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Roman Tunisian dietary patterns as a feature of Romanitas: an archaeozoological approach			
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Abstract

It has been said that the Roman Empire was one of the greatest empires of antiquity. At its height, it spanned the entire Mediterranean basin, from the Iberian Peninsula to the Near East, each territory contributing with its customs and specificities. In this melting pot, dietary preferences were modified, diversified and, sometimes, replaced. With this paper, we aim to study Roman dietary patterns in Tunisia, an area that has been the object of little academic scrutiny and for which only a few studies are available. We investigate this topic with an archaeozoological approach. The relative frequency of taxa, body part representation and kill-off patterns of faunal remains from 16 pre-Roman and Roman Tunisian sites shows that, in Tunisia, dietary patterns were modified as a result of the Roman conquest.

Keywords

faunal remains, Iron Age, meat diet, North Africa, Roman period

1 | INTRODUCTION

The current concept of “Mediterranean diet” can be traced back to the food and dietary patterns of the numerous populations that surrounded the Mediterranean Sea in antiquity (Radd-Vagenas, Kouris-Blazos, Fiatarone, & M Flood V., 2017). The region was a melting pot of influences from such civilizations as the Phoenician, the Greek or the Roman (Bispham, Harrison, & Sparkes, 2006; Mellersh & Williams, 1999), each of which made a contribution with their customs and specificities.

This topic is commonly studied by using the information provided by written and iconographic sources, which provide evidence on the products in the diet, the butchery techniques and the cooking methods used. However, most of these sources reflect an elite diet or an archetype diet, which sheds no light on the everyday diet and everyday food preferences. Therefore, a different approach is required if we are to gain greater insight into the dietary patterns in antiquity.

Archaeozoological studies can reveal what species were raised for meat consumption, how old the animals were when slaughtered, how carcasses were processed and which body parts were most consumed. Archaeozoology can provide all these information for different civilizations (Ashby, 2002; Woolgar, 2010), for different settlements of the same civilization (Moses et al., 2019; Sologestoa, Albarella, & Quiros Castillo, 2016) and even for different occupants of a single settlement (Ervynck, Van Neer, & Jörg Schibler, 2003; MacKinnon, 2010; McCormick, 2002; van der Veen, 2003). It therefore reveals more than simply which animals were consumed. The study of human meat dietary variations through meat processing, preparation and consumption can shed light on social identities and cultural choices. Variety in food choice can reveal differences in social position, economic class and even political status (Crabtree, 1990; Curet & Pestle, 2010; Holmes, 2014; Thomas, 2007).

These studies, however, have mainly focused on the dietary habits of the populations located at the north of the Mediterranean basin, showing how they took part in creating what is now known as the Mediterranean diet. Few studies are available from North Africa.

Taking all the above into account, this paper aims to fill this research gap and study the meat consumption of inhabitants from the present-day territory of Tunisia during the transition from the Iron Age to the Roman period. In the first century BC, North Africa was conquered by the Romans and far-reaching sociopolitical transformations took place (Graham, 1902; Pasa, 2009; Picard, 1959). Therefore, this study will allow us to determine if the Roman conquest affected North African meat dietary preferences, or if the existing culinary traditions continued mostly unchanged despite the changing powers.

2 | MATERIALS AND METHODS

Our study focuses on a chronological period that stretches from the Iron Age to the Roman period. The study of faunal remains from the Iron Age sites will give us an idea about the diet

and meat consumption preferences before the Roman conquest, and this data will then be compared with the information obtained from the Roman period.

Data were gathered from all available published studies, and here, we also present the results from Zama for the first time. The Iron Age sites studied here are Utica, Carthage city, Althiburos, Zita and Ghizen, (Figure 1, Table 1). The Roman archaeozoological information comes from nine sites: Bir Ennahal, Carthage city, Thuburbo Maius, Althiburos, Zita, Meninx, Ghizen and Zama (Figure 1, Table 1). We include all these studies in an attempt to be as exhaustive as possible and to present the most reliable portrayal of the meat diet in Tunisia during this time period.

The sites studied are from several areas of Tunisia. They are located on the north coast (Utica, Carthage, Bir Ennahal), on the south-east coast (Zita, Ghizen, Meninx) and inland (Thuburbo Maius, Althiburos, Zama) (Figure 1). Therefore, the study covers the whole of the region except the predesert in the south. In this regard, and for purposes of comparison, all the sites from pre-Roman Carthage (Bir Messaouda, Îlot de l'Amirauté, Magon Quarter and Byrsa) and Roman period Carthage (Bir Messaouda, Îlot de l'Amirauté, Magon Quarter, Circular harbour [harbourside] and the House of the Greek charioteers) will be presented together as the Carthage city site and compared with the other sites in the region.

The investigation analysed both the taxonomic representation of the species documented (number of identified specimens [NISP] frequency) and body part representation (based on NISP) and kill-off patterns when this information was available. This revealed the species used for their meat, what parts were processed and what kind of meat was eaten in each period.

It was not easy to compare the kill-off patterns of the main domesticates in the various faunal assemblages from Tunisia, partly because different archaeozoologists use different ageing methods and partly because some of the assemblages were small. Moreover, raw ageing data are rarely published. Therefore, our analysis was based on a comparison of the published data. Ageing observations made by different authors were reordered into several age categories (infant, juvenile, subadult, adult).

The same difficulties were found for body part representation. The observations made by different authors were reordered into five distinct body part categories (head, forelimb, hind limb, feet and trunk).

Figure 1. Location of the sites mentioned in the text. Additional information on each site in Table 1

Table 1. Archaeological information on the sites mentioned in the text

Site	Location	Chronology of the sample	Context of the sample	Type of the site	NR	Reference
Utica	Bizerte	10th–9th c. BC	A water pit	Tyrian settlement	536	Cardoso et al., 2016
Bir Messaouda	Carthag	Archaic and Punic period	Buildings	City	911	Slopsma, Van Wijngaarden-Bakker, & Maliepaard, 2009
Ilot de l'Amirauté		4th–2nd c. BC	Circular Harbour	Military site	131	MacKinnon, 2010
Magon Quarter		Second half of the 7th c. BC	Urban structure	City	1,159	Nobis, 2000
Byrsa		Punic period	Urban structure		156	Poulain, 1982
Magon		Punic period	Urban structure		1,504	Weinstock, 1996
Althiburos	El Kef	6th–2nd c. BC	Urban structure	Numidian city	5,798	Valenzuela-Lamas, 2016
Zita	Zarzis	2nd c. BC–1st c. AD	Urban structure	Carthaginian colony	1,198	Moses et al., 2019
Ghizen	Djerba Island	Punic period	Fishermen's houses	Fishermen's Village	457	Azaza & Colominas, 2019
Bir Ennahal	Kélibia	5th c. AD	House	City of ancient Clipea	766	Oueslati and Ennaïfer, in press
Bir Messadouda	Carthage	Roman period	Buildings	City	479	Slopsma et al., 2009
Kobbat Bent El rey		3rd–5th c. AD	Underground building		664	Baumgartner, 1996
Ilot de L'Amirauté		Roman period	Circular harbour	Military site	167	MacKinnon, 2010
Magon Quarter		1st–4th c. AD	Urban structure	City	3,727	Nobis, 2000
Magon		Roman period	Urban structure		96	Weinstock, 1996
Circular Harbour— harbourside		Roman period	Circular harbour	Military site	155	Levine & Wheeler, 1994
House of the Greek Charioteers		Roman period	House	City	294	Reese, 1977
Thuburbo Mauis	Tunis	Roman period	Courtyard	Roman colony	34	Jashemski, Foss, Lewis, Timpson, & Lee, 1995
Althiburos	El kef	Early Roman	Capitulum	Roman city	1,568	Valenzuela-Lamas, 2016
Zita	Zarzis	Roman period	Urban structure	Industrial Roman colony	4,648	Moses et al., 2019
	Djerba	Roman period	Garbage pit	Roman city	983	
Meninx Ghizen	Island	Roman period	Fishermen's houses	Fishermen's Village	472	Fabis & King, 2009 Azaza & Colominas, 2019
Zama	Siliana	2nd–3rd c. AD	Thermal structures	City	2,272	Present paper

Abbreviations: NR, Number of Remains.

3 | RESULTS

3.1 | Taxonomic frequencies

The following figures present the results of the analysis of the taxonomic frequencies. Figure 2 shows the proportion of the main taxa by combining NISP from all pre-Roman and Roman sites. Figures 3 (and Table 2) and 4 (and Table 3) present the relative taxonomic frequencies for the individual sites from the pre-Roman and Roman periods, respectively.

Figure 2 shows that the faunal remains recovered at all the sites were mainly mammalian species, of which the majority were domestic animals. The most common faunal remains were sheep/goat, cattle and pig as food waste. It can also be seen that the proportion of cattle decreased drastically during the Roman period. In contrast, the proportion of sheep/goat and especially pig increased. There was also an increase in bird remains. Nevertheless, sheep and goat were the predominant taxa during pre-Roman and Roman times, with more than 40% of the specimens attributed to these animals in both periods.

Focusing only on the most common species (caprines, cattle and pigs) by sites, we can see that the general predominance of sheep and goat is documented during the pre-Roman period at all sites studied here except at Utica, where there is a clear predominance of cattle remains (Figure 3). Cattle also have a considerable presence in Carthage city (42.51% of NISP). It should also be pointed out that pig remains are absent or nearly absent from Zita and Ghizen. Therefore, some patterns seem to be exclusive to particular areas. In the two northern sites, cattle were important. On the other hand, in the two south-eastern sites, sheep and goats were predominant. Therefore, a more detailed analysis shows some differences between areas despite the general predominance of caprine remains.

As far as caprines are concerned, at Althiburos, there are more sheep (6.26% NISP) than goats (0.91% NISP). Results are similar for Carthage (MacKinnon, 2010) and Ghizen, where 10.52% of the remains are identified as sheep and 8.54% as goats. In contrast, at Zita, the authors documented a predominance of goat remains (0.85% of NISP are sheep and 1.7% of NISP are goat). This information is not available for Utica.

Figure 2. Relative frequencies of faunal remains recovered in pre-Roman and Roman Tunisian sites

Figure 3. Relative frequencies of main species (cattle = *Bos taurus*, caprines = *Ovis aries*/*Capra hircus* and pigs = *Sus domesticus*) by sites during the pre-Roman period. Additional information on each site in Table 2

Table 2. Archaeozoological information on the pre-Roman sites mentioned in the text (*Bos taurus* = cattle; *Ovis aries*/*Capra hircus* = caprine; *Sus domesticus* = pig; *Equus sp.* = equid)

Pre-Roman sites	Utica	Carthage City	Althiburos	Zita	Ghizen
<i>Bos taurus</i>	265	1,364	523	2	43
<i>Ovis aries</i> / <i>Capra hircus</i>	142	1,453	1,007	39	70
<i>Sus domesticus</i>	88	382	352	0	3
<i>Equus sp.</i>	24	1	60	0	1
<i>Canis familiaris</i>	12	7	53	0	1
Wild mammals	3	2	4	4	0
Birds	0	0	23	8	1
Fishes	0	0	0	42	13
Mollusk	0	0	7	21	1
Herpetiles	2	0	44	1	0
NISP	536	3,208	2076	117	133

Abbreviation: NISP, number of identified specimens.

During the Roman period, cattle were clearly less important at all sites (Figure 4) and sheep and goat were still the most represented taxa. The proportion of pigs increased, principally at Carthage city, Tuburbo Maius and Althiburos, where they were 30% of the sample, and at Bir Ennahal, pig was the most represented species. This increase in pig remains is mainly documented at northern and inland sites, whereas at south-eastern coastal sites, there was a clear predominance of caprine remains, following the pattern documented in the previous period.

Information is also available on the proportion of sheep and goat during the Roman period. At Althiburos, sheep were still more predominant than goats, although the proportion of sheep decreased to 3.21% and goat to 0.35%. Similar proportions have been documented at Zama, where we registered 14.46% of remains as sheep and 6% as goats. At Zita, the proportion of sheep remains increased to 1.44% of NISP, and the frequency of goat decreased to 1.44%, so these two species were equally represented. At Ghizen, the proportion of sheep remains increased to 27.39% of NISP and that of goat decreased to 5.37% of NISP. Therefore, the proportion of sheep to goats increased. At the Meninx site, the authors also documented a predominance of sheep remains (11.2% sheep and 0.98% goats) during the Roman period. Despite this predominance, recent excavations in Meninx carried out by the University of Munich in collaboration with the Institut National du Patrimoine revealed that the percentage of sheep to goats in this site is variable. In the assemblage recovered in 2017 and 2018 dated to the Augustan period and the first century AD, sheep represent 7.0% and goats 1.3%. During the fourth to fifth century, sheep comprise 4.0% and goat remains even only 0.5% (Trixl S., personal communication, April 2020). Sheep largely predominate over goats in the Roman levels at Carthage (MacKinnon, 2010).

Table 3. Archaeozoological information on the Roman sites mentioned in the text (*Bos taurus* = cattle; *Ovis aries*/*Capra hircus* = caprine; *Sus domesticus* = pig; *Equus sp.* = equid)

Romansites	BirEnnahal	CarthageCity	ThuburboMaius	Althiburos	Zita	Meninx	Ghizen	Zama
Bostaurus	67	716	0	41	3	8	0	486
Ovisaries/Caprahircus	62	2,124	8	272	235	304	57	851
Susdomesticus	104	1895	5	196	17	50	6	105
Equussp.	11	6	0	6	0	1	1	6
Canisfamiliaris	3	1	0	1	0	107	0	14
Wildmammals	12	0	0	3	4	6	0	0
Birds	143	0	0	28	77	88	2	25
Fishes	67	0	0	0	313	239	5	0
Mollusks	26	0	0	9	174	0	0	6
Herpetiles	0	0	0	0	8	0	1	3
NISP	498	4,742	15	560	831	910	73	1,500

Abbreviation: NISP, number of identified specimens.

Figure 4. Relative frequencies (cattle = *Bos taurus*, caprines = *Ovis aries*/*Capra hircus* and pigs = *Sus domesticus*) by sites during the Roman period. Additional information on each site in Table 3

3.2 | Kill-off patterns

Table 4 shows the presence and predominance of age-at-death categories of caprines, cattle and pigs documented at each site during the pre-Roman and Roman periods.

Table 4. Presence and predominance of age-at-death categories of cattle (*Bos taurus*), caprines (*Ovis aries*/*Capra hircus*) and pig (*Sus domesticus*) documented at each site during the pre-Roman and Roman periods

Period	Sites	Cattle(juv.)	Cattle(ad.)	Caprine(juv.)	Caprine(ad.)	Pig(juv.)	Pig(ad.)
Pre-Roman	Utica	Present	Predominant	Present	Predominant	Present	Predominant
	CarthageCity	Present	Predominant	Present	Present	-	Present
	Althiburos	Present	Present	Predominant	Present	Present	Present
	Zita	-	Present	Predominant	Present	-	-
	Ghizen	Present	Predominant	Present	Predominant	-	Present
	Zama	Present	Predominant	Present	Predominant	Predominant	Present
Roman	CarthageCity	Present	Predominant	Present	Predominant	-	Present
	Althiburos	-	-	Present	Predominant	Predominant	Present
	Zita	Present	Present	Present	Present	Predominant	Present
	Meninx	Present	Present	Present	Present	Present	Present
	Ghizen	-	-	Present	Predominant	Predominant	Present
	Zama	Present	Predominant	Present	Predominant	Predominant	Present

Note.. Juv = juvenile; ad. = adult.

During the pre-Roman period, cattle meat was consumed from juvenile and adult individuals at Utica, Althiburos, Carthage and Ghizen, although meat from adult individuals predominated. In contrast, at Zita, only adult individuals were consumed. Sheep and goat meat were consumed from both juvenile and adult individuals at all sites during this period. However, at Althiburos,

there was a predominance of caprines killed between 6 and 12 months (Valenzuela-Lamas, 2016) and most caprines were slaughtered at juvenile and subadult ages at Carthage city (MacKinnon, 2010; Slopsma et al., 2009). Similar data were obtained from Zita, where most sheep and goat remains were from young animals, usually less than 1 year and often less than 3 months old (Moses et al., 2019). On the other hand, the meat consumed at Ghizen and Utica was predominantly from adult caprines. The pork consumed was mainly from adult individuals, although tender meat was also consumed at Utica and Althiburos.

During the Roman period, cattle meat was consumed not only from juvenile but also from adult individuals at Carthage city, Zita, Meninx and Zama (Table 4). Data from Zita, Meninx and Ghizen reveal that sheep and goat meat was also consumed from juvenile and adult individuals (Azaza & Colominas, 2019; Burke, 2001; Fabis & King, 2009; Moses et al., 2019). For Carthage, Zama, Ghizen and Althiburos, the data show that sheep and goat meat was predominantly consumed from adult individuals, suggesting that these animals may have been kept mainly for secondary products such as milk and wool (Azaza & Colominas, 2019; MacKinnon, 2010; Slopsma et al., 2009; Valenzuela-Lamas, 2016). Meninx (and probably Zita) is the only site in which caprine exploitation is more oriented towards meat production. As far as pork is concerned, data from Carthage reveal that most pigs were killed around 2–3 years of age, presumably when they had attained maximum weights (MacKinnon, 2010). On the other hand, data from Althiburos, Zita, Meninx, Ghizen and Zama show that pork was mainly consumed from juvenile individuals (Azaza & Colominas, 2019; Burke, 2001; Fabis & King, 2009; Moses et al., 2019; Valenzuela-Lamas, 2016).

3.3 | Body part frequencies

Information about body part frequencies in the Iron Age comes from Althiburos and Ghizen (Figure 5). Most body parts appear to be present at both sites, although the frequencies of representation are very different. At Althiburos, the predominant cattle parts are from the head, forelimb and feet. At Ghizen, trunk elements are well represented. For sheep and goat, the most represented body parts are head, forelimb, hind limb and feet at Althiburos. In contrast, there is a predominance of parts from the trunk, forelimb and feet at Ghizen (Figure 5). At Althiburos, most body parts of the pig are present but at low frequencies (<30%). At Ghizen site, the only three pig bones documented are phalanges.

Slightly more data are available for the Roman period from Bir Messaouda, Althiburos, Ghizen and Zama (Figure 6). Most cattle body parts are present at Bir Messaouda, Althiburos and Zama. At Ghizen, there are no cattle remains. At Bir Messaouda, forelimb parts are the most represented (40%). In contrast, at Althiburos, more than 50% of the elements are from the feet. At Zama, the most represented elements are from the trunk and forelimb. As far as sheep and goats are concerned, most body parts are present at Bir Messaouda, Althiburos, Ghizen and Zama, although at each site, different body parts predominate. The frequency of head parts is also lower at Ghizen than at other sites. For pigs, most body parts are present at Althiburos and Zama. At Bir Messaouda, the trunk is absent. At Ghizen, only mandibles and feet elements are present among the six remains recovered.

Figure 5. Body part representation of cattle, sheep/goat and pig documented in pre-Roman Tunisian sites

4 | DISCUSSION

Now that we have presented the data, we can move on to explore different aspects of meat consumption in Tunisia between the Iron Age and the Roman period. Since the Iron Age, most faunal remains as resulting from food waste can be attributed to four domestic species (cattle, sheep, goat and pig), which is the diversified model of pastoral production of sedentary or semisedentary populations (Halstead, 1996). In addition to these preponderant taxa, which make up a large part of the meat diet, we observe the presence of birds, fishes and mollusks in the faunal spectrum, especially during the Roman period. Therefore, although meat consumption was generally focused on four species, it was also rich and varied. On the other hand, wild mammals are practically absent, which shows that hunting would have had little importance in the supply of meat and meat products.

From a diachronic point of view, we observe significant variations in the frequency of species, the proportion of different body parts and animal's mortality profiles, which show changes in the meat diet.

During the Iron Age, the most common animals were caprines and cattle. Age-at-death analyses show that cattle were mainly killed at adult ages at most of the sites and especially

where they were the most common animal, showing that they were mainly exploited for traction and/or milk and not for meat production, although their meat was consumed after their slaughter. This pattern is different if we focus on caprines, which were reared not only for wool and milk but also for meat. The data on body parts for this period show that the sites produced and consumed meat products, as all anatomical parts are represented. We have not documented either a predominance of rich meat elements, which would characterize a consumer centre, or a predominance of poor meat elements, which would characterize a producer centre (Hambleton, 1999). Therefore, all these data seem to suggest that during the Iron Age, there was no specialization in terms of meat production and consumption. Some animals were exploited as meat producers, but their meat was mainly consumed only after their capacities for traction, reproduction or wool and milk production started to decline.

Figure 6. Body part representation of cattle, sheep/goat and pig

After the Roman conquest of the area, the relative frequency of cattle decreased and the relative frequency of pig increased, whereas the importance of sheep and goat remained stable over time. The most important changes in the relative frequencies are in the north area, whereas few changes are documented in the south-east. These changes were accompanied by a general shift in kill-off patterns. Now, pigs were reared as meat producers, caprines were used mainly to produce milk and wool and cattle were still mainly exploited for their traction. The fact that most of the consumed meat was from adult individuals suggests the little importance given to meat in the diet and that the products that were obtained during the animal's life were of greater value. The only animal reared exclusively for its primary products

was the pig. Body part representation also shows interesting results, especially for caprines. Most of these parts were associated with rich meat elements, such as the trunk, forelimbs and hind limbs, which suggest that for the first time, most of the population of these sites were only consumers of meat products.

Therefore, a general comparison between the pre-Roman and Roman data shows a consistency in diet over time because caprines are the most commonly consumed domestic animals in terms of NISP in these two periods. However, the changes in kill-off patterns reveal a more specialized livestock exploitation than in the previous period that can be linked with changes in diet and the pig becoming the primary meat producer.

High levels of pork (especially young pork) in the ancient diet have been considered a characteristic feature of Romanitas (King, 1999; MacKinnon, 2001), and it has been suggested that pork may have been a high-status food or associated with the military. Pigs are the most profitable species for meat production because they reproduce quickly, they are omnivores and they require little maintenance (Thurmond, 2006), making them ideal for supplying urban agglomerations. Therefore, for either cultural (adoption of new consumption habits) or practical reasons (an increase in the consumer population), Rome influenced the Tunisian diet.

Another factor we consider that could influence dietary patterns was animal husbandry. If we take into account that meat was fundamentally consumed from adult individuals (with the exception of pigs), the animal husbandry practised in each settlement (or territory) would be key to the meat diet followed in this settlement (or territory). In relation to this, Azaza and Colominas (2019) proposed that a more specialized animal husbandry mainly focused on sheep to obtain wool was developed during the Roman period in Tunisia. We believe that this change in husbandry practices, with a reduction of the economic importance of cattle, influenced dietary patterns, involving a reduction of beef consumption.

Another factor that could influence dietary patterns was the landscape. The low number of wild mammals remains recovered in most of the Roman sites under study here could be denoting a very little forested land around the sites. In that sense, would be easy rearing animals and obtain their meat after slaughter them than hunt in the surrounding areas. Palaeoenvironmental studies from Carthage and Althiburos corroborate this hypothesis, showing that the vegetation cover of the cities' surrounding lands was dry and seriously degraded (Cantero and Piqué, 2016; Van Zeist, Bottema, & van Deer Ven, 2001).

These changes, however, were more pronounced in these sites located on the northern coast and inland, whereas on the south-eastern coast the preferences continued to be for sheep and goat meat with a little increase of pork consumption. An explanation of this phenomenon could be the degree of Roman intervention on the territory (and therefore, the degree of absorption of Roman traits), in which these areas would be the first to be controlled by the Roman Empire, with the establishment of Utica as the new provincial capital. However, it has also pointed out that the destruction of Carthage involved a trade increase of the south-eastern and Sahel cities of Tunisia such as Hadrumèter, Lepti Minus or Thapsus, with the presence of Latin and Roman negotiatores in there (Pasa, 2009).

No differences on meat consumption patterns have been documented if we compare cities and colonies, the main function of the sites under study here. The only site considered as a village is Ghizen, in which an increase on pork is not documented but the decrease of the economic importance of cattle is attested (Azaza & Colominas, 2019). Therefore, another factor that would also influence dietary patterns could be the rural or urban character of the site.

We propose that the continuity of pre-Roman dietary patterns in some areas and settlements and not in others is related to a variety of factors that are not all linked with the Roman influence in the territory. We propose that the meat dietary pattern documented in Tunisia during the Roman period was influenced not only by cultural factors, but also by economic and maybe environmental constraints, all of which were interconnected.

5 | CONCLUSIONS

This study sheds light on Roman Tunisian meat dietary patterns, a topic that has been subject to little investigation to date due to the lack of archaeozoological studies.

The study of the frequency of species, body part representation and mortality profiles of 16 faunal assemblages from the Iron Age and Roman period shows that some changes in dietary habits came about as a consequence of the Roman conquest of Tunisia. These changes were a specialization in meat production and an increase in pork consumption, in particular, in northern and inland Tunisia.

We suggest that the changes that this pre-Roman dietary pattern underwent are due to several interconnected factors (such as environment and livestock practices) and not just the cultural influence of Rome in the territory. We must bear in mind that most of the meat consumed during the Iron Age and the Roman period (with the exception of pork) were from adult individuals and that meat consumption would have been unusual in the schemes of the Mediterranean diet.

To gain greater insight into the dietary habits of ancient Tunisia and find answers to questions of social identities and cultural choices, further research is needed. First, it would be of prime interest to study more faunal assemblages (with a more accurate chronology) so that the data and hypotheses presented here can be confirmed. Second, an integrated study of faunal remains and vessels, focusing on aspects that have not been discussed here, such as butchery practices and cooking techniques, would be an attractive prospect.

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