (a *need*) and what is a non-essential 'luxury' (a *desire*). Van der Veen illustrates this by the example of the basic *need* for bread and the *desire* for fresh or organic bread.[9] The latter is thus optional, non-essential and generally harder or costlier to acquire. Limited access to such luxury food is caused by, amongst other factors, its ingredients being rare, exotic and/or expensive. Hence the persons consuming such goods are 'privileged' in some way. In line with this, Bourdieu described these rare and/or expensive products as 'aristocratic foods'.[10]

Opposing to basic resources and requirements for human survival, luxury products are not a 'basic need'. Nevertheless, there are needs for these goods in society. The limited accessibility and qualitative superiority of these products makes them appealing and desirable. As Van der Veen argued, since they are privileged items, produced and consumed with attention to detail and are a matter of choice, luxury food has important social implications.[11] It can, therefore, be used to express social status.[12] It has socio-economic, political and cultural functions in communities, for instance, in advertising and displaying power, identity or wealth. In certain contexts, it can create a distinction between the 'haves' and 'have-nots' and this dichotomy has a wide variety of social implications. This was certainly an important theme in the cuisine and table manners in the Ancient and Medieval Mediterranean world.[13]

Presumably, in the Byzantine world, this meant that the well-to-do people saw the consumption of luxuries as a way of setting themselves apart from those belonging to a lower social strata. This was certainly the case in the Roman world.[14] Also, in the case of the Byzantine Empire, persons of higher social strata, such as the higher clerical classes in monasteries or the rural and urban well-to-do classes, had access to better foodstuffs and a more luxurious diet.[15]

What specific aspects made a food luxurious varies through time and is culturally specific. Nevertheless, through the study of ethnographic and archaeological data, Van der Veen managed to detect some general patterns. She argued that, in more complex societies like the Byzantine Empire, luxury food can be classified by its quality (rather than by quantity as is often the case in less complex societies),– it's expensive and exotic nature, it's complexity and the skill and knowledge required to produce and consume such foods.[16] Likewise, the Australian scholar of Early Christianity, Andrew McGowan, acknowledged the importance of the quality and variety of foods in relation to social status during Late Antiquity.[17] Also the Byzantines took a considerable interest in food preparation and the ingredients used.[18]

In short, the taste of food has always had a strong relation to the social value attached to it; certain tastes indeed seem to trigger a 'feeling' of luxury, almost regardless of time and place. At least, the assumptions of our present day interviewees about the 'luxury' taste of certain Byzantine dishes, recorded during the survey carried out during our Byzantine food-lab experiment, closely matched the social status of these dishes in Byzantine times (Tables 3a-b).

HISTORICAL BACKGROUND

Although significant progress has been made in the study of Byzantine foodways, there is still a lot which is largely unknown.[19] Consequently, the following account of the Byzantine kitchen, its products and associated habits, is a rather unfinished tale. Food production, distribution and consumption are central themes in Byzantine socio-economic history. Byzantium was largely an agricultural society. A large majority of the (peasant) population was preoccupied with food production and a great variety of foodstuffs was produced; these circulated and were consumed throughout the Byzantine world and beyond.[20] In line with documentary evidence (e.g. recipes in written texts, tax records, travellers' tales and dietary regimes) and with pictorial evidence (e.g. religious images, mosaics and wall paintings), the most important foods of the Byzantine (upper-class) diet included wheat, barley, olive oil and wine.[21] These main ingredients were often supplemented with meat, fish, dairy products (milk, cheese, butter, and yogurt), fruits, vegetables, nuts, legumes (beans, peas, and lentils), other grains (oats, rye, rice, and millet) and honey as a sweetener.[22] The meat consumption consisted mostly of sheep and goats although pigs, cattle, chickens and other birds were also consumed, for instance, in 13th-century north-western Turkey (Table 1).[23]

According to the Russian-American Byzantinist Alexander Kazhdan, meat consumption increased from the 7th century onwards.[24] The sea food assemblage consisted of more than 110 fish and 30 other aquatic species, all mentioned in Byzantine literature.[25] The preparation of meat and fish was another important factor, and these products were mostly salted, smoked or dried.[26] Some other marine products, such as caviar and sturgeon, were imported from far away.[27]

There is a general agreement among scholars that during the Middle to Late Byzantine periods in Greece (ca 10th -15th centuries), Orthodox fasting regulations led to an increase in marine-based consumption.[28] The Greek archaeologist Chryssa Bourbou stated that the calendar of the Orthodox Church imposed some form of dietary restriction for nearly half the days of the year, all on which meat consumption was prohibited.[29] During these periods of regulations, vegetables and fish usually moved to the centre of the menu.

Unfortunately, little is known about the everyday diet of the Byzantine lower social classes, primarily due to the absence of direct written evidence. While the wealthier classes had access to more exclusive products, the lower classes were limited to foods which were cheap and, equally important, locally available.[30] Most likely, bread, soup, and cheese formed the basis of the meals for the majority of the population, while meat and fish were probably too costly for most (Table 1).[31]

FOOD TYPE	MOSTLY CONSUMED
Meat	Pig[a,b], sheep, goat, chicken, fish, shellfish
Dairy products	Cheese[a], feta, egg, milk, butter
Sugar/dessert	Honey, rose sugar, quince marmalade, rice pudding, flatcakes (fried in oil)
Carbohydrates	Bread, *paximadion* (hard dried bread)[b]
Vegetables	Olive[a], cabbage, onion, legume, garlic
Fruits	Citrus fruits, fig, grape, pomegranate, apple, apricot, hazelnut
Drinks	Wine with warm water[b], water-vinegar[a,b], soft drinks, water (in limited amounts)
Underlined: never consumed during periods of fasting regulations.	
[a] Typical diet of the lower classes.	
[b] Typical diet of the Byzantine army.	

Table 1. Typical Byzantine diet in 13th-century north-western Turkey, based on archaeological and historical evidence (after Çağlar et al. 2007, 1144).

Byzantine dining habits varied per region and changed over time. During the 5th and 6th centuries, for instance, eating habits were identical to those prevailing in Late Antiquity with diners sitting on a semi-circular couch eating from a semi-circular table.[32] From this period until the 12th century, meals had a strong communal character, with large shallow ring-footed dishes dominating the dining table.[33] During the 12th and 13th centuries, however, a trend towards the separation of (semi-liquid) food and drink into smaller and deeper bowls, shared by only two or three diners, occurred.[34] Individual beakers, jugs, goblets, knives and forks suddenly made their appearance during this period.[35] Furthermore, an increased interest in the picturing of a variety of foodstuffs seemed to occur, including the fragmentation of communal eating.[36] What can be noticed is that the foods and drinks were more often separated into numerous vessels shared by a small number of diners, rather than the whole table.[37] Change in dining culture might also have been stimulated by the increasing Frankish involvement in Byzantine domestic affairs. Most notably, during the Late Byzantine period, especially from 1204 onwards, there was a considerable inflow of Frankish people to Greek lands and Western (mostly Italian) merchants got a strong grip on trade, especially in the exchange of foodstuffs.[38] It is likely that this influenced what was consumed and how.

Some scholars state that the Byzantines normally ate three times a day, while others propose two meals a day.[39] It is, however, assumable that the number of daily mails

differed depending not only on social class, but also on aspects such as local-availability, the current season of the year and monastic preferences. In some monasteries food was served three times a day, for example, while in others only one meal was conceded.[40]

According to the Austrian Byzantinist Johannes Koder, the normal number of daily meals was probably two. The first, called *ariston* or *geuma*, was consumed between 10 a.m. and 1 p.m. The richer, second meal, called *deipnon*, was consumed in the evening, before sunset. On some occasions, the two meals coincided, being served in the afternoon. This meal was therefore called *aristodeipon*. It is likely that the majority of people ate a hot cooked meal (*mageira*, and probably the *deipnon* in this case) only once a day, as fuel to heat the meal was costly and rare.[41]

The Greek-Canadian Byzantinist Nicholas Oikonomides, studying lists of household goods of middle- and lower-class households, concluded that dinner habits were rather simple in the average Byzantine household. People often ate with their fingers from a large serving plate and drank from a common cup or jar.[42] Similar dining manners occurred in Ottoman Greece as well.[43] However, what is important to keep in mind is that a part of the utensils and table ware used for dining, was probably made of non-ceramic materials (e.g. wood, leather, metal).[44] These reusable and perishable items are all but lost and with them, crucial knowledge regarding Byzantine foodways.

METHODOLOGY

With our food-lab experiment, we aimed to obtain reliable and useable information to shed light on the present-day perception ofByzantine diet and its socio-economic and cultural implications, by means of a public survey. A question-based form seemed to us a fruitful way of collecting this data. We formulated a number of questions which had the potential of providing interesting results (Fig. 1).

Firstly, we recorded the personal data of the participants of the survey, including information regarding any allergies and age. The reason for collecting this information was not only to gain insights into the diversity of the people interviewed, but also to find out whether there were any differences or similarities between various age groups (Figs. 2a and 3).

Thereafter, the emphasis was moved to the actual recipes of this experiment. We asked the interviewees not only to rate the recipes on a scale of one to five (one being the lowest and five the highest), but also which ingredients the different recipes could contain and which ingredients the interviewed person could recognise (Figs. 4a-b, 6 and 7). Next, the participants were requested to think about the production sequence of the recipes and to which social class (upper, middle, or lower) these recipes could

have belonged (Tables 3a-b). Lastly, the attendants were asked whether they knew of the existence of these recipes, and if they would like to consume them again after the interview or not (Fig. 5).

In the preparation for the *Crafts Market*, the necessary supplies for the experiment were bought and the Byzantine recipes had to be produced. These necessities included the actual ingredients used for the recipes, suitable tableware in which the dishes and beverages could be presented and a number of posters and flyers to elucidate the visual aspects of Byzantine cuisine and foodways to the visitors at the *Crafts Market* (Figs. 2a-c).[45] The historical background of the Byzantine recipes and the outcome of the survey will be described elaborately later in this article.

RECIPES OF THE BYZANTINE FOOD-LAB

The recipes used for the Byzantine food-lab were obtained from Late Antique and Byzantine written sources from many different centuries, and were tasted by present-day people. They contained seven drinks and six dishes. We tried to be as authentic as possible, using nearly the same ingredients and utilising the same or similar preparation techniques as described by various Byzantine authors in primary documents. However, we opted, in our experiment at the *Crafts Market* in Leiden, mostly for vegetarian dishes (without meat or fish) for practical and hygienic reasons. This was, for instance, due to the fact that we had no stove or open fire available and had to make everything one day in advance. Moreover, it made our food-lab accessible to those with certain dietary restrictions (such as vegetarians or in the case of religious restrictions, for instance, on pork). Nonetheless, admittedly, this lack of meat and fish left out important segments of the rich Byzantine cuisine.

The drinks – The first drink we made for our taste experiment was a non-alcoholic one, also known as *melegala* (No. 1) as listed by the Greek Byzantinist Phaidon Koukoules (1881-1956), a beverage of milk and honey in the fifth volume of his monumental work *Byzantine Life and Civilisation*.[46] We made a mixture of honey and almond milk, the latter being used widely in Medieval recipes of Western Europe.

The second drink included another non-alcoholic beverage, but this time made as a kind of fruit juice or rather concentrate (No. 2). The Jewish Byzantine physician Simeon Seth suggested, in the 11th century, to combine the juice of grapes with rose water (created by boiling petals in water).[47] Hence, we mixed defrosted grape juice with commercially distilled rosewater and water.

The third and fourth drinks were again non-alcoholic, as we used a very common drink in Byzantium described by the same Simeon Seth as *phoukas* or *phouska* (No. 4).[48]

This was a mixture of plain vinegar and water. We also made a variant of this beverage, this time with apple vinegar,water and with the addition of fresh mint (No. 3).

The mixing of water with spices was investigated in the fifth drink, another non-alcoholic but rather temperate beverage (No. 5).[49] It consisted of black pepper, cumin seeds and anise, that were mixed with hot water.

The sixth drink contained alcohol and was a spiced wine, or *conditum* (No. 6). The Byzantine physician Hierophile, suggested in the 13th century to drink wine with a heavy mixture of pepper, cinnamon, clove and spikenard.[50] Another variation on this theme was our seventh and final drink, a kind of pepper wine as described by Koukoules (No. 7).[51] This spiced drink was made of wine, honey and crushed pepper.

The dishes – The first dish in our Byzantine food repertoire included a cold cabbage salad (No. 8), as it was mentioned by the physician Oribasios in the 4th century.[52] In fact, he described the mixture as uncooked and washed cabbage, which should be cut up with a 'very sharp knife', with some coriander and rue. Then, the dish was to be sprinkled with vinegar and honey, and topped off with a little asafoetida powder.

The main ingredient in the second dish was grain, normally pearl barley (No. 9). According to Hierophile, 'pearl barley is suitably prepared when it is has swelled to its fullest extent during boiling, then after this put on a gentle flame until it has wholly converted into juice'.[53] After it is completely swollen, the substance is mixed with vinegar, and, subsequently, a little fine salt. It is also suggested by Hierophile to add some oil at the start of preparing this dish, as well as some leek and dill (if necessary).[54]

The third dish was made of legumes (No. 10). The Byzantine physician Anthimus presented detailed instructions on how to cook lentils in the 6th century.[55] Firstly, they had to be well-washed and then boiled in clear water, which had to be poured off. Secondly, enough hot water had to be put on them in order to cook them slowly on the coals. When ready, some vinegar can be added to the lentils, as well as *rus syriacus* ('sumac'), *oleum greniale* ('oil from unripe olives'), coriander roots/seeds and salt.

The fourth dish contained again legumes, but this time the main ingredients included beans (No. 11). Agapios suggested to cook beans with pepper, mustard (seed), oil and vinegar, which we indeed did during the preparation of this dish.[56]

The fifth dish was made of rice (No. 12). According to Simeon Seth, rice can be prepared 'with milk and sugar'.[57] We boiled for this dish unpolished (brown) rice in milk, while adding sugar during the cooking process.

Finally, the sixth dish was a kind of dessert, a honey cake made of honey and wheat as described by Koukoules (No. 13).[58] As leavening agent for this cake we used beaten eggs and added water. When baked in a modern oven, the cake looked nicely brown, but unfortunately it collapsed in the centre.

ANALYSING THE INTERVIEW RESULTS

The purpose of the next part of this article is to present the graphs and tables with the interview results for a preliminary analysis. As stated before, all the interviewees of the Byzantine food-lab had to give a rating from 1 (bad) to 5 (good) to the drinks and dishes they tasted (Figs. 4a-c). All these ratings were put together and converted into an average, per drink and per dish.

The results can be seen in the graph 'Average rating' (Fig. 4a). We separated dishes from drinks to illustrate the differences between the two categories: an average of 3.43 for drinks and 2.88 for dishes (on a scale of 1 to 5). Because there were more drinks (seven) than dishes (six), the graph 'Average rating' was further divided into two other graphs showing the average rating per drink and per dish, indicated by number (Figs. 4b-c). In total, we had an average for all seven drinks (Nos. 1-7) and all six dishes (Nos. 8-13), ranging from a 4.26 for dish 13 to a 1.63 for drink 4.

In the first graph, one can see the average rating people gave to the foods and drinks (Figs. 4b-c). Noticeably, generally, people liked the drinks more than the dishes. When looking closer at the separate graphs this favour for the drinks were almost equalled with the dishes. There were no major differences seen between the different averages per dish and drink. The lowest rating was for vinegar with water (No. 4) and for beans with mustard seeds (No. 11). The highest rating was for wine with pepper and honey (No. 7) and for the honey cake recipe (No. 13). Although the last combination of wine with spices looks similar to mulled wine but is not common for today's Western cuisine, the ratings were quite high in some cases.[59]

In two of the tables, we can distinguish the number of people who drank and ate the drinks and dishes or if they did not (Tables 2a-b). In addition, we can see the missing numbers by, for example, unreadable or unanswered questions. In total, the drinks were tasted 375 times and the dishes 300 times, which demonstrated the quantitative significance and statistical potential of our study. The different volumes in which the foods and drinks were made should also be taken into account. For example, one cake was made (No. 13) and two drinks of wine with spices (Nos. 6-7). In addition, we did not document the precise quantities for the ingredients in the recipes.

An important aspect that was considered was the age of the participants, which was asked during the interview. We see the result in the next graph 'Number of visitors to age group', categorised in six categories: 'less than 20 years', '20 to 25', '26 to 30', '31 to 40', 'above 41' and a 'missing/unanswered' category (Fig. 3). Most participants of the Byzantine food-lab were between the ages of 20 and 25. The overrepresentation of this age group can be explained by the fact that we conducted this experiment within the vicinity of the *Van Steenis*-building, which is part of Leiden University. Naturally,

most of the visitors were students. Lecturers, professors, parents of the students and local residents also attended the *Crafts Market*.

The identity of the interviewees (socio-economic status, occupation, gender and nationality) were not asked during the Byzantine food-lab. In anthropological literature, these aspects were often considered.[60] Since these aspects were not taken into account in our interviews, we can only assume that most of the participants were generally used to Western cuisine and eating habits, or at least were familiar with them.[61] Much of Western (including the Dutch) cuisine consists of very different ingredients and cooking processes, than that of the Byzantines.[62] Hence, many of the recipes used for the Byzantine food-lab are quite uncommon to traditional Dutch food culture. As a consequence, the dishes and drinks were rather unfamiliar to many interviewees.

Nonetheless, some recipes were appreciated by a large part of the interviewed people. During the survey, it was also interesting to ask the participants if they liked the food and drinks and if they would like to continue to consume such goods (Figs. 5a-b). Most interviewees wanted to continue eating *some* of the foods in the future. Another 28 persons were enthusiastic to continue to consume *all* Byzantine drinks and dishes in the future. On the other hand, 18 persons would not like to consume any of the dishes and drinks after the interview and 12 interviewees did favour only one kind of dish or drink. A small number of people (8) said 'maybe' to further consumption.

INTERPRETING THE INTERVIEW RESULTS

The participants of the Byzantine food-lab observed, smelled, touched, ate and drank the dishes and drinks prepared for them. For their judgment and interpretation of the products, they relied almost entirely on their senses without much historical background information of any kind.[63] Their answers were thus largely based on tastes, aromas and looks of the final products, as they were not able to observe the actual food preparation which potentially could have significantly influenced their perception.[64]

Nevertheless, many of them had assumptions about the techniques used for the processing of the drinks and dishes. As said and presented above, they had to guess what the items were, what they were made of, how they were produced and by whom they would have been consumed in the past. The results described below are general trends observed in the answers of the interviewees and, admittedly, there were many exceptions and deviations.

In many cases the interviewees made connections between taste, ingredients (with respect to usage, complexity, costs and provenance) and social class. Many of them were right – to some degree – in that eating habits of the past were somehow linked to a certain lifestyle and hence implied a certain social status.[65]

Although Bourdieu stressed the existence of a 'food division' between the sexes as an essential factor in the way people in the past viewed and consumed certain foods and drinks, this aspect seemed completely absent among the interviewees.[66] The participants did not comment at all on gender roles in relation to the different foods and drinks they consumed. Neither was age mentioned. Gender roles and divisions between age groups were nonetheless certainly important to the processing, as well as in the consumption, of foods and drinks in Medieval Mediterranean societies.[67]

Some interviewees did detect links with contemporary Mediterranean cuisines, especially Arabic/Turkish and Greek ones. Indeed, the taste of unfamiliar exotic ingredients, like some spices, can lead to associations with such 'traditional' cuisines.[68] In general, sour-tasting dishes and drinks (containing vinegar) were less appreciated, and alcoholic (containing wine) or sweet-tasting (containing sugar or honey) drinks were more appreciated.

Returning to the debate regarding luxury food and social class, a lot of participants seemed to regard foods made of supposedly 'ordinary' or 'cheap' ingredients as associated with lower classes and with a non-luxurious status, and the use of – in their eyes – more costly or exotic products, particularly spices, as a sign of higher wealthier classes (Tables. 4a-b). For instance, foods and drinks with pepper, cinnamon, and rosewater were by multiple interviewees identified as luxury products, solely consumed by the upper classes. Similarly, vinegar, onion, beans and cereal-based products were often regarded as low-value goods used in low- and middle-class meals.

Interestingly, the lack of meat (and other animal products) in these recipes was seen by several participants as sign of poor diet and hence low social status. Historically, this was generally the case: the consumption of meat or fish in cuisines of the past, especially the quantities in which they were used, was an important indicator of a more luxurious status of meals.[69]

Indeed, the food of the lower classes was usually meatless (what nowadays would be called 'vegetarian') in Byzantium.[70] Nonetheless, fruits and vegetables were appreciated more by the Byzantines – even by the Byzantine Emperor – than by Medieval Westerners.[71] The remarks of these present-day participants (being mainly north-western Europeans) might, with the necessary caution, be traced back to the negative attitude towards 'greenstuffs' from the European Middle Ages.[72]

The use of alcohol was, by some interviewees, considered a sign of the wealthy upper classes. Interestingly, the Byzantines appreciated alcoholic beverages (mainly wine) whereas, at the same time, they were aware of the 'bad effects' such drinks could have.[73] In the case of Byzantium, the British historian Andrew Dalby regards wine to have been consumed by the wealthier on a daily basis, whilst being a luxury product.[74]

Van der Veen considered this, like meat consumption, as being linked to a higher social status, as many ethnographical and historical examples show.[75]

The participants regarded more 'complex' foods and drinks as luxurious and intended for the wealthy upper classes, whereas 'simple' and 'basic' ones were intended for the lower social strata. Many comments were made about the relationship between the complexity of foods and drinks and their supposed place in Ancient social hierarchies. In fact, Van der Veen already recognised that complexity did play a role in past societies.[76] Water mixed with vinegar was, for instance, seen by many of the interviewees as simple, not very tasteful and, hence, for lower classes; indeed, this recipe (called *poscat* or *oxycrat*) was mainly consumed by Byzantine soldiers and was referred to as the 'wine of the poor'.[77]

Despite this, the bases for many eastern Mediterranean meals (including Byzantine ones) were ingredients regarded by today's Westerners as 'simple' or 'mundane', like bread, vegetables and legumes. Westerners visiting the Ottoman Empire were known to have made condescending comments on the apparent lack of complexity in the Ottoman cuisine and, therefore, labelling them as 'frugal'.[78] Nevertheless, the Byzantine diet, with its great varieties and high quantities of vegetal ingredients, can be considered quite balanced and healthy.[79] Again, the apparent link between the mental template of the 21st-century participants and Europeans in the past is striking.

The (supposed) provenance and scarcity of some ingredients played an important role in the estimations of the interviewees of luxury and social class as well. Again, such views are supported by Van der Veen.[80] Many participants saw the items which they regarded as having been abundant, mundane and/or from local origin (such as onion, lentils, beans, barley, and nuts) as non-luxury goods and, thus, belonging to the lower classes. Exotic products and ingredients which were considered as 'special' in some way, were though of as luxurious. These included rosewater, pepper and almond milk (Figs. 6 and 7).

However, in Byzantine times, the poor also used ingredients like pepper, honey, cinnamon and cumin.[81] On the other hand, 'normal' goods like bread, grains and legumes were greatly appreciated by the Byzantines of all social strata and widely used.[82] These goods were often used for sophisticated meals and, in many cases, dietary qualities were given to them. The Modern perception on what is 'exotic', 'special', 'extraordinary' or 'exclusive' is thus greatly different from that of the Medieval Mediterranean past. Some ingredients, which in the past were regarded as special, are today highly common and *vice versa* (see Figs. 6a-b for two anecdotic examples of which ingredients our 2014 interviewees could recognise in recipes Nos. 1 and 9).[83]

The final major factor in assigning 'social status' to food was for many interviewees, of course, taste. Certain characteristic taste sensations appeared to be associat-

ed outright with either higher or lower social strata. More often than not foods and drinks with sour or bitter tastes were classified as lower class, whereas sweet-tasting ones were associated with the middle and upper classes. Many respondents found the foods and drinks to be oddly tasting, or even 'disgusting', although often they were also regarded as nutritious. In such cases, these dishes were mostly seen as food for lower or middle classes.

CONCLUDING REMARKS

How do Modern Europeans respond to Byzantine dishes and drinks, and what are their assumptions about this cuisine? With these two main questions in mind, the Byzantine food-lab and the corresponding survey were set up, from which this article arose. Recipes from different Byzantine periods were selected and recreated as authentically as possible, after which the dishes and beverages were served to present-day consumers, whose reactions and taste sensations were recorded systematically.

The written sources quite clearly indicate that the Byzantine Aegean diet was mainly based on wheat, barley, olive oil and wine, supplemented with meat (mostly sheep and goat), fish, dairy products (milk, cheese, butter and yogurt), fruits, vegetables, nuts, legumes (beans, peas and lentils), other grains (oats, rye, rice and millet) and honey. The lower classes, however, were usually limited to foods which were cheap and locally available, often without meat. As a result, it seems that the significant differences in eating habits – at least those which can be noticed – occurred primarily in the higher classes of society. Furthermore, there were undoubtedly variations in diet and eating habits within regional, and even local areas, which would be interesting to examine as well. It is nevertheless clear that the Byzantine food and eating habits were remarkably different from those who were accustomed to dining in Europe, both in the past and in the present.

Our interview results clearly show the participants' unfamiliarity with, as well as recognition of some elements of, the Byzantine cuisine. Certain recipes and ingredients were identified as Mediterranean, or even Greek or Arabic/Turkish, whereas others were received as very strange and, consequently, often non-appealing. These reactions can, perhaps, be partly explained by the temporal, geographical and cultural distance between the interviewees and the Medieval Mediterranean cuisines. On the other hand, Dutch people today can perhaps relate more to exotic cuisines than their Medieval and Early Modern ancestors. In conclusion, there is no clear and straight answer on how people today perceive the Byzantine foodways. The survey results were ambiguous and presumably based on too few respondents to be truly statistically significant. To get a better picture, similar public surveys and studies need to be done.

Nonetheless, we can say, with the necessary precaution, that our interviewees did seem to share the Byzantine notion of a luxurious meal when alcohol, meat, and/or other exotic or expensive ingredients are involved, and that a social downgrading is at place when these elements are absent at one's table.

However, what is remarkably different is that plant products were enjoyed more by the Byzantines, even those of high status, whereas many Europeans have a distaste for such goods and would regard their food poor if fruits, vegetables and legumes were its main ingredients. Furthermore, 'simple' versus 'complex' recipes as synonyms for 'poor' versus 'wealthy', is a view shared by our participants and Byzantine society. Still, the concept of a simple or a complex meal differs greatly, which, again, goes back to the usage of animal or vegetal products and spices. Similarly, the view of which ingredients are exclusive or mundane varies quite a bit; the participants saw certain spices, rather normal for the average Byzantine person, as exotic whilst some products, which we would regard as dull, were liked by people of all strata in Byzantium.

To conclude, although there is general agreement between the Modern Dutch interviewees and Byzantine society on concepts that constitute a wealthy diet (e.g., complexity, expensiveness, distinctiveness), there is considerable disagreement on which products embody these concepts the best. Most noteworthy, Western food culture is greatly focused on animal products and, subsequently, appreciates plant products less than the Byzantines seem to have done. This seems to go back to the traditional culinary division between northern Europe and the Mediterranean on the role of animal and plant foods and the different usage and spices. Different perceptions are probably also rooted in the changed nature of present-day food production and increasing general economic wealth. The position of alcoholic drinks, in contrast, seems to be rather similar in Western and Byzantine society as a symbol of status as well as a means of enjoyment.

Nowadays, there is a great influx in north-western Europe of migrating people, ideas and goods (including foodstuffs) from cultures all over the world, and the Low Countries are certainly no exception. This globalisation of cuisines is likely to make present-day people more tolerant, or at least somewhat familiar, to dishes and drinks from outside their own traditional kitchen. Hence, the depressing and equally simplistic vision of a disruptive one-way-diffusion of Western foodways (such as the McDonald's hamburger, Heineken beer and Coca-Cola) to other parts of the world, endangering traditional cuisines, can be disputed by demonstrating cases of successful and welcome penetrations of (old) Eastern foods and drinks in the Modern European cuisine. A similar 'open-mindedness' is, of course, seen in other aspects of cultural interaction and interests in traditional customs (e.g. language, religion, visual culture, music and clothing fashion).

ACKNOWLEDGEMENTS

We would like to thank the organisers of the *Crafts Market*, the Faculty of Archaeology, and all the participants of our interview in 2014. Furthermore, we are much indebted to the Leiden students of archaeology, Zizi Rico Neves and Pim Rusch, for the opportunity to use their colour images in Figures 2a-c and 5c. Finally, we are grateful for the opportunity to publish our results in this volume.

NOTES

1 This round table session, which resulted in the publication of *Medieval MasterChef*, was organised during the 2014 European Association of Archaeologists (EAA) meeting in Istanbul, Turkey.
2 This event was held on September 26th 2014 at the Faculty of Archaeology (Leiden University, the Netherlands) during the opening of the new 'Van Steenis-building'.
3 Bradley 1998, 51; Mauss 2001, 72-74; Mintz and Du Bois 2002, 99-101; Van der Veen 2003, 405, 420-21; Bourdieu 2013, 36.
4 e.g., Davidson 1988; Santich 1988; Freedman 2007; Vanderbilt 2016, 5-6.
5 Davidson 1988, 9.
6 Van der Veen 2003, 405-6.
7 Mintz and Du Bois 2002, 99-101.
8 Bourdieu 2013, 31.
9 Van der Veen 2003, 406-7.
10 Bourdieu 2013, 32.
11 Van der Veen 2003, 406-7.
12 Goody 1982, 99; Bradley 1998, 51; Van der Veen 2003, 408; Boekaert and Zuiderhoek 2012, 92-93.
13 Bradley 1998, 49-52. In Byzantium other (non-edible) luxury items, and especially the limited accessibility thereof, were used for socio-cultural and diplomatic tools as well. For instance, the political and commercial power facilitated by Byzantine silk was based on the extreme exclusivity of its production and controlled exchange (see Muthesius 1992, 103).
14 Bradley 1998, 51; Boekaert and Zuiderhoek 2012, 92-93.
15 Talbot 2009, 260-262; Bourbou 2010, 137-38.
16 Van der Veen 2003, 420.
17 McGowan 1999, 36.
18 Frankopan 2009, 134.
19 Bourbou 2010, 1-9; idem 2013b, 65-66. An important problem is the general lack of scientific research on floral and faunal data as well as studies of human remains from Byzantine times.
20 Morrisson and Sodini 2002, 195-97; Laiou and Morrisson 2007, 4-7, 101, 112; Frankopan 2009, 114; Haldon 2009, 171.
21 Vroom 2003, 309-31 and table 11.1; Bourbou 2013a, 216; idem 2013b, 65.
22 Vroom 1998a, 541; idem 2003, 330; Bourbou 2013a, 216.
23 Koder 2007, 70-71.
24 Kazhdan 1991, 621.
25 Bourbou et al. 2011, 571.
26 Koder 2007, 59, 70-71; Bourbou 2011, 99-100.
27 Kazhdan 1991, 621.
28 Dalby 1996, 197; Maniatis 2000, 13; Chrone-Vakalopoulos and Vakalopoulos 2008, 123-24.
29 Bourbou et al. 2011, 571. Furthermore, recent isotopic research shows that maritime food was generally more consumed in Byzantine Greece than during previous periods (Bourbou and Richards 2007, 70).
30 MacKay 2003, 419.
31 Bourbou 2011, 101; idem 2013a, 216.
32 Vroom 2003, 304-13; idem 2007a; idem. 2007b, 193-95.
33 Vroom 2003, 313-21, idem 2007b, 197-200.
34 Vroom 2003, 321-27; idem 2007b, 200-03.
35 Vroom 2011, 419-21.

36 Vroom (2015, 186, fig. 25) illustrates this by comparing an 11th century painting of a dining scene with one from the late 12th to 13th century. The table settings clearly moved from communal to a more individual character.
37 Vroom 2007b, 204-05.
38 Laiou-Thomadakis 1977, 4; Laiou 2002b, 305, 368; Laiou and Morrisson 2007, 166-67; Vroom 2011, 417-26. In 1204 the Sack of Constantinople by members of the Fourth Crusade took place. This event led to the establishment of the Latin Empire which controlled great parts of former Byzantine territories.
39 Kazhdan 1991.
40 Koder 2014, 425.
41 Koder 2014, 425-26.
42 Oikonomides 1990, 212; Vroom 2003, 328.
43 Vroom 2000, 210-11; idem 2015, 185.
44 Vroom 1998b, 151-54; Redford 2015, 251.
45 All the ingredients were purchased at local supermarkets or specialised food stores. We prepared the dishes and drinks in Utrecht and Leiden some days prior to the *Crafts Market*-event. The posters and flyers we produced ourselves.
46 Koukoules 1948-57, V, 136-69; also Marks 2002, 153.
47 Marks 2002, 154.
48 Marks 2002, 154; Dalby 2003, 91.
49 Marks 2002, 153.
50 Marks 2002, 151.
51 Koukoules 1948-57, V; Marks 2002, 152.
52 Marks 2002, 85.
53 Marks 2002, 133.
54 Marks 2002, 134.
55 Marks 2002, 146.
56 Marks 2002, 143.
57 Marks 2002, 132.
58 Koukoules 1948-57, V; Marks 2002, 148.
59 For instance, mulled wine (*Glühwein*) is a typical Christmas drink made of heated red wine with mulling spices or sometimes raisins. This beverage is very popular in various parts of Europe and there are many different types. A Dutch variant is *Bisschopswijn*, a kind of mulled wine consumed during the folklore celebration of the birthday of St Nicholas (*Sinterklaas*) on the 5th of December.
60 Harris 1989; Bourdieu 2013.
61 Nevertheless, the Dutch dining culture has also been influenced by many foreign cuisines (such as the French, Italian, Indonesian, Chinese etc.).
62 For instance, the so-called *Hete Bliksem*-dish (potatoes with apple) is widely known to be very typical for cuisine in the Netherlands.
63 Albeit that a significant part of the interviewees, being either student or faculty member associated with the Faculty of Archaeology, had more-than-average knowledge of, and familiarity with aspects of non-Western and pre-Modern cultures. They were, therefore, perhaps less representative of the average present-day Dutch person.
64 Sutton 2006, 316-17.
65 Bourdieu 2013, 32.
66 Bourdieu 2013, 35.
67 Goody 1982, 101; Bradley 1998, 45-49.
68 Bourdieu 2013, 32.
69 McGowan 1999, 127-40; Vroom 2000, 206; Dalby 2003, 66-72; Van der Veen 2003, 412; Redford 2015, 252-53.
70 Dalby 1996, 196.

71 Vroom 1998a, 542 and note 82; Idem 2000, 212; McGowan 1999, 125-27; Dalby 2003, 74-77.

72 Additionally, today industrial production of animal products has caused a normalisation of their daily consumption and thereby perhaps an estranging of meals which lack such foodstuffs; cf. Gossard and York 2003, 2; Daniel et al. 2010, 575, 579. Although vegetarianism is a rising trend in the Western world, meat consumption is still growing.

73 Dalby 2003, 86.

74 Dalby 2003, 91.

75 Van der Veen 2003, 412, 418, 420. In temporal traditional communities, meat can also have socio-cultural connotations. For example, cattle meat (beef) is consumed – either eaten or sacrificed – by the Tandoy, on the island of Madagascar, during ceremonies (Parker Pearson 2000, 221-22, 224-27). Its consumption is thus an indicator for wealth, as well as a way of interacting with the supernatural. The possession of cattle and the exchange and consumption of their products, is seen by the Tandoy men as a sign of the pastoral masculinity. The case of the Medieval Türkmen from the Central Anatolian Plateau, suggest a similar attitude towards animal husbandry and its goods (Redford 2015, 249-53). This nomadic people traded in, amongst other things, animal products (such as wool, felt, hides, yogurt and cheese). They were, however, rather hesitant to slaughter their livestock for meat consumption, since these animals were central to their owners wealth. Hence, foods like meat, can carry symbolic meanings regarding social hierarchies and, at the same time, it can be a medium of expressing lifestyle and (gender) identity. This example supports the hypothesis of Bourdieu (2013). Studies of Modern Western society show that factors such as gender still play major roles in meat consumption (Gossard and York 2003, 6; Daniel et al. 2010, 578-579). Hence, it would be interesting to conduct a new taste experiment which does include meat and fish dishes. As for alcoholic beverages, there is much ethno-archaeological literature to suggest that such drinks are of major importance as status differentiator in contemporary societies as well as for people in the past; see Mandelbaum 1965, 281-82, 288; Van der Veen 2003, 418. For example, the trends in alcohol consumption in India seem to correlate with social changes (Mandelbaum 1965, 283). When India was more egalitarian, alcohol was used by all men. However, when Indian society became more hierarchical, some castes were forbidden to drink liquor. Nowadays, in the Western world, the consumption of expensive wines or whiskies is a way of expressing economic or cultural wealth. This is often part of an effort to impress business or romantic partners during luxurious dinners.

76 Van der Veen 2003, 420.

77 Dalby 1996, 196.

78 For her description of the European perception of Ottoman dishes, Vroom (2000, 210-11; idem 2003, 335-41) uses written accounts of several Western travellers of the 16th to 19th centuries. The way of consuming the foods and drinks, and most noticeably the usage of tableware and

cutlery (or the lack thereof) as well as table manners, were alien to these travellers and were generally not appreciated. Historically appropriated table manners, cutlery and tableware, would probably greatly alter the experience of interview participants. A food-lab involving these elements, might potentially, provide interesting data.

79 Laiou 2002a, 53-54; Bourbou and Richards 2007, 64-65; Bourbou and Garvie-Lok 2015, 184, 189-90. Nonetheless, it cannot go unnoticed that the quality of the Byzantine diet shifted significantly between different regions and periods, and, consequently some people certainly lived on poor meals; cf. Bourbou 2010, 172.

80 Van der Veen 2003, 420.

81 Dalby 1996, 196.

82 Dalby 2003, 77-78, 80.

83 The American anthropologist Sidney Mintz provides a clear example with sugar (1985). Sugar was once regarded as an elite product which was exclusively consumed by upper class people. Nowadays, it is available to everyone and used by all social strata of modern society, while overconsumption is even not uncommun in the lower strata of society. Many other kinds of food went to similar socio-cultural developments. This is why today health issues, such as obesity and hart diseases, related to certain types of food (e.g., alcohol, meat, dairy products, and sugar) are much more common and are not reserved for the wealthiest classes, which was generally the case in pre-Modern times.

BIBLIOGRAPHY

Bourbou, C. 2010. *Health and Disease in Byzantine Crete (7th-12th Centuries AD)*, Farnham.

Bourbou, C. 2011. Fasting or feasting? Consumption of meat, dairy products and fish in Byzantine Greece: Evidence from chemical analysis, in: I. Anagnostakis, T.G. Kolias and E. Papadopoulou (eds.), *Animals and Environment in Byzantium (7th-12th c.)*, Institute for Byzantine Research, International Symposium 21, Athens, 97-114.

Bourbou, C. 2013a. Are we what we eat? Reconstructing dietary patterns in Greek Byzantine populations (7th-13th centuries AD) through a multi-disciplinary approach, in: S. Voutsaki and S.M. Valamoti (eds.), *Diet, Economy and Society in the Ancient Greek World: Towards a Better Integration of Archaeology and Science. Proceedings of the International Conference held at the Netherlands Institute at Athens on 22-24 March 2010*, Pharos Supplement 1, Leuven, 215-29.

Bourbou, C. 2013b. All in the cooking pot: Advances in the study of Byzantine diet, in: I. Anagnostakis (ed.), *Flavours and Delights. Tastes and Pleasures of Ancient and Byzantine Cuisine*, Thessaloniki, 65-70.

Bourbou, C. and S. Garvie-Lok 2015. Bread, oil, wine, and milk: Feeding infants and adults in Byzantine Greece, in: A. Papathanasiou, M.P. Richards and S.C. Fox (eds.), *Archaeodiet in the Greek World. Dietary Reconstruction from Stable Isotope Analysis*, Hesperia Supplement 49, Princeton, 171-94.

Bourbou, C. and M.P. Richards 2007. The Middle Byzantine menu: Palaeodietary information from isotopic analysis of humans and fauna from Kastella, Crete, *International Journal of Osteoarchaeology* 17, 63-72.

Bourbou, C., B.T. Fuller, S.J. Garvie-Lok and M.P. Richards 2011. Reconstructing the diets of Greek Byzantine populations (6th-15th centuries AD) using carbon and nitrogen stable isotope ratios, *American Journal of Physical Anthropology* 146(4), 569-81.

Bourdieu, P. 2013. *Distinction: A Social Critique of the Judgement of Taste*, London & New York [= *La Distinction. Critique sociale du jugement*, Paris, 1979].

Bradly, K. 1998. The Roman family dinner, in: I. Nielsen and H.S. Nielsen (eds.), *Meals in a Social Context. Aspects of the Communal Meal in the Hellenistic and Roman World,* Aarhus, 36-55.

Broekaert, W. and A. Zuiderhoek 2012. Food and politics in Classical Antiquity, in: P. Erdhamp (ed.), *A Cultural History of Food in Antiquity, Vol. 1,* London & New York, 95-112.

Çağlar, E., O.O. Kuscu, N. Sandalli and I. Ari 2007. Prevalence of dental caries and tooth wear in a Byzantine population (13th c. AD) from Northwest Turkey, *Archives of Oral Biology* 52.12, 1136-45.

Chrone-Vakalopoulos, M. and A. Vakalopoulos 2008. Fishes and other aquatic species in Byzantine literature: Classification, terminology and scientific names, *Byzantina Symmeikta* 18, 123-57.

Dalby, A. 1996. *Siren Feasts: A History of Food and Gastronomy in Greece*, London & New York.

Dalby, A. 2003. *Flavours of Byzantium*, Blackawton & Totnes.

Daniel, C.R., A.J. Cross, C. Koebnick and R. Sinha 2010. Trends in meat consumption in the USA, *Public Health Nutrition* 14(4), 575-83.

Davidson, A. 1988. Tastes, flavours, aromas, in: T. Jaine (ed.), *Proceedings of the Oxford Symposium on Food and Cookery 1987: Taste*, London, 9-14.

Frankopan, P. 2009. Land and power in the middle and later period, in: J. Haldon (ed.), *The Social History of Byzantium*, Hoboken, 112-42.

Freedman, P. 2007. Introduction, in: P. Freedman (ed.), *Food: The History of Taste*, London, 7-33.

Goody, J. 1982. *Cooking, Cuisine and Class. A Study in Comparative Sociology*, Cambridge.

Gossard, M.H. and R. York 2003. Social structural influences on meat consumption, *Human Ecology Review* 10.1, 1-9.

Haldon, J. 2009. Social élites, wealth, and power, in: J. Haldon (ed.), *The Social History of Byzantium*, Hoboken, 168-211.

Harris, M. 1989. Foodways: Historical overview and theoretical prolegomenon, in: M. Harris and E.B. Ross (eds.), *Food and Evolution. Toward a Theory of Human Food Habits*, Philadelphia, 57-90.

Kazhdan, A.P. (ed.) 1991. *The Oxford Dictionary of Byzantium*, Vol. 1, Oxford.

Koder, J. 2007. Stew and salted meat – opulent normality in the diet of every day?, in: L. Brubaker and K. Linardou (eds.), *Eat, Drink, and Be Merry (Luke 12:19): Food and Wine in Byzantium, Papers of the 37th Annual Spring Symposium of Byzantine Studies, in Honour of Professor A.A.M. Bryer*, Society for the Promotion of Byzantine Studies Publications 13, Aldershot, 59-72.

Koder, J. 2014. Cuisine and dining in Byzantium, in: D. Sakel (ed.), *Byzantine Culture: Papers from the Conference Byzantine Days of Istanbul/İstanbul'un Doğu Roma Günleri held on the Occasion of Istanbul being European Cultural Capital 2010, Istanbul, May 21-23 2010*, Ankara, 423-38.

Koukoules, Ph. 1948-1957. *Βυζαντινῶν βίος καὶ πολιτισμός / Byzantine Life and Civilisation*, Vols. 1-5, Athens.

Laiou, A.E. 2002a. The human resources, in: A.E. Laiou (ed.), *The Economic History of Byzantium. From the Seventh through the Fifteenth Century*, Vols. 1-2, Washington, 46-54.

Laiou, A.E. 2002b. The agrarian economy, thirteenth-fifteenth centuries, in: A.E.

Laiou (ed.), *The Economic History of Byzantium. From the Seventh through the Fifteenth Century.* Vols. 1-2, Washington, 305-69.

Laiou, A.E. and C. Morrisson 2007. *The Byzantine Economy*, Cambridge.

Laiou-Thomadakis, A.E. 1977. *Peasant Society in the Late Byzantine Empire: A Social and Demographic Study*, Princeton.

MacKay, T.S. 2003. Pottery of the Frankish period: 13th and early 14th century, in: C.K. Williams and N. Bookidis (eds.), *Corinth XX: Corinth, The Centenary: 1896-1996*, Athens, 401-22.

Mandelbaum, D.G. 1965. Alcohol and culture, *Current Anthropology* 6(3), 281-93.

Maniatis, G.C. 2000. The organizational setup and functioning of the fish market in tenth-century Constantinople, *Dumbarton Oaks Papers* 54, 13-42.

Marks, H. 2002. *Byzantine Cuisine*, New York.

Mauss, M. 2001. *The Gift: The Form and Reason for Exchange in Archaic Societies,* London & New York [= Essai sur le don. Forme et raison de l'échange dans les sociétés archaïques, in *L'Anneé sociologique*, seconde serie, Paris, 1923-1924].

McGowan, A. 1999. *Ascetic Eucharists. Food and Drink in Early Christian Ritual Meals*, Oxford.

Mintz, S.W. 1985. *Sweetness and Power. The Place of Sugar in Modern History*, New York and London.

Mintz, S.W. and C.M. Du Bois 2002. The anthropology of food and eating, *Annual Review of Anthropology* 31, 99-119.

Morrisson, C. and J.-P. Sodini 2002. The sixth century economy, in: A.E. Laiou (ed.), *The Economic History of Byzantium. From the Seventh through the Fifteenth Century, Vols. 1-2*, Washington, 165-213.

Muthesius, A.M. 1992. Silk, power and diplomacy in Byzantium, in: B. Gordon and S. Baizerman (eds.), *Textiles in Daily Life: Proceedings of the Third Biennial Symposium of the Textile Society of America, September 24-26, 1992*, Earleville, 99-110.

Oikonomides, N. 1990. The contents of the Byzantine house from the eleventh to the fifteenth century, *Dumbarton Oaks Papers* 44, 205-14.

Parker Pearson, M. 2000. Eating money: A study in the ethnoarchaeology of food, *Archaeological Dialogues* 7(2), 217-32.

Redford, S. 2015. Ceramics and society in Medieval Anatolia, in: J. Vroom (ed.), *Medieval and Post-Medieval Ceramics in the Eastern Mediterranean – Fact and Fiction. Proceedings of the First International Conference on Byzantine and Ottoman Archaeology, Amsterdam, 21-23 October 2011,* Medieval and Post-Medieval Mediterranean Archaeology Series 1, Turnhout, 249-72.

Santich, B. 1988. Broadening the palate: Considerations of taste, in: T. Jaine (ed.), *Proceedings of the Oxford Symposium on Food and Cookery 1987: Taste*, London, 183-84.

Sutton, D. 2006. Cooking skills, the sense, and memory: The fate of practical knowledge, in: E. Edwards, C. Gosden and R. Phillips (eds.), *Sensible Objects: Colonialism, Museums and Material Culture*, Oxford, 87-117.

Talbot, A.-M. 2009. A monastic world, in: J. Haldon (ed.), *The Social History of Byzantium*, Hoboken, 257-78.

Vanderbilt, T. 2016. *As You May Also Like: Taste in an Age of Endless Choice*, New York and Toronto.

Veen, M., van der 2003. When is food a luxury?, *World Archaeology*, 34(3), 405-27.

Vroom, J. 1998a. Medieval and Post-Medieval pottery from a site in Boeotia: A case study example of Post-Classical archaeology in Greece, *Annual of the British School at Athens* 93, 513-46.

Vroom, J. 1998b. Early Modern archaeology in Central Greece: The contrast of artefact-rich and sherdless sites, *Journal of Mediterranean Archaeology* 11(2), 131-64.

Vroom, J. 2000. Byzantine garlic and Turkish delight: Dining habits and cultural change in Central Greece from the Byzantine to Ottoman times, *Archaeological Dialogues* 7(2), 199-216.

Vroom, J. 2003. *After Antiquity. Ceramics and Society in the Aegean from the 7th to the 20th centuries A.C. A Case Study from Boeotia, Central Greece,* Archaeological Studies Leiden University 10, Leiden.

Vroom, J. 2007a. The archaeology of Late Antique dining habits in the eastern Mediterranean: A preliminary study of the evidence, in: L. Lavan, E. Swift and T. Putzeys (eds.), *Objects in Context, Objects in Use. Material Spatiality in Late Antiquity,* Late Antique Archaeology 5, Leiden & Boston, 313-61.

Vroom, J. 2007b. The changing dining habits at Christ's table, in: L. Brubaker and K. Linardou (eds.), *Eat, Drink, and Be Merry (Luke 12:19): Food and Wine in Byzantium. Papers of the 37th Annual Spring Symposium of Byzantine Studies, in Honour of Professor A.A.M. Bryer,* Society for the Promotion of Byzantine Studies Publications 13, Aldershot, 191-222.

Vroom, J. 2011. The Morea and its links with southern Italy after AD 1204: Ceramics and identity, *Archeologia Medievale* 38, 409-30.

Vroom, J. 2015. Food and dining as social display, in: K.B. Metheny and M.C. Beaudry (eds.), *Archaeology of Food. An Encyclopaedia, Vols. 1-2*, Lanham, Boulder, New York, and London, 184-87.

Vroom, J. forthcoming. The ceramics, agricultural resources and food, in: J. Haldon, H. Elton and J. Newhard (eds.), *Euchaita: A Late Roman and Byzantine City in Anatolia,* Cambridge.

Survey

What is your age? ....

Do you suffer from allergies? If so, please notify us! ....

Which dishes and beverages did you consume? What rating will you give per dish and/or per beverage on a scale of 1 to 5? (Multiple answers possible)

Dish / Beverage	…	…	…	…	…	…	…	…
Rating	…	…	…	…	…	…	…	…

Do you recognise the main elements in the dishes and beverages you consumed?
Which ingredients do you recognise?

....

....

How do you think the dishes and beverages are prepared (cooked, boiled, fried etc.)?

....

....

Indicate per dish and beverage which social class (upper, middle, or lower) you think would have consumed it in Byzantine times? Explain your answer.

....

....

Did you know of the existence of these dishes and beverages?

....

....

Would you consume the dishes and beverages again, if they were available?

....

....

FIG. 1 – Example of interview form used in 2014 (J. Vroom et alii).

FIGS. 2a-c – *See colour plates page 399.*

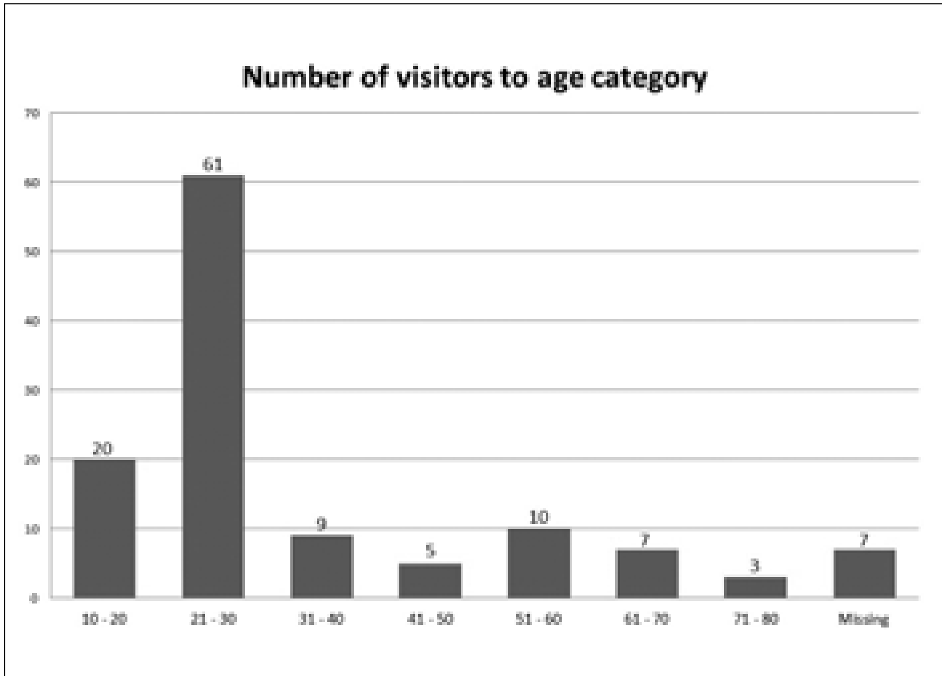


FIG. 3 – Number of visitors per age group (J. Vroom et alii).

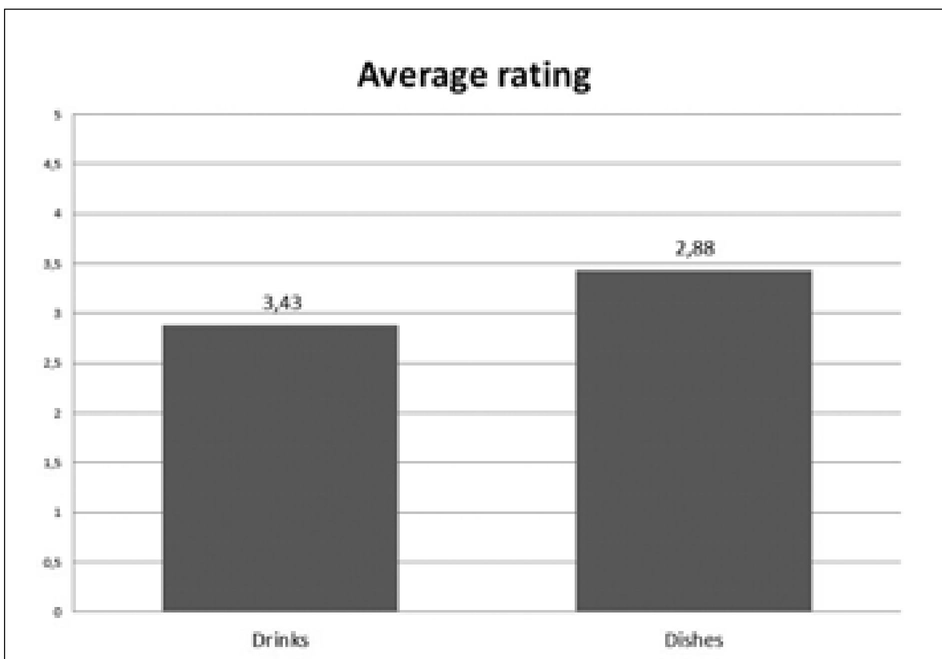


FIG. 4a – Average rating on a scale of 1 to 5 (J. Vroom et alii).

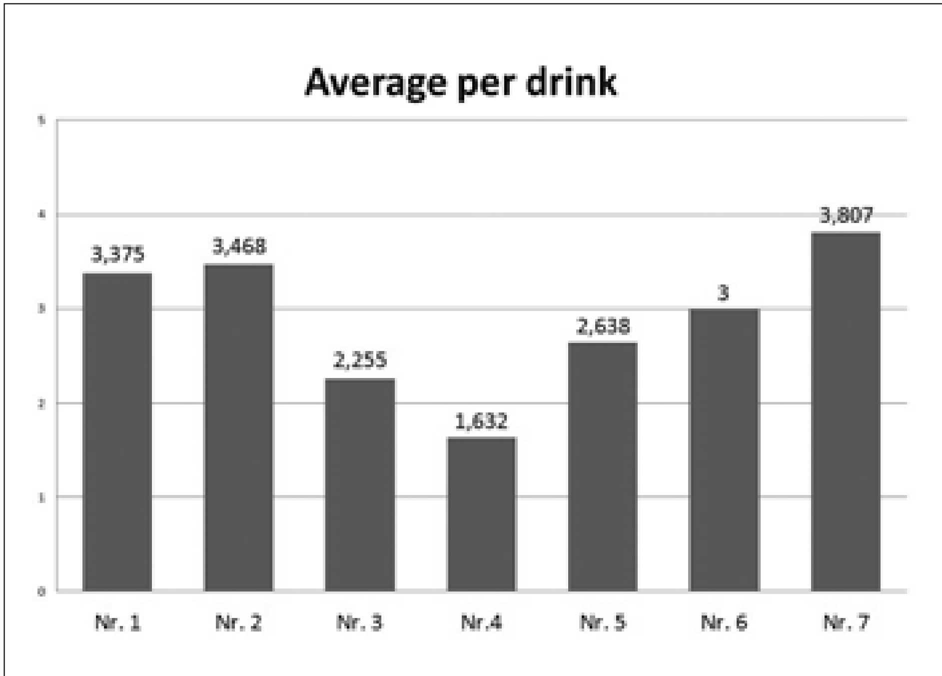


FIG. 4b – Average rating per drink on a scale of 1 to 5 (J. Vroom et alii).

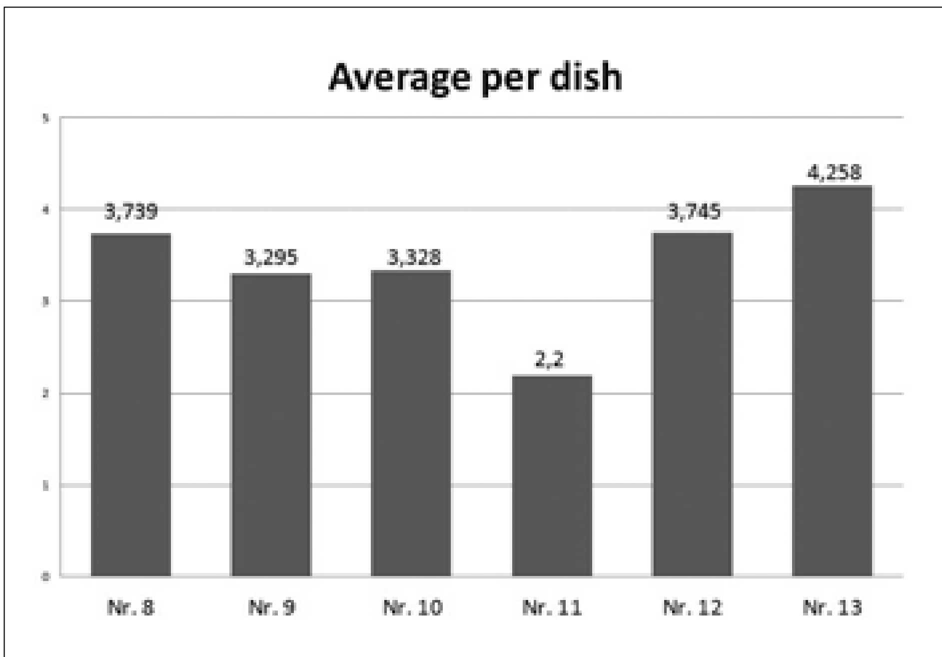


FIG. 4c – Average rating per dish on a scale of 1 to 5 (J. Vroom et alii).

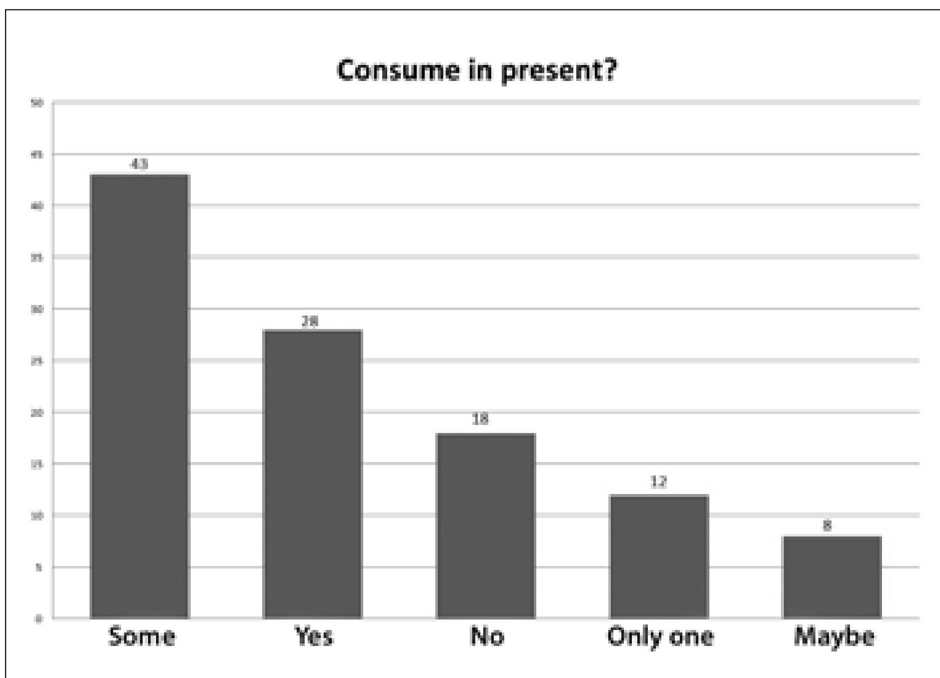


FIG. 5a – Results of question 8: Would you consume the recipes again? (J. Vroom et alii).

FIG. 5b – Would you consume the recipes again? (Photo: P. Rush).

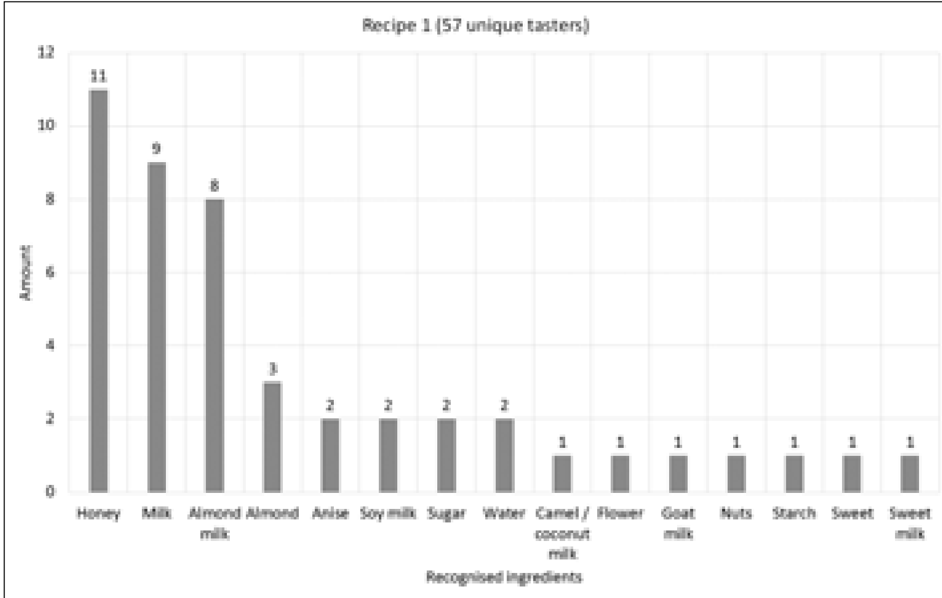


FIG. 6a – Example of recognized ingredients in drinks (J. Vroom et alii).

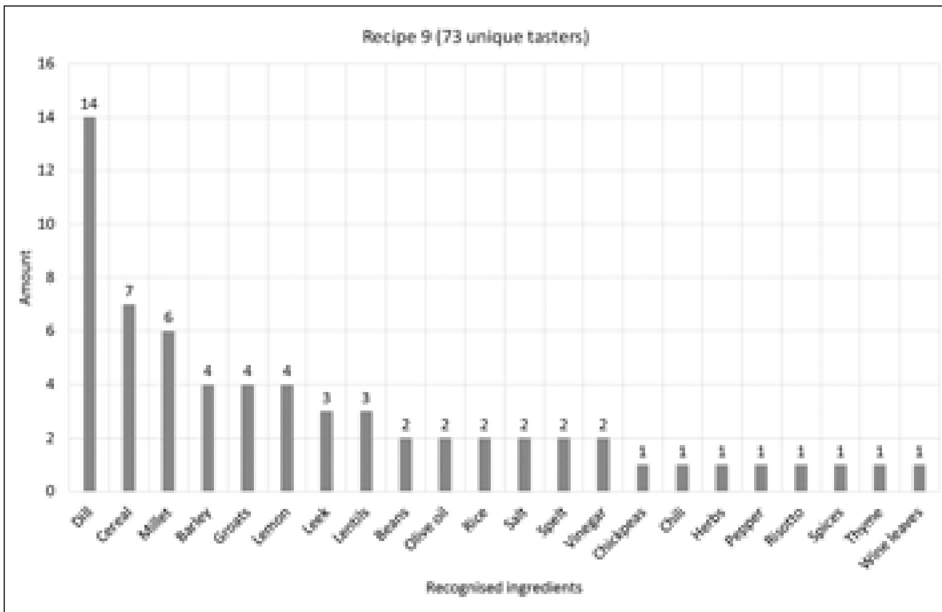


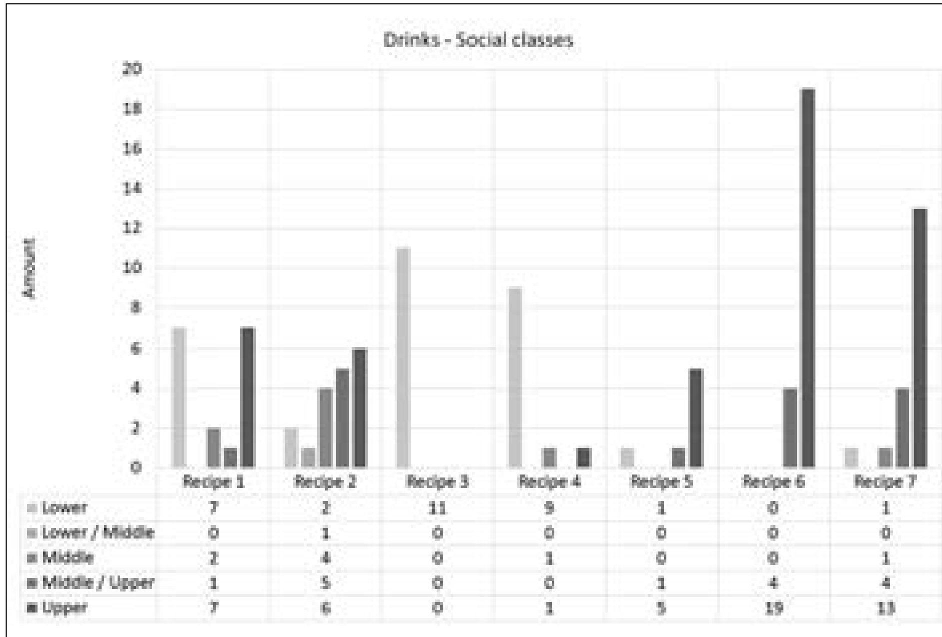
FIG. 6b – Example of recognized ingredients in dishes (J. Vroom et alii).

Rijlabels	Nr. 1		Rijlabels	Nr. 5
Not tasted	64		Not tasted	72
Tasted	57		Tasted	47
Missing	1		Missing	3
Eindtotaal	**122**		**Eindtotaal**	**122**
Rijlabels	**Nr. 2**		**Rijlabels**	**Nr. 6**
Not tasted	56		Not tasted	58
Tasted	63		Tasted	61
Missing	3		Missing	3
Eindtotaal	**122**		**Eindtotaal**	**122**
Rijlabels	**Nr. 3**		**Rijlabels**	**Nr. 7**
Not tasted	67		Not tasted	63
Tasted	52		Tasted	57
Missing	3		Missing	2
Eindtotaal	**122**		**Eindtotaal**	**122**
Rijlabels	**Nr. 4**			
Not tasted	81			
Tasted	38			
Missing	3			
Eindtotaal	**122**			

Table 2a – Number of people who drank the drinks or not (J. Vroom et alii).

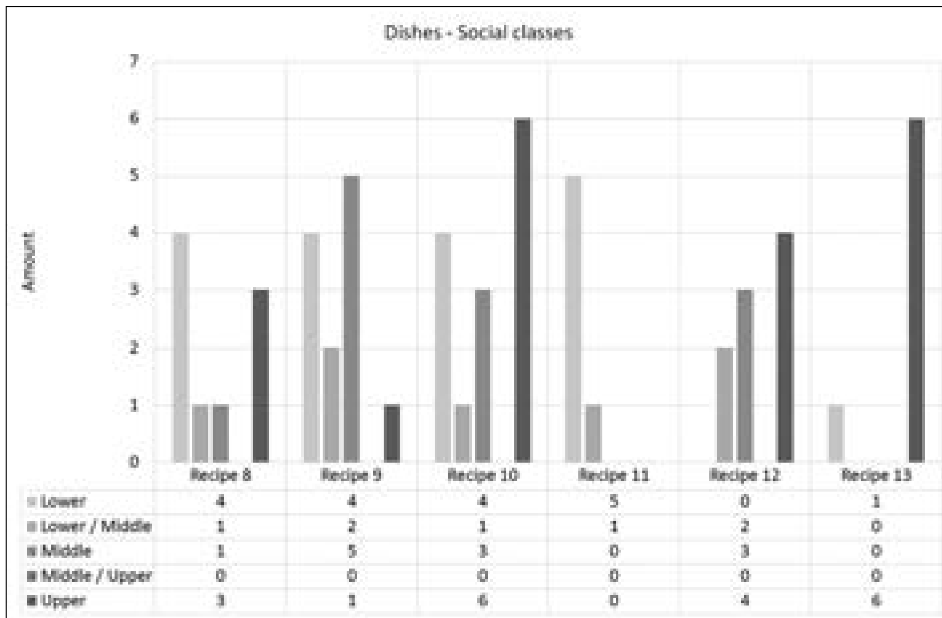
Rijlabels	Nr. 8		Rijlabels	Nr. 11
Not tasted	77		Not tasted	81
Tasted	44		Tasted	40
Missing	1		Missing	1
Eindtotaal	**122**		**Eindtotaal**	**122**
Rijlabels	**Nr. 9**		**Rijlabels**	**Nr. 12**
Not tasted	48		Not tasted	70
Tasted	73		Tasted	51
Missing	1		Missing	1
Eindtotaal	**122**		**Eindtotaal**	**122**
Rijlabels	**Nr. 10**		**Rijlabels**	**Nr. 13**
Not tasted	60		Not tasted	90
Tasted	61		Tasted	31
Missing	1		Missing	1
Eindtotaal	**122**		**Eindtotaal**	**122**

Table 2b – Number of people who ate the dishes or not (J. Vroom et alii).



	Recipe 1	Recipe 2	Recipe 3	Recipe 4	Recipe 5	Recipe 6	Recipe 7
Lower	7	2	11	9	1	0	1
Lower / Middle	0	1	0	0	0	0	0
Middle	2	4	0	1	0	0	1
Middle / Upper	1	5	0	0	1	4	4
Upper	7	6	0	1	5	19	13

Table 3a – Drinks attributed to social class (J. Vroom et alii).



	Recipe 8	Recipe 9	Recipe 10	Recipe 11	Recipe 12	Recipe 13
Lower	4	4	4	5	0	1
Lower / Middle	1	2	1	1	2	0
Middle	1	5	3	0	3	0
Middle / Upper	0	0	0	0	0	0
Upper	3	1	6	0	4	6

Table 3b – Dishes attributed to social class (J. Vroom et alii).