A DAILY BREAD – PREPARED BUT ONCE A YEAR

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Cereals which have been cultivated in Greece since the seventh millennium BC continue to form an important part of the diet, transformed in traditional ways, a subconscious local resistance to colonisers of the modern Greek table such as fast food and stimulants like coffee and Coke. Cooks of the older generation continue to prepare various traditional cereal foodstuffs made in the home, and the commercial sector has also marketed some of these traditional products, now that the 'Mediterranean diet' has become a fashionable food-style/fad. Among the wide range of traditional cereal products known to Greeks, some involve the mixing of ground grain with milk, or yogurt, in various types of preparations widely known under the name of *trachanas*. Foodstuffs of this general type are widely known in circum-Mediterranean countries like Turkey (Hillman 1984, p. 137, Bayram 2000, p. 80) and Jordan (Palmer 2002) as well as further east in Iran and Armenia (Aubaile-Sallenave 1994). Recent archaeobotanical investigations in northern Greece (figure 1) have indicated that the practice of boiling ground cereals in some form of liquid and their storage for later use can be detected as far back as the end of the third millennium BC (Valamoti 2002). The archaeological finds consist of fragments of cereals which at Mesimeriani, one of the sites, occurred as loose shiny fragments probably of einkorn grain. At the other site, Archondiko, they consisted of loose cereal fragments, identified as ground barley, as well as lumps of these fragments stuck together. A series of experiments have been carried out, aided by scanning electron microscopy, in order to provide a means of identifying how cereals were cooked from the archaeobotanical record (Valamoti et al in press). The outcome

of this pilot study was rewarding in that it demonstrated that the characteristic morphology of the charred starchy endosperm allows us to identify when a grain has been boiled, when charring of the grain preparation occurs under low charring temperatures. It was realized that more experiment and observation would be needed to gain a better understanding of the archaeological finds. After our experence with cereal food-remains from the Bronze Age, it was clear to us that our investigation of prehistoric food preparations and any attempt to decipher the recipes behind these charred remains, would depend on our obtaining a better knowledge of modern traditional processes which convert cereals into a storable, easy-to-cook form. The characteristic lumps of ground cereals stuck together, observed both in the archaeological finds from Archondiko and in modern *xinochondros*, suggested that investigation of prehistoric food-remains would be greatly assisted by a close observation and record of traditional ways of processing cereals for future consumption.

This paper focuses on the detailed description of a broad category of such preparations, all involving the mixing of cracked wheat and milk, still made in many parts of modern Greece. The cereal and milk dishes discussed here, involve coarsely ground wheat boiled or soaked in milk, then stored in the form of largish, dry lumps. These dishes are called *xinochondros*, sometimes *chondros*, or *glykos* (i.e. sweet) *trachanas*. The core ethnographic work was carried out on the island of Crete, where the preparation of *xinochondros* was recorded step by step, while interviews on the preparation of *trachanas* in the region of Mani in the Peloponnese and in Kozani, in western Macedonia, provided further insights into this type of pre-cooked cereal food.

CHONDROS (χόνδρος), *PLIGOURI* (πλιγούρι, I.E. BULGUR) AND *TRACHANAS* (τραχανάς) IN TRADITIONAL GREEK COOKING

The cereal element of the *xinochondros* is called *chondros*, i.e. ground wheat grain. As various forms of ground wheat grain exist

it is important to clarify what the term means. Explanations for the terms *chondros*, bulgur and *trachanas* can be found in a recent comprehensive publication on the subject of traditional cereal-based foodstuffs in Greece (Psilakis and Psilakis 2001, p. 544). *Chondros* consists of cracked wheat, i.e. coarsely ground wheat grain, though barley can also be used. An alternative term used for *chondros* is *korkoto*, reported from eastern Macedonia in northern Greece, and nowadays used by Greeks originating from the Black Sea region. This agrees with an account of the preparation of *korkoto* included in a book of recipes from the Black Sea region brought to Greece by refugees from that area (Kiziridou 2002, p. 105): the wheat grain is slightly soaked and then pounded to remove its bran; it is subsequently dried and coarsely ground. When the grain is ground into smaller particles it has a different name (*mandzilekia*). In the Black Sea *korkoto* is also prepared from maize and barley (Kiziridou 2002, p. 105). *Chondros/korkoto* is used as an ingredient in various recipes like soups (mixed with yogurt, butter, onion and spearmint, Kiziridou 2002, p. 176), or mixed with yogurt or milk after boiling in water (Kiziridou 2002, p. 246, Psilakis and Psilakis 2001, p. 544) or even in bread making (Psilakis and Psilakis 2001, p. 174). *Chondros* is probably equivalent to *jarīsha*, prepared in southern Jordan, mainly among the Bedouin, consisting of cereal grain (wheat, barley or sorghum), crushed using a rotary quern (Palmer 2002, p. 182). It is probably also equivalent to the *karslı* method of producing grits from emmer wheat described by Hillman (1984, p. 138–140). In neither of these processes to reduce whole cereal grain to smaller particles is the grain boiled.

Pligouri (the modern Greek word equates to bulgur in Turkish or *burghul* in Arabic[1]), by contrast to *chondros*, consists of fragments of cereal grain that have been boiled prior to grinding. A detailed account of making bulgur is given by Bayram (2000, pp. 81–82). This is very similar to descriptions found in Greek recipe books (Kiziridou 2002, p. 105, Psilakis and Psilakis 2001, p. 544). The grain is first cleaned of stem, straw, husk, stones, and weed seeds. It is

washed to remove any dust. The clean grain is boiled, simmered and left in the sun to dry. Then the loose outer bran is removed either by hand rubbing or pounding in mortars, drying and subsequent winnowing. The grain is then cracked using mill-stones. *Pligouri* can be used in place of rice, or cooked with onions, or with meat or pulses (e.g. lentils). Many recipes are to be found in the wider circum-Mediterranean area using this product as an ingredient (Bayram et al. 2005, Kiziridou 2002, Rivera-Nuñez and Obon de Castro 1989, Palmer 2002).

The dish *trahanas* is a mixture of either *chondros* or flour with other ingredients such as milk, yogurt, tomatoes, peppers, onions or sesame (Psilakis and Psilakis 2001, pp. 546–549). After mixing the ingredients (a process which may or may not involve boiling), the mixture is left to dry, then rubbed or grated before storage in bags made of cloth, usually cotton. Like *pligouri*, this preparation is used widely in the eastern Mediterranean. In Turkey, where it is known as *tarhana* (Hillman 1984, p. 137) 'low quality bulgur of small (often crushed) fragments which are often retained in the sieve' are used. In Jordan, this preparation is known as *kishk* and consists of fine-grade *burghul* combined with milk products, either full-fat yogurt (*labana*) or defatted yogurt (*shanīna*) (Palmer 2002, p. 186). In the Middle East, the term *kishk* corresponds to a complex preserved food made from cereals and sour milk (in liquid or dry form) mixed together and then dried in the sun and stored for piecemeal use, with a wide range of variants occurring between regions and through time (Aubaile-Sallenave 1994, pp. 122–124).

MODERN PREPARATION OF *XINOCHONDROS* AT THE VILLAGE OF KAKODICI AT THE PROVINCE OF CHANIA IN CRETE

The recipe described here is based on observations carried out in the village of Kakodiki.[2] *Xinochondros* was prepared by Stella's grandmother Mrs Chryssi Trakaki. *Xinochondros* consists of ground wheat, called *chondros*, boiled in fermented milk and dried in the form of lumps.[3] Besides this preparation involving the mixing of

Figure 2.

Figure 3.

Figure 4a.

Figure 4b.

sour milk and ground wheat, *glykos* (sweet) *chondros* or *glykochondros*, is also prepared, made from unfermented milk and ground wheat, though we were told that this type does not keep for longer than a month, that is a much shorter period than the sour version.

INGREDIENTS: 3 parts milk, 1 part wheat, salt. (As regards the quantity of salt we observed their using 1.5kg salt to 30kg milk and 10kg wheat.[4])

PREPARING THE INGREDIENTS

WHEAT

In the past, a family numbering five to seven people needed approximately 10kg of clean wheat grain to supply them with *xinochondros* for a whole year. This was washed in a wooden basin and left for one day to dry. Then the grain was ground in the quern or hand-mill, broken into particles that were smaller than bulgur and larger than semolina (figures 2 and 3). The particle size examined and recorded ranged approximately between 0.5mm and 1mm. These querns were not owned by every family in the community, but those families which owned them would share their use with other households. In a neighbourhood of ten families there were approximately two to three hand-mills. If someone wanted to use one, he or she would go to the house of the owner with a quantity of wheat that he needed to grind and would stay there for as long as was needed to finish the job. Usually the task would last for a single afternoon. They would sit at one end of the kitchen, spread a blanket on the floor (for keeping the grinder warm) and a cotton sheet on top of the blanket to collect the ground wheat (figures 4a and 4b).

MILK

Normally, goat's or sheep's is used. Should there be a shortage of either, a mixture may well be employed. The milk is mixed with salt and kept for 5–7 days in a clay storage vessel called κουρούπα

(*kouroupa*), during which time the milk turns sour (figures 5 and 6). Every day during this souring process, more milk is added to the starter batch until the required quantity has been collected – usually 30kg of milk for the 10kg of wheat that was the standard batch-size for *xinochondros*. In the past, when the collection of milk for *xinochondros* production lasted a few days as we have described, every time milk was added to the *kouroupa*, a handful of salt was also added and the mixture was stirred. Nowadays, much smaller quantities are prepared and therefore the milk does not stay long in the *kouroupa*. Current practice is the milk is left for 3 days to turn sour but it does not achieve the curd-like consistency it did in the past. Once the milk is sour, it is poured into the *tetzeri*, a tinned copper pot (to prevent poisoning) of 10kg capacity. This is put onto a brisk wood figure until it reaches boiling point (figure 7). As soon as it starts boiling, the fire is damped and the mixture is left to simmer for 30 minutes. In the past, instead of sour milk, this process was carried out using only the thick part of the fermented milk, which was of a curded cheese consistency (like the Greek *mizithra*-type cheese) and would melt to a thick cream during simmering. As the sour milk boils, wheat is added as well as an extra handful of salt (figure 8).

Salt is a necessary ingredient that acts as a preservative for the long term-storage of *xinochondros*. Storage life is estimated between 7 and 8 months but more salt would result in an extension to this. Preservation issues were of course of major importance 30 or 50 years ago when electricity and refrigerators were unavailable to most rural households. In the case of Kakodiki they bought salt from a merchant who supplied them with sea salt from pans approximately 10 kilometres distant.

The milk and wheat are left simmering for 5–10 minutes during which time the milk is absorbed and the mixture acquires a thick, porridge-like consistency (figure 9). Meanwhile, the wooden *pinaki*, a shallow squarish bowl with a capacity of 20kg (1m x 60cm by 40cm depth) is washed and well dried prior to receiving the

Figure 5.

Figure 6.

Figure 7.

Figure 8.

Figure 9.

Figure 11.

Figure 12.

Figure 13.

Figure 14.

Figure 15.

Figure 16.

Figure 17.

mixture. The usual course of events was that the *xinochondros* was prepared in the afternoon and the mixture left to cool on the *pinaki* overnight (frontispiece and figure 11).

As the *chondros* begins to dry in the *pinaki*, it is cut into slices approximately 1cm thick (figure 12). The morning after, these slices are spread on a cloth-covered board, which is then left to dry in the sun (figure 13). This wooden board was raised out of harm's way, keeping its contents safe from poultry, rodents or cats (figure 14). Some houses were built with a balcony or verandah (called *exostis*) around them. The board might then be suspended under its sheltering eaves. If the house was not so equipped, the *xinochondros* would be spread out on a table and someone would be deputed to guard it – usually a family-member no longer involved in heavy physical work, for example a grandparent.

The drying takes most of a week. The first day the slices are turned over, so they dry on both sides. The next day, they are cut into smaller pieces, the size of a bite (*boukia*). These are left for a week to dry completely (figure 15). The pieces of *xinochondros* are stored in cotton bags, (figure 16) of 6 to 8kg capacity. They are kept in a dry place.

SOME VARIANTS OF *CHONDROS/TRACHANAS* IN OTHER PARTS OF GREECE

A 'recipe' very similar to the *xinochondros* of Crete has been recorded in the villages of Selitsa and Avia in the region of Mani in the Peloponnese, where it is called *trachanas glykos* (sweet). Either sour or unfermented milk are used for boiling ground wheat, with the addition of some salt during cooking but apparently not during the milk fermentation process. Our informants suggested that the use of fermented or unfermented milk seems to be a matter of preference. Studies of traditional foods by Karabela (2002, p. 242) and Xantheas (2007, p. 43) point to the use of unfermented milk for *glykos trachanas* both in the general district of Lakonia in southern Peloponnese, as well as in the much smaller area of Tseria on the Mani peninsula. However, Mrs Roubini Pandazi, our principal

informant, preferred sour milk, whereas another informant, Aristoula Tsernetopoulou from Avia (a resident of Athens), prefers not to allow the milk to sour. Although fermentation appears to vary according to taste, the first stage of fermentation (the milk turning sour) was probably inevitable in the past, as there were no fridges available and the summer heat would turn the milk very quickly. Irrespective of the type of liquid, both informants described this preparation as sweet *trachanas*. For 6kg of milk, Aristoula uses 1kg of cracked wheat and approximately 1 spoonful of salt (used as a preservative). The book by Karabela containing traditional recipes from the Lakonia region (2002, p. 242) records a similar ratio of milk to grain, but uses three times as much salt (150g). The ratios of milk to wheat provided by Aristoula (5 or 6:1) are greater than those recorded for the *xinochondros* in Crete (3:1). Also, the Cretan is saltier than the Mani *trachanas*.

'Sweet' *trachanas* preparation was recorded step by step as it was prepared by Mrs Roubini Pandazi with the aid of one of the authors (SMV) in Avia, following the recipe used at the village of Selitsa in the Mani region where Roubini lives. In the past, wheat was ground in rotary querns but nowadays they use a coffee-bean grinder, available in the village. When they were using rotary querns, the more forceful the rotation, the coarser the grain. She said that the finer the fragments, the better the end product. The wheat they used to use were two traditional free-threshing varieties, '*asprositi*' and '*mavragani*', the same that they grew for making bread. For the *trachanas* prepared by Roubini and S.M. Valamoti, dehusked einkorn wheat grain was pounded in a wooden pestle and mortar. Roubini commented that this means of grinding was satisfactory, though the proportion of whole grains was higher than when a rotary quern was used. For 260g of pounded einkorn, 2 litres of goat's milk were used. This Mani preparation used one part wheat to eight parts milk, a higher ratio of milk to grain than was observed on Crete or at Avia. We used both milk that had turned sour and milk that was freshly milked in that morning and had been kept in the fridge.

Figure 18.

Figure 19.

Figure 20.

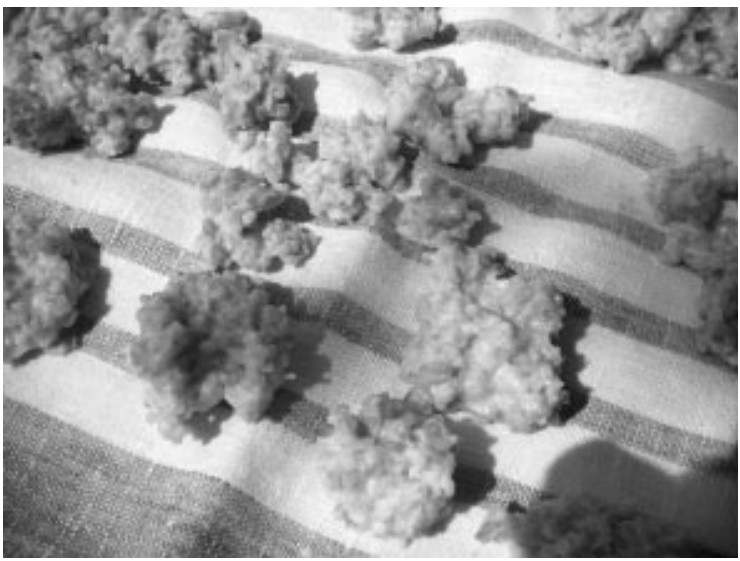

Figure 21.

To start 750 ml was boiled in a pan (figure 17). Salt was added as a preservative (a spoonful for this batch of *trachanas*). The milk was left to simmer for 5 minutes, then the ground einkorn was added and stirred in (figure 18). This was all performed on a gas cooker of professional standard, for the work was undertaken at Roubini's son's seaside tavern, 'Pefkaki'. The heat was lowered and the mixture was allowed to boil while stirring constantly. As the wheat absorbed the milk, turning into a mass like sticky porridge, more milk was added and the boiling, with constant stirring, was continued (figure 19). Roubini said that some women would stop cooking at this point, but she remarked that the more milk that is added, the tastier the end product would be. She also commented that the reason our batch was so sticky was that some of the grain had been ground into fine particles like flour. She did not think this a disadvantage and it appears that there is no standardisation in the grain fragment size for making *trachana*, just as there is room for disagreement about the length of cooking and the amount of milk that should be added.

When cooking was over, the mixture, resembling a very thick porridge, was left in the pan to cool. When cold, it was taken in small bits from the pan and spread on a cotton cloth laid out in the sunlight (figures 20, 21). Roubini considered sun-drying essential and thought that if the *trachana* was made when the weather was cloudy or humid (quite rare in the Mani in summer, but not impossible), the mixture ran the risk of turning mouldy. As the lumps dry in the sun, they are turned over and are gradually broken into smaller fragments. The size of the fragments is a matter of taste. They can be left as largish lumps or they can be broken down into much smaller particles, for example by rolling an empty bottle over the top of them or rubbing them through a sieve.

On the island of Lesbos, in the village of Agiassos, *trachanas* used to be prepared in a way very similar to that described for Crete and Mani. Information provided by Professor G. Gounaris,[5] who grew up as a child in the village of Agiassos between 1942 and

1960, highlights some interesting differences in the way milk was treated for the preparation of *trachanas*, there known as *chachla* (χάχλα): milk would be collected in a small jar similar to the Cretan *kouroupa* over a period of up to 40 days, as the milk available was provided piecemeal by two goats kept by his family. Approximately 40 kilos of milk were used for *trachanas* production for a household, a quantity similar to that recorded for Crete. To this milk, instead of salt (as in the Cretan recipe) they would add yogurt 'yeast' (i.e. a small quantity of yogurt) and cover the surface with a thin layer of olive oil to prevent spoiling of the milk. Besides this difference in milk treatment, this *trachanas* from Lesbos is formed into the shape of small bowls and dried in the sun (figure 22).

Moving northwards to the area of Kozani in western Macedonia on mainland Greece, *trachanas* of cracked wheat is made, albeit in rather a different way. The milk is boiled and ground wheat is left to soak in it overnight; neither fermentation of the milk nor boiling of the grain is involved in this process.[6] Sheep's or goat's

Figure 22.

milk and wheat grain are used for the Kozani preparation, in a ratio of one part grain to two parts milk (Tsikritzi-Momtsiou and Ftaka-Tsikritzi 2006, p. 40). Grain is washed, ground in either hand-operated stone mills (practised in the past) or electric mills with metal 'grinding' elements and spread in the sun to dry. It is then winnowed to get rid of the bran. Then the milk is boiled and while still boiling-hot it is poured over the grain, now transferred to a big, open container. The milk should just cover the wheat grain, which is then left to soak overnight so that it absorbs the liquid. In the morning, spoonfuls of this mixture are spread on a clean cloth. As evaporation sets in, but before it has thoroughly dried out, it is rubbed through a sieve. The granules produced in this way are spread out to dry completely before storing in a cotton bag (Tsikritzi-Momtsiou and Ftaka-Tsikritzi 2006, p. 40). This *trachanas* preparation is called *trachanas starenios* (wheaten).

SWEET AND SOUR TRACHANAS

Both our field observations and the cookbooks make a distinction between sweet and sour *trachanas*. In the cookbooks the distinction between sweet and sour is either clearly explained as one based on the type of milk used, i.e. fermented or unfermented (Psilakis and Psilakis 2001, p. 546), or it may be inferred from the recipes that sweet *trachanas* is made using unfermented milk (Karabela 2002, Xantheas 2007, Tsikritzi-Momtsiou and Ftaka-Tsikritzi 2006, p. 40). In these latter instances, the sour (*xinos*) version involves mixing flour (instead of coarsely ground wheat grain of the *chondros* type) with yogurt or sour milk, eggs and a sourdough leaven and the fermentation of all these ingredients from a few hours to overnight (Karabela 2002, Xantheas 2007, Tsikritzi-Momtsiou and Ftaka-Tsikritzi 2006, p. 39). Moreover, sour *trachanas* is often combined with other ingredients. Thus, prior to fermentation the dough can be mixed with onions, tomatoes and an unspecified herb in Crete called *trachanochorto* (*trachana* herb) (Psilakis and Psilakis 2001, pp. 546–547). In the Drama and Evros regions in

northern Greece there are also variants of *trachanas* where flour is mixed with vegetables (e.g. tomatoes, peppers and pumpkin) (Psilakis and Psilakis 2001, pp. 546–547; www.gaia-evros.gr). Both the sweet and sour versions of our dish involve mixing dairy products and cereals but the difference between them lies in the nature of these products. Is the grain coarsely or finely ground? Is the milk fermented or unfermented? And is cooking or final fermentation of the preparation involved? While the books we consulted apparently offer a clear-cut distinction between the two versions, our field observations show that the dividing line between sweet and sour, is obvious as regards the cereal component, but not so rigid or consistent when it comes to the dairy component. In the Mani region, despite the use of milk that had been left to turn sour, the *trachanas* was still called sweet, distinguishing it from the sour one which is made with flour. It therefore seems that the most consistent distinction between the two types lies in the degree of processing of the cereal component and the presence of absence of fermentation taking place after all ingredients have been mixed together. It should also be pointed out that in some cases no nominal distinction is made at all. Thus in the region of Chania in Crete, the term *chondros* is used to refer to *xinochondros* and the 'sour' component of the term is omitted although it is present in the recipe. At Selitsa, the 'sour' element of the recipe is translated as 'sweet', implying that the distinction is based on the cereal component and boiling process, rather than the degree of milk fermentation.

XINOCHONDROS AND *TRACHANAS* IN MODERN GREECE AND ITS IMPLICATIONS FOR UNDERSTANDING ARCHAEOLOGICAL FOOD REMAINS

To some Greeks, especially those not living on the island of Crete, the term *xinochondros* may sound totally unfamiliar. The food itself, however, may be familiar, albeit under a different name (*trachanas* for example) and with, perhaps, a different taste depending on whether the milk component is fermented or not. On Crete, it

is prepared both in villages and cities, usually by women of the older generation. It is also sold in some supermarkets, marketed as a traditional Cretan product. The commercial distribution of *xinochondros* throughout Greece is part of a recent trend in certain supermarket chains or even food industries which market traditional Greek products, as a result of a movement towards wholemeal, traditional, healthy foodstuffs, most of which are covered by the umbrella term, the 'Mediterranean diet'. Thus, *xinochondros* is produced both within the household but also by local women's cooperatives which provide supermarkets with a traditional product which can trace its roots to prehistoric times.

In the community of Kakodiki on the island of Crete, each family prepared *chondros* every July or August to ensure the summer heat persisted during the drying process. The same timing was mentioned for the region of Mani. At Tseria (Xantheas 2007) production was timed to coincide with the Assumption of the Virgin Mary in mid-August, while in the village of Selitsa we were told that the animals are taken further uphill in August, therefore the preparation of *trachanas* is carried out in July when milk is readily available. At Kakodiki the amount of *chondros* prepared was enough to last a family of eight people until April (they were dealing with 30kg of milk and 10kg of wheat). They would eat it two or three times a week and, although not a substitute for bread, it would replace it if the family run out of bread which was baked on a weekly basis. A family of five people in the village of Selitsa prepared approximately 7kg of wheat in their *trachanas* in July 2007. The making of *trachanas*, therefore, falls in the hot summer months, though the exact timing will depend on the availability of milk which, in turn, is linked to the type of animal husbandry practised by the community.

Freshly-made *trachanas*, just after boiling was complete, could be served as a dessert as follows. At Mani, Aristoula mentioned that when *trachanas* had just finished boiling during its bulk production in the summer, a small quantity would be removed from the pot,

a bit of sugar added and eaten as a dessert similar to rice pudding. A similar use is mentioned by Psilakis and Psilakis (2001, p. 546) for the Cretan *xinochondros*. This sweet preparation for immediate consumption during the *trachanas/chondros* preparation, involved a small quantity removed from the bulk prepared for consumption in dry form. Dry *trachanas* would mainly be consumed as a soup in which milk and cheese could be added. When cooking *trachana* at Mani, they used to soak it overnight to render it soft and reduce cooking time which would take place early in the morning before departing for the fields. This shows that the preparation of *trachana* not only transforms milk and wheat into a highly nutritious starch- and protein-rich product that can be used throughout the year, it also allows families to have the ingredient for a traditional 'fast food', rich in fibre (as the grain is not cleaned from its bran).

The *xinochondros* we studied in our fieldwork can be cooked as a soup (without further elaboration), may be used as an ingredient of vegetable stews *(yahni)* with tomatoes, potatoes and onions, or cooked with snails, onions and tomatoes. *Trachanas* would be eaten as a soup, mixed with milk and with added cheese, or cooked with meat (pork in the Mani region) in the following way: the meat would boil until cooked, then removed and the liquid was used to boil *trachanas* which would accompany the meat. For the Mani version, prior to cooking, the required quantity would be soaked overnight. In northern Greece *trachanas* is sometimes mixed with other ingredients to form the stuffing for *lachanodolmades*, i.e. stuffed cabbage leaves, and for *yemista* (stuffed peppers and tomatoes).

CONCLUSION

Xinochondros and *trachanas* described in this paper correspond to a simple combination of two basic ingredients available to agro-pastoralist communities, wheat and milk. Their production is on a large scale, enough to last throughout the winter at least, and with a characteristic seasonality – produced in the hot summer months.

Both products are at once a foodstuff and a recipe in its own right, i.e. the preparation of cereal grain in a form suitable for easy consumption throughout the year, and a basic ingredient of a wide range of more elaborate recipes, savoury or sweet. This 'ingredient' can easily be turned into a meal, requiring a short cooking time. In all the *xinochondros* and *trachanas* formulae recorded in this paper, the ground grain is boiled in milk or sour milk. In the Kozani variant, however, cracked wheat is left to soak overnight in boiled milk rather than being boiled with the milk. What all this suggests is that given two ingredients, wheat and milk, a range of procedures could be followed which could vary in terms of the type of milk, i.e. fermented or unfermented, the degree of processing of the cereal component, added ingredients, i.e. salt, spices and herbs, and the type of mixing, i.e. boiling, soaking or fermenting. This complexity in the combination of all these variables has certain implications as regards the interpretation of the archaeological finds of processed cereals. It highlights the difficulty of determining the exact procedure that might have been followed in prehistoric times as the possible combinations are manifold. At the same time it points to various possibilities that might be explored in a series of experiments that would aim to reconstruct these steps in the archaeological record.

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NOTES

1. The term *pligouri* is used throughout the text, except for cases where information on its use from other countries is used. In these cases the name locally used, i.e. *bulgur* or *burghul*, is adopted in the text.
2. Observations on the island of Crete were carried out by S. Anastasaki, while

those concerning the Mani region by S.M.Valamoti.

3. It should be pointed out that in the area of Chania, where our investigation took place, the word *chondros* is used to signify both the product resulting from mixing ground grain and milk, as well as the ingredient, i.e. ground wheat. Throughout the text we use the term *xinochondros*, which is used elsewhere in Crete (Psilakis and Psilakis 2001, p. 547) for the same preparation described in detail in our paper, in order to distinguish between the ingredient and the composite end product.
4. Although the quantity of salt appears high, the fact that this is unprocessed sea salt should be taken account of as it is less strong that the commercially available type. A handful of unprocessed sea salt is equivalent to a spoonful of commercial salt, according to Stella's grandmother.
5. I would like to thank G. Gounaris, Prof. of Byzantine Archaeology at the Aristotle University of Thessaloniki, for sharing this information with us.
6. We wish to thank Efi Tsiolaki, post-graduate student of archaeology at the Aristotle University of Thessaloniki, for providing information on *trachanas* preparation in the village of Lefkopigi, in the Kozani region. This information deriving from Efi's grandma, is also recorded in detail in a recently published book of recipes from the region.