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Acquiring a taste: the menu of Iron Age and Roman-period farmers at Oss-Ussen, the Netherlands

The incorporation of the southern part of the Netherlands into the Roman Empire led to the introduction of customs, manners and ideas hitherto unknown or hardly known to the indigenous societies. Among the novelties were foods and culinary habits. An interesting question is how the local rural population reacted to the wave of change. The excavations that were carried out at Oss-Ussen provided an opportunity to study this subject. A combination of botanical, zoological and other evidence on eating and drinking shows that the culinary habits of the native farmers indeed underwent some changes, but that the new customs were not uniformly adopted by all the households. Moreover, the main part of the daily diet remained unchanged. A reflection on the reasons why people change their culinary habits seeks to offer an explanation for this.

1. Introduction

The year 12 BC was an important year in the history of what is now the Netherlands. In that year the Roman army invaded the area and incorporated part of it into the Roman Empire. The position of the border between occupied and free territory fluctuated somewhat at first, but around AD 47 it came to be fixed along the course of the river Rhine. The Roman army was followed by the Roman administrative and marketing systems and the area was linked up with the Roman infrastructure. This resulted in the introduction of customs, manners and ideas hitherto unknown or hardly known to the indigenous societies. Among the novelties were also new foods, as has been amply demonstrated in the *limes* area with its Roman *castella* and associated sites (Knörzer 1991a).

An interesting question is how the local rural population, living in more or less backward areas, reacted to the wave of change. Did their menu change and, if so, in what ways? Another important issue is the meaning of changes in eating and drinking habits: culinary customs are influenced by more than nutritional values alone.

The excavations that were conducted at Oss-Ussen between 1976 and 1986 gave us an opportunity to search for answers to these questions. During the large-scale fieldwork carried out by the Leiden Institute of Prehistory a micro-region of some 30 hectares was uncovered, revealing a continuous history of occupation from the Bronze Age,

through the Iron Age into the Roman period. Since the excavations, several major reports have appeared and more will be published in the near future (Van der Sanden/Van den Broeke 1987; Van der Sanden 1988; Schinkel 1994; Fokkens 1996; Wesselingh forthcoming). These reports enabled us to conduct the study whose results are presented on the following pages.

2. Settlement at Oss-Ussen in the Iron Age and the Roman period

Ussen is the name of an area in the northwestern part of the municipality of Oss. The area lies in the transitional zone between the Pleistocene coversands of the province of Brabant and the wide valley of the river Meuse. The local subsoil is sand. At present, the Meuse flows five kilometres to the north of the site, but it may have run closer by in the Iron Age and the Roman period (fig. 1).

The history and nature of the human occupation have been amply described by K. Schinkel (1994). In the Early Iron Age (800-500 BC) settlement consisted of single farms scattered across the landscape. The farms incorporated living areas and a byre beneath a single roof. One or more outbuildings and wells were to be found in the yards. Sometimes there was also a watering place for livestock. When a farmhouse was abandoned, it was not rebuilt at the same spot or in the same yard. Farmsteads were shifted about within a – their? – small territory. The occupants of the farms practised both arable farming and stock-breeding.

The nature of settlement did not change during the Middle Iron Age (500-250 BC). Only from the Late Iron Age (250-12 BC) onwards were farms rebuilt at more or less the same spot, as testified by the clustering of features uncovered in the excavations. This does however not imply a more clustered type of settlement, because contemporary farms still lay scattered across the landscape. The economy remained the same.

The development outlined above ultimately resulted in fixed settlements with true clustering of permanent farmsteads in the Roman period (12 BC - AD 200). During the 1976-1986 campaigns the remains of three such hamlets were discovered: Vijver, Zomerhof and Westerveld. With the exception of Zomerhof, whose earliest remains were dated

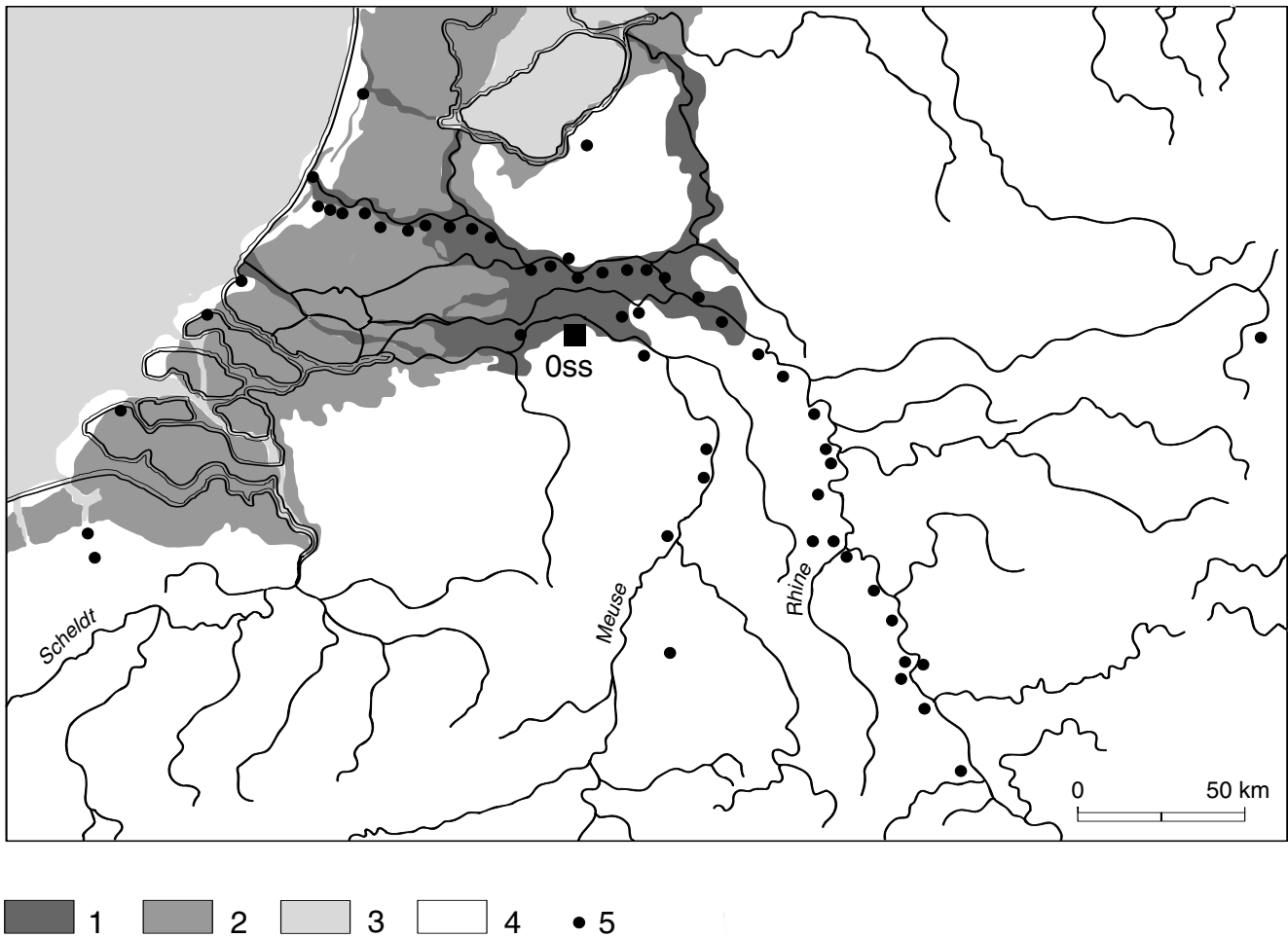


Figure 1. The location of Oss with respect to the Roman limes. 1. fluviatile deposits; 2. peat and clay; 3. water; 4. coastal barriers and Pleistocene deposits; 5. military camps.

around AD 70, the hamlets can be regarded as the direct successors of the Iron Age settlements in this area. The largest of the three, the Westerveld settlement, lay within a rectangular ditched enclosure. This settlement was moreover found to have comprised new types of houses. In spite of these differences, farming was the principal activity of all the hamlets' inhabitants.

The deceased of Oss-Ussen were cremated and their ashes were buried in loosely arranged clusters of burials. Only the layout of the cemetery from the Roman period shows some degree of planning. In addition to burials, other ritual – but most certainly non-funerary – monuments were discovered. They included square structures, which were built from the Middle Iron Age onwards and were interpreted as open-air sanctuaries (Van der Sanden 1994; Slofstra/Van der Sanden 1988).

3. Ingredients of the diet, plants

The diet consisted of ingredients derived from plants, animals and mineral sources. Aspects like how the food was prepared and served will be dealt with in later sections. We will first take a look at the food plants.

Our main source of information on food plants consisted of soil samples. Soil samples were obtained from both dry and waterlogged contexts at Oss-Ussen. The former were foundation trenches and postholes, the latter wells and watering places. Both types of sediments were sieved using mesh sizes up to and including 0.25 mm. The dry samples could have been subjected to flotation, but as they were from necessity small because the features were small, and as the waterlogged samples had to be hand-sieved anyhow, all the material was treated in the same way. Flotation would not have reduced the overall processing time. A small amount of

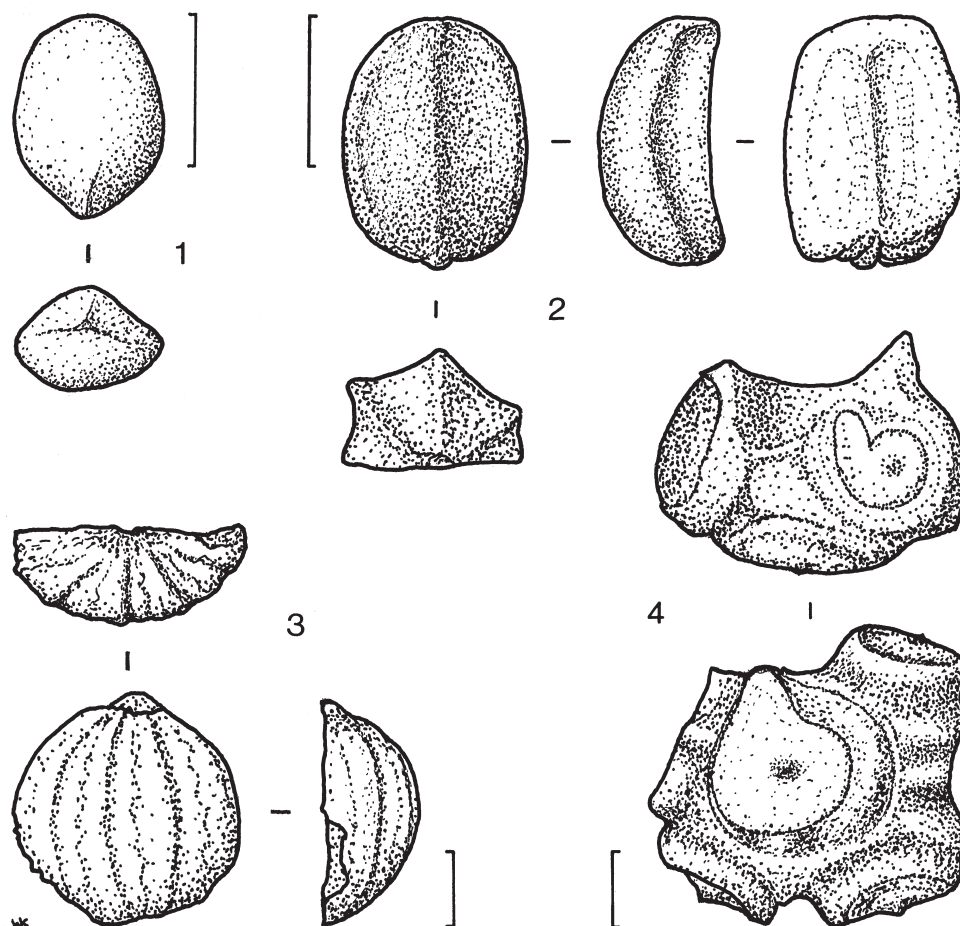


Figure 2. Seeds of typical Roman-period plants. 1. savory, 2. celery, 3. coriander, 4. beet. Scale bars: 1 mm.

additional information on food plants was obtained from impressions in pottery.

The Iron Age remains were published by C. Bakels (1994) and the seeds and fruits from the Roman period were analysed by I. van Amen (1995). Many of the remains were of wild plants which, with the exception of wild fruits and hazelnuts, will not be considered below. Oats will be omitted here, too, because only few remains of these plants were found and the identifiable chaff belonged to wild oats (*Avena fatua*). Another uncertain cereal, rye (*Secale cereale*), may likewise have been a field weed, but it was nevertheless included in the analysis because rye was beginning to be cultivated in the period under consideration. Although the foliage, seeds, tubers, *etc.* of many wild plants will have been consumed, we decided to restrict ourselves to cultivated plants and the aforementioned fruits and nuts as the evidence obtained in the excavations did not reveal any changes in the presence of wild plants over the centuries.

Tables 1, 2 and 3 show the composition of the evidence per period and site. Table 1 presents the evidence from the primary fills of waterlogged features. Secondary fills were not considered because their dates are not certain. Although several samples were taken from many of the wells and watering holes, especially those in which different layers were observable, we regarded the feature as the unit of analysis instead of the sample. The various layers of the primary fills of the individual features bore a close resemblance to one another in terms of contents. There were however considerable differences between the individual features.

Table 1 shows the frequencies of the various species instead of the numbers of seeds recovered. The frequencies indicate the percentages of the features in which remains of the plant in question were found. At sites like Oss-Ussen, where all kinds of waste have been preserved, frequencies provide a better impression of the commonness of different

Table 1. Plant remains from waterlogged features, expressed in frequencies.

Site	Oss-Ussen								Oss-IJsselstraat
Period	Early Iron Age	Middle Iron Age	Late Iron Age	Roman period					Roman period
Settlement				Zomerhof	Vijver	Westerveld 1	Westerveld 2	Westerveld 2-P329	
Number of features	5	9	8	7	8	6	22	21	3
cereals									
<i>Hordeum vulgare</i> , hulled barley	40	67	63	43	63	67	68	67	100
<i>Panicum miliaceum</i> , millet	40	33	63	29	100	83	68	67	67
<i>Secale cereale</i> , rye	0	0	0	14	0	0	0	0	0
<i>Triticum dicoccum</i> , emmer wheat	20	44	13	14	25	33	14	14	33
<i>Triticum spelta</i> , spelt wheat	20	33	13	0	0	33	18	14	0
pulses									
<i>Vicia faba</i> , Celtic bean	0	11	0	0	0	0	0	0	0
oil plants									
<i>Brassica rapa</i> , rape seed	0	0	25	0	0	0	9	10	0
<i>Camelina sativa</i> , gold of pleasure	20	22	13	0	0	0	0	0	0
<i>Linum usitatissimum</i> , linseed	20	33	50	14	50	50	32	29	0
<i>Papaver somniferum</i> , poppy	40	0	0	0	0	17	5	0	0
kitchen herbs etc.									
<i>Anethum graveolens</i> , dill	0	0	0	0	0	17	5	0	0
<i>Apium graveolens</i> , celery	0	0	0	0	0	17	5	5	0
<i>Beta vulgaris</i> , beet	0	0	0	29	25	17	9	5	0
<i>Coriandrum sativum</i> , coriander	0	0	0	0	0	33	14	10	0
<i>Satureja hortensis</i> , savory	0	0	0	0	0	17	5	0	0
fruits and nuts, wild or cultivated									
<i>Corylus avellana</i> , hazelnut	20	0	0	0	25	17	18	19	0
<i>Juglans regia</i> , walnut	0	0	0	0	0	17	5	0	0
<i>Malus</i> sp., apple	0	0	0	0	13	17	14	14	0
<i>Prunus insititia</i> , plum	0	0	0	0	0	0	0	0	33
<i>Prunus spinosa</i> , sloe plum	0	0	13	0	75	17	18	14	67
<i>Rubus fruticosus</i> , blackberry	0	0	0	57	88	50	36	33	0
<i>Rubus idaeus</i> , raspberry	0	0	0	14	13	33	14	10	0
<i>Sambucus nigra</i> , elderberry	20	0	0	14	0	17	14	14	0
<i>Vaccinium myrtillus</i> , bilberry	0	0	0	14	0	0	5	5	0
Number of species	9	7	8	10	10	18	20	16	5

Table 2. Plant remains from dry contexts, expressed in frequencies.

Site	Oss-Ussen					Son	Oosterhout
	Middle Iron Age	Late Iron Age	Roman period			Middle Iron Age	Roman period
Settlement			Zomerhof	Vijver	Westerveld		
Number of structures	7	7	2	1	18	7	22
Cereals							
Hordeum vulgare, hulled barley	57	57	0	100	56	100	100
Panicum miliaceum, millet	29	29	0	0	11	100	100
Triticum dicoccum, emmer wheat	43	43	0	0	14	57	50
Triticum spelta, spelt wheat	0	0	0	0	14	86	50
Pulses							
Pisum sativum, pea	0	0	0	0	0	14	0
Vicia faba, Celtic bean	0	0	0	0	0	0	0
Oil plants							
Camelina sativa, gold of pleasure	0	0	0	0	0	86	0
Linum usitatissimum, linseed	0	0	0	0	29	14	50
Fruits and nuts, wild or cultivated							
Corylus avellana, hazelnut	0	0	0	0	6	14	0
Rubus fruticosus, blackberry	0	0	50	0	0	0	0
Rubus idaeus, raspberry	0	0	50	0	0	0	0

Table 3. Seed impressions in pottery from Oss-Ussen in absolute numbers.

Period	Early Iron Age	Middle Iron Age	Late Iron Age	Roman period
Hordeum vulgare, hulled barley	7	7	3	3
Panicum miliaceum, millet	–	1	–	1
Triticum dicoccum, emmer wheat	1	7	1	–
Triticum spelta, spelt wheat	–	2	–	–
Vicia faba, Celtic bean	–	1	1	–
Linum usitatissimum, linseed	–	1	–	1

species than the numbers of preserved remains. Some of the remains will have been deposited in the farmyards as part of the domestic waste and will have been kicked or blown into the wells. Others may have been intentionally dumped into an abandoned well. The commoner the plant, the greater the chance of it occurring among the preserved remains, on the condition, of course, that it includes parts that survive well in waterlogged contexts. Examples of such parts are cereal chaff, the seeds of oil plants and kitchen herbs, the pips and kernels of fruit and nutshells. Pulses are rarely preserved. The Celtic bean listed in table 1 had survived by chance because some carbonised beans had ended up in a well. Without these remains, the Celtic bean frequencies would have been zero everywhere. Some of the cereal grains were also carbonised, but this does not affect the frequencies.

The Early, Middle and Late Iron Age are represented by nine, seven and eight species, respectively. They are all more or less the same and their frequencies do not differ much. Local customs do not seem to have changed much throughout the Iron Age. Hulled barley, millet, emmer wheat and spelt wheat were the main cereals, gold of pleasure and linseed the main oil-seed species. The samples contained no remains of kitchen herbs and fruits and nuts were rare. The poppy caused some surprise. Some experts are of the opinion that poppy was introduced by the Romans (Van Zeist 1980).

With their ten species each, the lists of food plants encountered at the Roman settlements Zomerhof and Vijver are not much longer. In the analysis of the remains from six randomly selected wells at Westerveld eighteen species were encountered (Westerveld 1 in tab. 1). They included dill,

celery, coriander, savory (fig. 2) and walnut – plants which are associated with a Roman way of life.¹ This result induced I. van Amen to analyse samples from more wells at this settlement. As Westerveld was a large settlement, the number of analysed features could be raised from six to 22. But only two additional species, rape and bilberry (tab. 1, Westerveld 2, which includes the remains from the wells of Westerveld 1), were identified in the subsequent analyses. It was moreover found that the remains of dill, savory and walnut were restricted to one well, P329, which had been included in the first analysis by chance. This well also contained remains of coriander. It was clearly a special case. Therefore, a third list of species was set up, in which the remains from P329 were not included (Westerveld 2 – 329). This list still contains sixteen species, which is more than the number of species encountered in the Iron Age farmyards and in the Roman-period settlements Zomerhof and Vijver.

As far as hulled barley, millet, emmer wheat and linseed are concerned, the evidence from the Roman period shows no differences with respect to the preceding period. Their frequencies show that they were all still common food plants. Spelt wheat seems to have become less common than in the Iron Age, which is surprising, because spelt is known to have been very popular in Roman circles (Knörzer 1991a, 199; Kooistra 1996, 96/108). Rye was found only at the Roman-period hamlet of Zomerhof, in very small amounts. It was perhaps not yet being cultivated in this area, and will not be considered further below. True differences between the Iron Age and the Roman period are observable in gold of pleasure, which is restricted to the former, and beet, which is restricted to the latter. Gold of pleasure did apparently not even grow as a weed in flax fields in the Roman period. That flax/linseed was cultivated locally is apparent from the repeated occurrence of the weed *Cuscuta epilinum* associated with this species. The occurrence of beet in Roman-period contexts only is in agreement with current views on its introduction as a food plant (Knörzer 1991b, 160; Kooistra 1996, 122).

Remains of kitchen herbs were likewise encountered in Roman-period contexts only, and only at the Westerveld settlement. Some fruit and nut species were also represented almost exclusively in Roman contexts, for example walnut. The frequencies of berries, which were presumably gathered in the wild, are clearly higher than in the Iron Age.

A small amount of further information on food plants was obtained from carbonised remains recovered from the postholes and foundation trenches of farmhouses and other buildings. Most of these features were however too shallow for sampling, so only a few, fairly small samples could be taken. No concentrations of seeds were found. The only sample from the features of ritual structures to contain seeds

yielded nothing more than a few stray remains of wild plants.

The results are presented per building in table 2. Seven Middle Iron Age buildings, seven Late Iron Age ones, two buildings discovered at Zomerhof, one at Vijver and eighteen at Westerveld were included in the frequency analysis. Only two Early Iron Age houseplans were recorded and they were not sampled. As was to be expected, the species list is much shorter than that presented in Table 1. The only noteworthy aspect is that even this small amount of evidence included pips of blackberry and raspberry.

Our third source of information consisted of impressions in pottery. They represent only those seeds which leave impressions large enough to be observed during the handling of sherds and so the range of species identified in pottery impressions is always somewhat restricted. The seeds were identified in casts. One of the advantages of analysing impressions is that there is no bias against pulses. Only few impressions were observed in the pottery from Oss-Ussen, but at least two of the impressions unmistakably represented Celtic bean (tab. 3), which shows that pulses were underrepresented in the other types of samples.

To summarise the results of the frequency analyses, beet, wild fruits, walnut and kitchen herbs seem to have been added to the traditional diet in the Roman period. The latter seem to have been consumed occasionally, and only at the largest and most developed hamlet – Westerveld. Gold of pleasure went out of use.

Whether these conclusions also hold for other, comparable rural sites in the same area is difficult to say as only little evidence is available for comparable sites. Tables 1 and 2 include the evidence from three wells from the Roman period discovered at Oss-IJsselstraat, seven Middle Iron Age silos filled with domestic rubbish excavated at Son, and the features of two Roman-period farmhouses found at Oosterhout (Bakels 1980; Bakels/Van der Ham 1980; Buurman 1990). The data show that hulled barley, millet, emmer wheat, spelt wheat and linseed were common food plants in both periods, as at Oss-Ussen. The evidence from Son adds pea to the list of Iron Age species. Gold of pleasure was represented only at the Middle Iron Age settlement of Son. Kitchen herbs were absent at all these sites. In this respect Westerveld remains a remarkable hamlet.

4. Ingredients of the diet, animals

The sandy soil of Oss-Ussen is far from ideal for the preservation of faunal remains. Nevertheless, some six thousand bones, bone fragments and especially teeth were recorded. They have been described and published by R. Lauwerier and G. IJzereef (1994).

Table 4. Oss-Ussen. The Iron Age faunal remains. Table after Lauwerier/IJzereef 1994, table 23.

species	Early Iron Age				Middle Iron Age				Late Iron Age			
	number	%	weight (g)	%	number	%	weight (g)	%	number	%	weight (g)	%
cattle	43	61	407.6	50	100	59	2589.5	75	116	72	2562.9	75
sheep/goat	1	1	0.4	0	1	1	60.0	2	4	2	21.2	1
pig	10	14	50.4	6	8	5	38.6	1	8	5	53.5	2
horse	15	21	347.8	43	59	35	761.4	22	30	19	683.0	20
dog	1	1	5.0	1	0	–	0.0	–	1	1	15.0	0
red deer	0	–	0.0	–	1	1	13.5	0	3	2	62.7	2
total identified	70	48	811.2	77	169	52	3463.0	83	162	37	3398.3	69
cattle-horse size	35	47	175.3	70	90	57	610.1	85	225	83	1479.8	97
sheep-pig size	25	33	53.7	22	44	28	79.7	11	45	17	50.6	3
mammal	15	20	20.0	8	21	13	24.0	3	2	1	1.1	0
bird	0	–	0.0	–	3	2	1.0	0	0	–	0.0	–
total unidentified	75	52	249.0	23	158	48	714.8	17	272	63	1531.5	31
Total	145		1060.2		327		4177.8		434		4929.8	

Table 5. Oss-Ussen. The faunal remains from the Roman period. Table after Lauwerier/IJzereef 1994, table 25.

species	Vijver				Westerveld				Zomerhof			
	number	%	weight (g)	%	number	%	weight (g)	%	number	%	weight (g)	%
cattle	17	77	279.4	91	517	67	6751.2	73	8	67	51.9	84
sheep/goat	0	–	0.0	–	25	3	98.0	1	0	–	0.0	–
pig	3	14	3.9	1	32	4	195.6	2	1	8	5.0	8
horse	0	–	0.0	–	181	24	2218.7	24	3	25	5.0	8
dog	1	5	0.3	0	12	2	40.1	0	0	–	0.0	–
red deer	1	5	25.0	8	0	–	0.0	–	0	–	0.0	–
domestic fowl	0	–	0.0	–	1	0	0.9	0				
total identified	22	81	308.6	97	768	50	9304.5	66	12	67	61.9	91
cattle-horse size	3	60	5.7	53	666	87	4630.6	95	6	100	6.3	100
sheep-pig size	0	–	0.0	–	65	8	92.3	2	0	–	0.0	–
mammal	2	40	5.0	47	38	5	170.0	3	0	–	0.0	–
total unidentified	5	19	10.7	3	769	50	4892.9	34	6	33	6.3	9
Total	27		319.3		1537		14197.4		18		68.2	

The remains were in a poor condition and rather fragmented. Larger animals may therefore be overrepresented, and the results of the identification might not reflect the original domestic refuse. This is especially true where the numbers of remains are concerned. The bone weights present a more accurate impression of the refuse. The problem of preservation is however the same for all the periods under consideration and comparisons between the evidence from the Early, Middle and Late Iron Age and that from the

Roman period can still be made, especially where large animals are concerned. It is possible that differences in small and rare animals were not detected in the analyses. The results of the bone counts and the bone weights are presented in Tables 4 and 5.

A comparison of the values for the large mammals reveals negligible differences between the Early, Middle and Late Iron Age farms and the three hamlets from the Roman period.

Hunting, expressed as percentages of red deer, was not important in any of the periods considered. The few Iron Age remains of red deer include bone, which implies that some deer were indeed caught. The only red deer fragment from the Roman period, on the contrary, is a piece of antler, which may derive from a shed antler or imported material. The difference is however not significant enough to allow the conclusion that the Iron Age farmers hunted more deer. No other remains of hunting and fishing were found. This could be attributable to the fact that not all the refuse was sieved, but no fish bones were found among the residues obtained in the botanical analysis either. Another reason could be that the small bones had not survived. As a matter of fact, contemporary net-sinkers have been found 2.5 km from Oss-Ussen, in the area of a former branch of the river Meuse (Verwers/Beex 1978). Nevertheless, Lauwerier and IJzereef are of the opinion that hunting and fishing cannot have been of importance for the local diet.

Cattle constituted the most important source of meat. The percentages calculated for the Iron Age, especially the Early Iron Age, are lower than those obtained for the Roman period, but the difference is attributable to differences in the numbers of horse bones. The horse is generally not considered to have been a meat supplier (Gautier 1990; IJzereef/Laarman/Lauwerier 1989; Lauwerier 1988). When we leave the horse bones out of consideration, the remaining cattle bones show no changes in the consumption of beef.

In their study of the faunal remains, Lauwerier and IJzereef also considered the possibilities of changes in slaughtering practices and the size of the animals. They detected no differences in slaughtering practices, the age at which the animals were killed or their sex, but they emphasised that their results were based on only a small number of measurements, owing to the fragmented condition of the evidence.

The same problem of insufficient evidence complicated the reconstruction of the animals' withers heights. It is well-known that the cattle's size changed under Roman influence. The withers height increased from 110 cm or less in the Iron Age to 125 cm or more (Lauwerier 1988). Two reconstructions of cattle from the Roman period at Oss-Ussen suggest animals of Iron Age sizes. The – very tentative – conclusion drawn by Lauwerier and IJzereef is that Roman husbandry practices had no influence on cattle raising at Oss-Ussen.

Sheep/goat seem to have been of almost negligible importance, although their bones may form part of the category of unidentified bones of sheep/pig dimensions.

Pig seems to have been slightly more important. No true differences are observable between the various periods or hamlets. The highest percentages were obtained for the Early Iron Age and the Roman-period hamlet of Zomerhof. But in

both cases the total numbers of bones are the lowest in their series, which makes the pig values suspicious.

The Roman invaders were fond of pork and the Roman army left ample evidence of its pork consumption, although cattle were its main source of meat (Davies 1971; Lauwerier 1988, 161). The civilian part of the “Roman” world appears to have consumed large amounts of pork, too. Viewed in this context, the absence of clear differences in the pig bone numbers and weights means that the farmers of Oss-Ussen did not start raising more pigs under the influence of the Romans.

There are more aspects that should be considered with respect to foodstuffs besides domestic consumption. The finds from Oss-Ussen suggest that pig played a fairly important part in burial practices in the Roman period. Some cremation burials were found to contain pig bones in addition to human remains (Lauwerier 1985). They are the remains of food intended for the deceased. The pigs were young individuals or suckling pigs. This custom is known from other Roman-period cemeteries, too (Lauwerier 1983). The fact that the deceased were accompanied by piglets does not imply that pork was the main food for the dead, because, as Lauwerier has pointed out, beef would have been deposited in the grave without bones and would hence have left no archaeologically visible remains. The evidence from Oss-Ussen does not imply that the custom was adopted from the Romans, because the Iron Age cremation graves also yielded bones which may have belonged to pig, but which could not be identified any further than as remains of pig or sheep.

The last animal to be mentioned is chicken. According to W. Prummel (1987, 187), the chicken was introduced by the Romans. The occurrence of a chicken *tibiotarsus* in the hole of a roof-bearing post – an offering? – in the Westerveld settlement is an indication that the bird was known and may have been kept in farmyards in the Roman period. Another bone fragment of a chicken-like bird was found in one of the cremation burials. In addition to piglets, chickens were popular parts of the meals for the dead.

The consumption of chicken may have been a luxury in domestic contexts. The faunal remains identified as the bones of chicken may be the only true indications of Roman influence as far as the animal part of the diet is concerned. We should however be very careful in drawing such conclusions as the list of Middle Iron Age faunal remains also includes three bones of birds, one of which was even specifically identified as a bird resembling a chicken or a pheasant. These bones were however not found in a domestic context, but in association with the feature of a ritual structure and a grave. The faunal remains that were found in such contexts are not listed separately in Table 5, but they constitute only a very small proportion of the overall amount

of remains and do not affect the percentages. In the case of the bird bones, however, the non-domestic context should be mentioned. The custom of using birds in rituals does not seem to have been introduced by the Romans and if the bird mentioned above was indeed a chicken or a different newly introduced bird like the pheasant, this would make the connection between Roman occupation and the consumption of chicken less obvious than previously assumed.

5. Other ingredients

The only mineral ingredient for which evidence was found at Oss-Ussen is sea salt. The evidence in question consists of many fragments of a specific type of pottery identified as a salt container. These containers, which are usually very porous as a result of the use of organic temper, were designed specifically for the extraction and transportation of salt from the Dutch, Belgian and French coasts (Van den Broeke 1986, 1987, 1995a and 1995b). Salt was being transported to the Ussen settlements in the Iron Age already and this continued in the Roman period. In the Early Iron Age, the salt containers were of a semi-cylindrical shape, but over the centuries their shape, and also their fabric, underwent several changes. In the Roman period a more or less standardised type was used: a cylindrical container with a decorated rim, usually of a brittle fabric, with a yellowish to light orange surface. There was also a different type of a harder fabric and an orangey-red colour, which had much thinner walls. It has been argued that the two types represent two different salt-production areas. The former may have contained salt from the Dutch/Belgian coast, where salt is known to have been produced from the Iron Age onwards. The latter, thin-walled type may have been produced in the area around the Strait of Dover (Van den Broeke 1995b). An interesting question raised by this hypothesis is whether the quality of the salt from the different coastal regions varied. It may well be that in the Roman period different kinds of salt were used for consumption and preservation on the one hand and other activities such as the tanning of hides on the other.

Another product whose presence at the settlements of Oss-Ussen may perhaps be inferred from its container is wine. But since grapes are not known from the area and the product itself has not been found we do not know for certain whether the settlements' inhabitants ever tasted wine. The salt containers had to be broken to extract their contents and they could hence not be reused, but this was not the case with the two wooden wine casks whose remains were found at Oss-Ussen, so they may have arrived here empty. The two wine casks had been reused to line the insides of two wells dating from the Roman period, both situated in the Westerveld settlement (fig. 3). Analysis of the wood and the stamps observable on one of the casks led to the conclusion that the cask originated in southern France or northern Italy,



Figure 3. Wine cask, reused as a well-lining at the Westerveld settlement (diameter approx. 65 cm, original height approx. 90 cm). The strips of split wicker that held the staves together were not preserved.

as did the wine it had at some time held (Bogaers 1987). If the two casks arrived full of wine, the inhabitants of the Westerveld settlement may have enjoyed over 1500 litres of wine.

A set of bronze kitchen utensils recovered from a well some 500 m northeast of Ussen (Verwers 1991, 138) may also be associated with wine (fig. 4). The set, which comprised a basin and a matching scoop and strainer that were dated to the second or third century AD, probably belonged to an inhabitant of a different (unexcavated) settlement. We know that similar sets of scoops and strainers were intended for ladling and filtering crude wine, but it has been suggested that these later implements may have been used for a different purpose, such as straining stock (Koster 1993, 306). Such a set would have been a precious possession, even if it was not used for wine, so its occurrence at Oss does not necessarily imply the presence of wine at the settlement. No fragments of certain types of amphoras that are known to have been used primarily as wine containers (for instance Dressel 2-5 and Pélichet 47) were identified at Oss-Ussen. The only evidence that could prove that wine was consumed at Oss-Ussen would be the remains of the casks it arrived in.



Figure 4. Bronze scoop and strainer found in a well at Oss-Horzak (length 34.3 cm). (photo ROB).

Olive oil is a third ingredient that may have been imported into the Oss-Ussen area. Again no remains of the product itself were found, nor of any olives. The vessels in which olive oil may have been imported were globular amphoras of the type identified as Dressel 20, which were produced in southern Spain. Several fragments of these thick-walled vessels, which were used to transport olive oil from the Guadalquivir valley, were found in the Roman-period settlements of Oss-Ussen.² Like the wine casks, the oil amphoras were still suitable for use after they had been emptied of their original contents, so we do not know for sure whether the inhabitants of Oss-Ussen actually consumed olive oil.

6. The preparation, serving and consumption of food

Only a few finds yield direct information on the ways in which food was prepared. Many fragments of tephrite querns, used to grind cereals into flour, were found in features from both the Iron Age and the Roman period. In the Iron Age saddle querns were used, but the Late Iron Age (around 200 BC) saw the introduction of the rotary quern, which was to become the common type in the Roman period. This new type will have simplified the grinding process, but the end product was the same. Flour could be used to make bread or porridge. One of the soil samples, taken from a well in the Westerveld settlement, contained thousands of bran fragments, all smaller than 1 mm (Van Amen 1995). They could be the result of grinding, but also of chewing. A second Westerveld sample yielded lumps of fragmented cereals that were charred, and hence definitely the result of grinding and not chewing.

Objects pointing to the preparation of dairy products were found only in Iron Age features. A large, alder-wood barrel with two handles, which had been reused as a well-lining, was shaped rather like a churn (fig. 5). Whether it was actually used as such cannot be proved. A specific, funnel-shaped type of pottery without a base may have been used for dairying. Fragments of these vessels show typical wear patterns on the outside of the rim suggesting that the vessels were used as cheese presses (Van den Broeke 1987, 104-105).

A typical Roman way of preparing food involved the use of a *mortarium* or mortar. Such wheel-thrown vessels, over 250 fragments of which were found at Oss-Ussen, were designed for making sauces, marinades or other fluids. Fragments of quartz on the inside of the base served to create a rough surface on which herbs, seeds or other ingredients could be rubbed and crushed. After a fluid had been added, the resulting mixture could be poured out through a spout. Again there is no evidence to show whether the native population adopted this preparation method from the Romans.

A final aspect of food preparation is the ways in which ingredients were combined: which meats and cereals were eaten together, what was salted and what was sweetened, which dishes were flavoured with condiments? Unfortunately we have very little information on this issue. The aforementioned sample containing bran fragments also included a blackberry pip with grain fragments adhering to it and pieces of an apple core. We would like to be able to say that these are the (digested) remains of bread or porridge sweetened with fruit, but that is by no means



Figure 5. Churn-shaped barrel made of alder wood, reused as a well-lining in the Iron Age (length 90 cm).

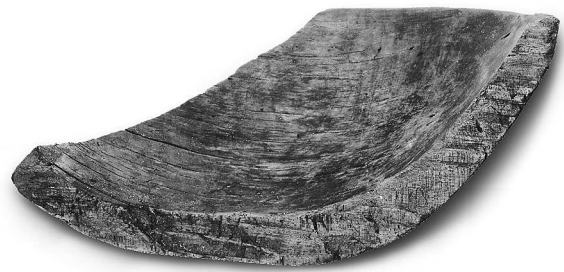


Figure 6. Part of a maple-wood bowl (height 13.5 cm).



Figure 7. Maple-wood bowl (height 6 cm).

certain. It is more likely that the ‘ingredients’ ended up together as refuse.

To summarise, the evidence suggests that the ways in which food was prepared underwent only few changes over the centuries. If the mortars were used in the Roman way, they represent a significant change. Another change involved the complete replacement of the saddle quern by the rotary quern and it would seem that dairying became less important.

Pottery is our only source of information on the ways in which the foodstuffs were served and consumed. The types of dishes that were used can tell us something about communal *vs* individual dining habits (Hawthorne 1996, 4). In the case of Iron Age pottery it is almost impossible to relate specific types to specific functions, such as serving and eating (Van den Broeke 1987, 103). The only unexpected development represented by the pottery is a decrease after the Middle Iron Age in the relative frequency of open dishes and bowls. These types are assumed to have been the most suitable for serving and eating. However, wooden plates, bowls and dishes will have served the same functions equally well, but they are only rarely preserved.

Two maple-wood bowls, of different shapes and sizes, were found in Roman-period wells in the Westerveld settlement (figs 6 and 7).

In the Roman period, the use of wheel-thrown pottery increased, though it would seem that hand-made pottery never went out of use entirely (Wesselingh forthcoming). Roman wheel-thrown pottery shows a wide range of shapes and sizes, from which we can infer some functions. Besides the aforementioned types used for transport, storage and food preparation there were a number of vessels that were specifically intended for serving and consuming food and drink. This so-called tableware includes bowls, plates, cups and beakers, usually made of relatively thin-walled pottery. The fabrics include *terra sigillata*, Belgic wares, colour-coated pottery and a few examples of smooth-walled ware. Tableware was found at Oss-Ussen, too, but in low relative frequencies (tab. 6). The earliest types were encountered in the Westerveld settlement. Special attention should be paid to the colour-coated cups and plates. The proportion of plates is thought to be an indication of the degree of Romanisation: eating from a plate was a Roman innovation (Van Enckevort/Huisman 1995, 35). Table 7 shows a low percentage of plate fragments. Unfortunately the sherds

Table 6. Wheel-thrown pottery from the Roman-period settlements at Oss-Ussen (number of fragments and relative frequencies).

	Vijver		Zomerhof		Westerveld	
terra sigillata	59	2	21	2	362	4
Belgic ware	140	5	44	3	544	5
colour-coated ware	150	5	46	4	349	3
smooth-walled pottery	639	21	281	22	1677	17
mortaria	45	2	35	3	178	2
dolia	321	10	131	10	50	+
amphorae	60	2	20	2	485	5
thick-walled indet.	–	–	–	–	420	4
coarse ware	1634	53	676	54	2495	25
other	11	+	5	+	3510	35
total	3059	100%	1259	100%	10070	100%

Table 7. Colour-coated cups and plates from the Roman-period settlements at Oss-Ussen (number of fragments and relative frequencies).

	Vijver		Zomerhof		Westerveld	
cups	142	95	44	96	346	99
plates	8	5	2	4	3	1
total	150	100%	46	100%	349	100%

cannot be accurately dated, so we do not know whether the number (or the use) of plates increased.

Another luxurious Roman import that may have been used for serving is the glass vessel. Several fragments of glass were found at Oss-Ussen, most of which had belonged to bowls and bottles, two to a cup or beaker. The majority of the glass fragments were found in the Westerveld settlement.

7. Elements acquired after the Roman occupation

The above survey of the various elements of the menu leads to the conclusion that the incorporation of Oss-Ussen into the Roman world indeed brought about changes, notably in the form of additions to the Iron Age diet. Only few elements disappeared. Gold of pleasure seems to have gone out of use, fewer deer may have been hunted, although this is by no means certain, and dairying may have become less important. Only the latter would actually represent an important change.

New elements are the more frequent use of wild fruits and the introduction of beet, walnut, kitchen herbs, wine, olive oil and chicken, and the use of mortars and new forms of tableware. With the exception of the wild fruits, whose incorporation into the diet is poorly understood, the new products must have been obtained through contacts with the

“Roman civilization”, most probably the army and its surroundings. At first, all of the new products were possibly imported into Oss-Ussen, but at a later stage some of them may have been produced locally. The occupants of the settlements may have started to grow beet and the kitchen herbs in their farm gardens, but this cannot be proved on the basis of the scarce evidence. The same holds for the walnut. The tree is known to have been introduced into the southern part of the Netherlands in this period (Bakels 1996, 141), but a single shell fragment does not constitute sufficient evidence for us to assume that a walnut tree actually grew in or near the settlements.

The single chicken bone represents a similar case; we know that the fowl was being kept at the time, but the bone recovered in the excavations may derive from an imported bird.

The wine and olive oil were definitely imported from outside. As for the wheel-thrown pottery and the glass vessels, they were not made at Oss-Ussen itself. The early types came from distant sources and some of the later types were produced in specialised centres in the area.

Interesting questions are when and in what quantities the new products arrived in the various settlements. The dates of

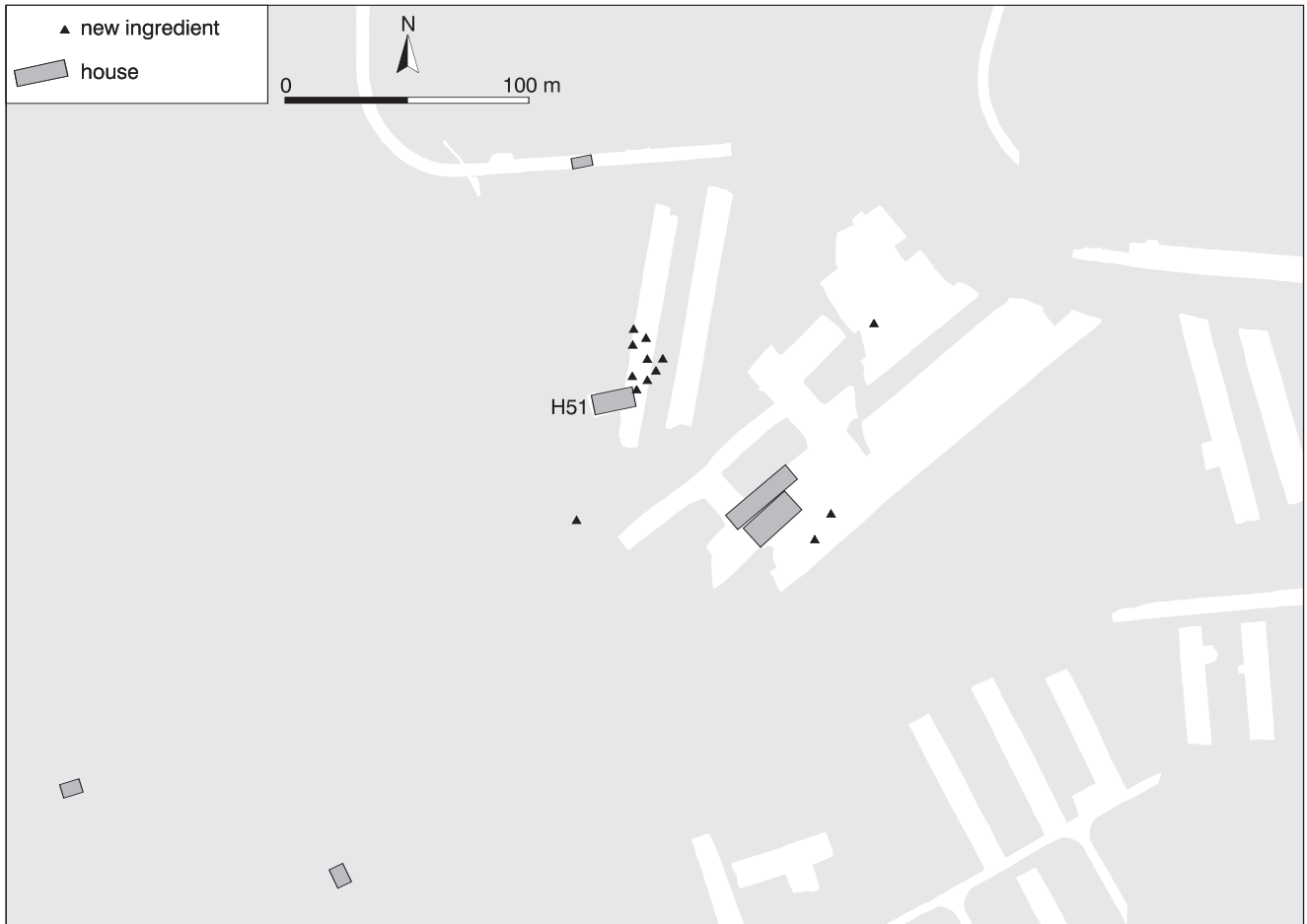


Figure 8. Plan of the Vijver settlement showing the new ingredients (apple, blackberry, raspberry and beet).

the features that yielded the remains of the new products can be used to answer these questions. Unfortunately, finds from pits and wells are problematic in this respect. The majority of the non-botanical finds were not collected from specific stratigraphic contexts, as a result of which the assemblages from which the dates of the features had to be inferred were mixed and spanned long periods of time. At best, the dates may be regarded as *termini ante quem*, as the final dates are mostly based on the youngest pottery. Due allowance should be made for this in considering the dates mentioned below. Further allowance must be made for the timespans of the settlements themselves: the earliest remains of the Zomerhof settlement are of a later date than those of the other two settlements (see page 193). The dates obtained for the wine, which are based on the casks that were reused as well linings, should of course also be considered with due caution; we must not forget that a certain length of time will have elapsed between the emptying of the cask and its

secondary use. The olive oil containers also involve problems, because too little is yet known about their occurrence at Oss-Ussen.³

Forest fruits seem to have become more important from the beginning of the first century onwards, perhaps a little later in the two smaller settlements. Beet was present in the Zomerhof settlement in the first century, and in the other two in the second century. As for the other ingredients that were found only at the Westerveld settlement, celery, wine and chicken were present in the second half of the first century, walnut, coriander, dill and savory in the second century.

The earliest dates of some of the other aspects of the culinary habits can also be given. Glass vessels made their appearance in the early first century AD in the Westerveld settlement, and towards the end of that century in the smaller settlements. The early use of glass in the large settlement, at a time when the new foodstuffs had not yet arrived, indicates that glass was not necessarily associated with a different diet.

Mortaria (type Brunsting 36) were used from the middle of the first century onwards. As for the salt containers, a well in the Westerveld settlement yielded one of the earliest fragments of the thin-walled, orangey-red ware ever found at rural settlements; it is possibly of pre-Flavian date (Van den Broeke 1995b, 196).

All in all, this means that most of the new elements were introduced and/or used at Oss-Ussen between AD 50 and AD 200. There is no evidence for the import of foodstuffs in the Augustan/Tiberian period; the forest fruits that were consumed in this period were not imported. The three truly exotic kitchen herbs seem to have been used from the second century AD onwards.⁴ The two categories of foodstuffs that allow comparisons between the settlements, *i.e.* wild fruits and beet, show no differences in terms of dates. Fruits started to be consumed slightly earlier at the Westerveld settlement, while the Zomerhof settlement yielded the earliest evidence for beet.

In an attempt to gain a better understanding of culinary practices on a household level, we plotted some of the new ingredients on the settlements' plans (figs 8, 9, and 10). In the case of the Vijver settlement, most of the remains of the new foods seem to have come from a cluster of pits near one of the houseplans (H51), but as only part of this settlement was unearthed, we cannot conclude that this was the only household to have adopted the new customs. The samples containing remains of wild fruit that were collected at the Zomerhof settlement, of which a larger proportion was excavated, came from all over the settlement site, but beet was encountered only in the easternmost farmyard (H4/H5/H6).

The distribution of the new elements at the Westerveld settlement is rather interesting, showing what appear to be two distinct concentrations. The southwestern concentration lies within a large farmyard enclosed by a series of ditches. Within this enclosure were several houseplans, one with an exceptional layout possibly indicating Roman influence (H78). Several other unusual objects were found here, too.

The second concentration essentially comprises the contents of a single well (P329), in the northwest of the excavated area, near another cluster of houseplans which includes H105. A tentative conclusion could be that at least two Westerveld households tried the new foods. To summarise, it would seem that not all the inhabitants of Oss-Ussen acquired a taste for the new foods and that a small number of households took the lead in sampling the novelties.

8. An acquired taste

A combination of botanical and zoological evidence and other information on eating and drinking has shown that the

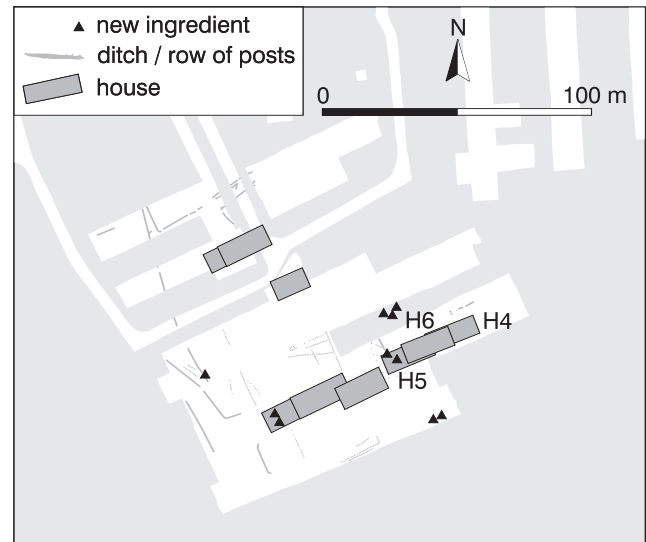


Figure 9. Plan of the Zomerhof settlement showing the new ingredients (blackberry, raspberry, bilberry and beet).

culinary habits of the native farmers of Oss-Ussen underwent various changes during the Roman period. To regard this 'culinary Romanisation' merely as an aspect of overall Roman influence would be oversimplifying matters. Below, we will try to answer two main questions about the observed changes, and argue that a change in diet reflects more than a more varied supply alone. Why do people change their culinary habits? And which of the inhabitants of Oss-Ussen (first) adopted the new eating and drinking habits?

On the assumption that the diet of at least some of the farmers of Oss-Ussen changed, a few remarks can be made about the possible motives for such a change. Given that food is central to the sense of identity, we may legitimately ask why, and under what circumstances, people tend to retain or change their culinary habits. Identity and social lifestyle may be more important criteria determining what people eat and drink than the simple matter of taste: people will consume certain dishes in order to express a wish to belong, or to emphasise their identity ('you are what you eat').⁵ In this respect, basic anthropological categories like age, sex, race and class are all important. Very few people enjoy their first taste of coffee or beer – two drinks with important social implications. But most will quickly acquire a taste for these beverages to show that they are an adult, or one of the 'lads'. Likewise, status, rather than taste, can sometimes be the main reason for eating or serving dishes like oysters or caviar.

Adults can be extremely conservative about what they eat – an attitude known as *neophobia*. The complete opposite of this 'fear of the new' is an attitude towards food involving a

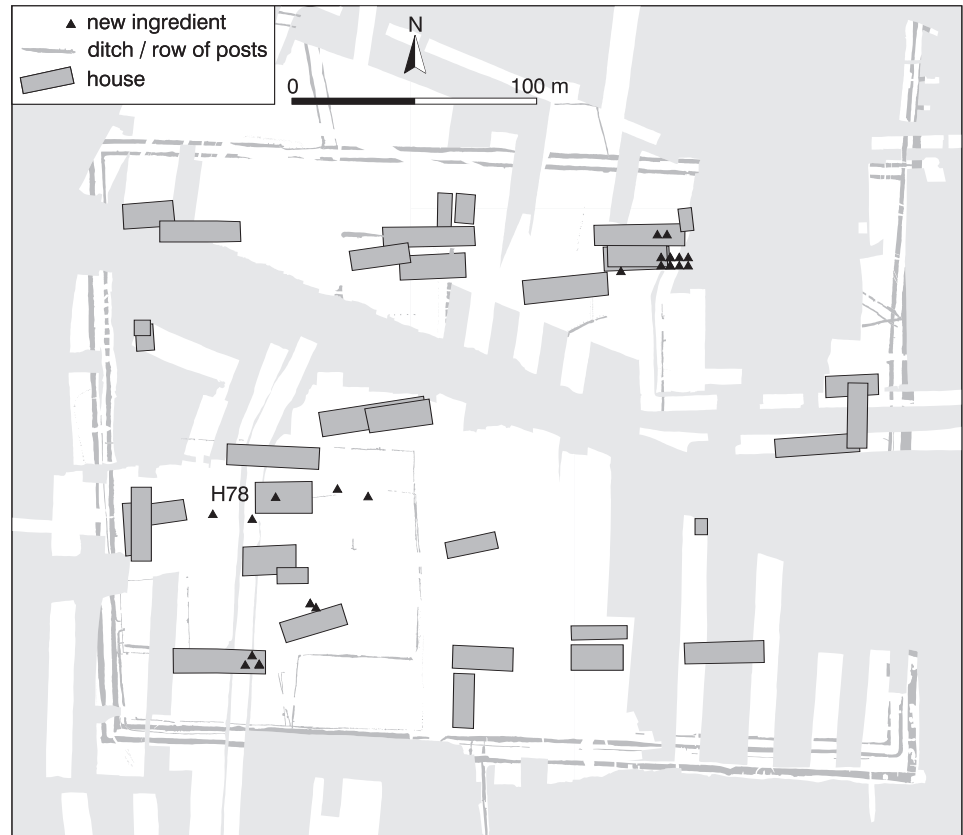


Figure 10. Plan of the Westerveld settlement showing the new ingredients (apple, blackberry, raspberry, bilberry, beet, dill, celery, coriander, savory, walnut, chicken, wine and olive oil, represented by >15 fragments of Dressel 20).

constant search for variety (*neophilia*). Humans show both tendencies (Visser 1991, 42-43). Contact with other cultures, either through travel or because one's own surroundings are being influenced, is thought to encourage the willingness to try something new. However, this will depend strongly on people's attitude towards the new culture: the British who colonised India refused to eat 'native' food and had their own corned beef and tea shipped in. Eating can thus be used as a way of resisting or embracing another influence. In this respect, the different menu of the Oss-Ussen farmers seems to be a clear reaction to Roman influence. But which inhabitants changed their habits?

Some of the new foods and food-related implements were encountered all over the Oss-Ussen area, but a number of ingredients were clearly restricted to the large Westerveld settlement. Does this uneven distribution perhaps reflect a social difference? In addition to remains providing information on aspects of the diet, the Westerveld evidence includes several other distinct elements, among which is an exceptional houseplan (H78), thought to represent a building with a Roman-style timber porticus. It has often been suggested that a tribal elite that controlled the other

inhabitants of the Oss-Ussen area resided in this house. Via contacts with the Roman army they may have received 'diplomatic gifts' or exchanged (surplus) products for luxury goods (Van der Sanden 1988, 118). Tableware, wine and kitchen herbs may well have been among these luxury goods. Exotic condiments were considered 'primarily for the rich man's table' (Miller 1969, 10). This would fit in with the idea that innovations in diet, including aspects of material culture associated with food and drink, do not affect an entire society at once (Sherratt 1991, 229). The new habits may have started out as something exclusive, restricted to the 'upper classes', in this case the local elite living in the Westerveld settlement.

If this was indeed the case, we are left with a few questions. Firstly, the exotic foods were not concentrated exclusively around the supposed elite residence. Some of them were found in a well (P329) near another cluster of farmhouses (fig. 10). This may be the result of the use of different areas for storing, cooking, serving and waste disposal. In cases in which an elite and members of a lower class lived close together it can sometimes be difficult to infer spatial divisions where food is concerned

(De Hingh/Bakels 1996, 120). In the case of the Westerveld settlement it is questionable whether there was indeed such a division between the upper and lower classes (Wesselingh forthcoming). However, when we leave the one well out of consideration, as has been done in table 1, we do in fact observe a marked clustering of finds around the house with the porticus. Something else that should be considered is that the unexcavated parts of the settlement, such as the area immediately to the east of P329, may have contained another 'elite' building.

The second question to be answered is why, after their introduction as an elite privilege, the new foodstuffs never came to be widely used at Oss-Ussen. By the end of the occupation period, around AD 200, other innovations that had also been luxuries at first, such as wheel-thrown pottery, were in common use at all three settlements. Herbs, chicken, walnuts and wine apparently remained rare goods. This would fit in with the general impression that the Westerveld settlement never fully evolved into a wealthy villa-like complex (Van der Sanden 1988, 119). It could be that the elite's wish to retain the exclusive right of using the luxury ingredients prevented their diffusion among the rest of society, even if the foodstuffs in question were widely available.

The nature of the elite may provide a different answer to the question of the new foods' restricted acceptance. The local elite came into contact with Roman culture when it 'invaded' their surroundings. But what if an inhabitant of the Westerveld settlement learned to appreciate Roman cuisine literally by broadening his horizons? The *civitas Batavorum*, in which Oss was situated, is known to have supplied large numbers of soldiers for the Roman army. If it is true that a member of almost every Batavian household served in the Roman army (Roymans 1993, 40), it is likely that the Westerveld settlement also supplied one or more warriors. On their return to Oss, these men may have introduced Roman dishes or table manners for which they had acquired a taste during their time in the army. This scenario throws an entirely different light on the acceptance of novel culinary habits, since those habits would then have been introduced by 'converted' locals. Besides the attitude towards Roman culture, the esteem of the veterans themselves will in this case have played a role in changing the culinary habits.

An alternative to the above hypothesis based on an elite cuisine, whether introduced by lineage heads or army veterans, is a variation on the idea that innovations in diet do not affect an entire society at once. It could well be that, rather than being exclusive in a social respect, the new foods were used only on special occasions, for example in ceremonial or religious contexts.⁶ The activities involved may have been accessible to everyone, and may well have

taken place at the Westerveld settlement. But may we still speak of a true change in diet if coriander was eaten (or sacrificed) by a priest twice a year?

Whatever scenario we choose, the changing diet reflects some of the changes brought about by the arrival of Roman culture. It is important to note that we are here referring not to the mere introduction of new ingredients and new ways of preparing food, but to the native inhabitants' acceptance of all these novelties as part of a new lifestyle. They did not merely take what was available to them, but consciously selected the elements they wanted, redefining them and combining them with elements already present. It is precisely this blend of the old and the new and the appropriation of Roman elements that is essential to Romanisation in general (Derks 1996, 8-13). In the case of diet, only the full range of culinary habits, from preparation to serving and consumption and even disposal, can tell us what the native population considered worth keeping and what worth trying. In a situation in which a group of native farmers was influenced by a new, Roman culture, such choices were of crucial importance. Eating and drinking served as ways of communicating (Douglas 1984, 6; Hastorf 1991, 135), and identity may have been one of the messages to be conveyed (Meadows 1994, 135).

It is clear that many (social) aspects of consumption cannot be inferred from archaeological evidence. Social and ideological factors must to a great extent have determined which individuals (men, women, children, families, individuals of a particular status) ate where, in what way and especially with whom. Unfortunately, our knowledge about details of the menu is very poor owing to the shortage of relevant evidence. Entire settlements were sampled at Oss-Ussen, but most of the evidence was recovered from pits and wells and must hence be regarded as refuse. It is almost impossible to say anything about food on a household level. Moreover, it is difficult to define what people chose to consume if we do not know what was available.⁷ For instance, there are no indications that *garum*, the famous Roman fish sauce, was present at Oss-Ussen. Did it never reach the region, or did the inhabitants of Oss-Ussen decide not to include it in their diet? And if not, was this because of the sauce's salty taste, or did the sauce not agree with the native community's (culinary) identity? Something else that we should bear in mind is that the presence of Roman ingredients does not necessarily imply an entirely Romanised cuisine. Beet, herbs and chicken may have been combined with existing foods such as cereals, pulses and beef. They may have been prepared, served and consumed in the traditional way. So a selection of new ingredients need not reflect a change in taste: new foodstuffs may have been 'nativized' or even perceived as traditional (Douglas 1984, 28-29). On the other hand, the absence of new ingredients

does not necessarily imply a ‘neophobic’ attitude towards food and eating. Local foodstuffs may have been prepared, served or consumed in a Roman way, even without using Roman vessels (Meadows 1994, 137). In both cases, even in the absence of evidence for ‘native continuity’, ‘Romanisation’ is not the appropriate term for describing the social change. It is impossible to make a clear distinction between Roman and non-Roman elements (Meadows in press).

Only a few preliminary conclusions can be drawn from the evidence available on culinary habits. Without knowing what new foods were available, or the exact composition of the meals, we can say that (some of) the inhabitants of Oss-Ussen chose to enrich their menu with various new elements provided by Roman culture. This may have been done by a select group of people at first, or the foods and implements may have been used for special occasions. Apparently culinary innovations, like many other aspects of culture, did not affect the entire society at once. In the case of Oss-Ussen it seems that some of the new elements never penetrated to all the members of the community, either due to limited availability or limited access or by choice. If the new cuisine reflects the identity of this small group of farmers living just within the borders of the Roman Empire, it was an identity in which traditional aspects were still valued. New elements were incorporated from time to time, but their nutritional value was low. The main part of the daily diet continued to consist of traditional cereals and meats. The fact that the additions to these dishes consisted of flavourings is however significant.⁸ Although the food remained ‘native’ in essence, the new flavourings must have given it a different appearance and fragrance; the way the food looked and smelled, its public impact, was obviously important. In this respect the innovations were certainly intended to express a changed identity, whether this message was intended for fellow-inhabitants, farmers of nearby settlements or even the occasional Roman. Irrespective of all the political, social and ideological considerations that may underlie a diet, a preference for a particular foodstuff is to some extent also dependent on individual likes and dislikes. But considering the social and ideological implications of food, tastiness is very often the result rather than the cause of a preference for a particular foodstuff. Asking whether the farmers of Oss-Ussen truly acquired a taste for the Roman cuisine is hence as meaningless as asking whether beer is ‘really’ tasty.

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The drawings were made by P. Heavens (figs 8, 9, 10) and W. Kuijper (fig. 2). J. Pauptit (figs 3, 5, 6, 7) and the Rijksdienst voor het Oudheidkundig Bodemonderzoek (fig. 4) provided the photographs. The English text was corrected by S. Mellor.

notes

1 In the following discussion we will assume that the herbs encountered at Oss-Ussen were used as condiments. Some of the herbs are however known to have been used by the Romans for different purposes, too. Besides as a flavouring, dill was also used as an ingredient in ointments, and coriander and dill may have been used as *aromata* in perfumes (Miller 1969, 6-7).

2 Various specialists analysed the wheel-thrown pottery from the Ussen settlements. The material from the Vijver and Zomerhof settlements was studied by W.J.H. Verwers. Amphora sherds were identified, but not ascribed to specific types. M. Brouwer studied the pottery from the Westerveld settlement. She described several sherds as parts of ‘Spanish amphoras’ (= Dressel 20), but that was the only type of amphora she distinguished. Some of the sherds recovered at the two smaller settlements may also have belonged to Dressel 20 amphoras, but they were not identified as such.

3 See also note 2. Fragments of Dressel 20 ware have so far been identified only in the Westerveld settlement, and only documented for the houseplans. The only two structures to have yielded more than five fragments of Dressel 20 ware are two houseplans found within the areas where the new foods concentrate. H105, dated Id(IIA), yielded 18 fragments, H78, dated I(c)d/IIA, 38 fragments.

4 The fourth herb, celery, is a wild plant which grows in coastal areas, also along the North Sea coast. The plant is however assumed to have been domesticated in the Mediterranean area.

5 “The old saw about being what we eat, which turns up in a dozen different languages and numerous metaphors, impresses by its very banality: anything *that* everyday must be quite special. Our tastes and habits in other spheres of consumption [...] do not approach food in significance.” (Mintz 1993, 262).

6 In an abstract of a lecture given at the International Roman Archaeology Conference 1997, M. Loughton writes that ‘initially the consumption of wine was controlled by rituals [...], later the consumption of wine was less structured and determined by new beliefs and rituals. [...] The changing values given to imported wine are linked with other pivotal changes[...]’ (Loughton 1997).

7 A regional analysis or a comparison with evidence from other rural settlements could shed more light on this question. Unfortunately the botanical and zoological data of many excavated sites have not yet been published. An exception is Wijk bij Duurstede – de Horden, which shows a remarkably similar list of Roman ingredients. In addition to wine (casks), beet and chicken it includes the herbs coriander, dill and celery. No remains of walnut were recovered, but amphoras used for the transportation of *garum* were found (Kooistra 1996; Van der Werf 1987). At this site the proximity of a *castellum* will have greatly influenced the availability, and possibly also the acceptance, of new foods.

8 “What we do not often realize is how powerfully these flavor markers shape our notion of what a cuisine is. Cover any food, no matter what, with a sauce made of tomatoes, olive oil, garlic and herbs, and we identify it as Italian: what is more, Italians will identify it as Italian. Be it dromedary hump or acorn, its culinary identifications will ultimately be determined by the way in which is flavored (Rozin 1982, 197).

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