Feeding Rome: Food supply, trade and consumption in an ancient metropolis

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Appendix: food items reported by André (L'alimentation et la cuisine à Rome)

Tab. 1. Cereals.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Barley	*Hordeum*	*Hordeum vulgare* (*H. hexasticum* was the only one cultivated in Magna Graecia until 4th c. BCE; *H. disticum* was signalled in Greece from 3th c. BCE)	Used to prepare *puls*, bread (pancakes). It was considered less nutritious than wheat. So, it was cultivated mainly as feed, and was consumed in periods of food shortage.		Columella *Rust*. 2, 9, 14. Plin. *HN* 18, 14.
Emmer	*Triticum*, *far*, *ador*, *adoreum*	*Triticum turgidum* subsp. *dicoccum*	Hard, hulled, without awns, the first wheat consumed by the Romans during the first 300 years of their history. Var.: *zea* – *semen* – probably with awns; *scandals* or *scandula*, cultivated in Gaul, 2 times less expensive than barley; *arnica*, cultivated in Gaul and Italy, with long and heavy ears; *spelta*, called *far* by St. Jerome.		Plin. *HN* 18, 12; 18, 19; 18, 20. *Ed. Diocl.*, 1, 8.
Einkorn wheat	*Tiphe*	*Triticum monococcum*	According to Plin. only cultivated and consumed outside Italy.		Plin. *HN* 18, 12; 18, 20.
Durum wheat	*Triticum*	*Triticum durum*	Cultivation started in 5th C. BCE. From 1st c. BCE, cultivated everywhere in Mediterranean. Cato gave to his slaves only naked wheat. From 1st c. CE Italian farmers only cultivated naked wheat as food.		Plin. *HN* 18, 12; 18, 20.
Half hard wheat	*Triticum*	*Triticum turgidum*			
Soft wheat	*Siligo*	*Triticum vulgare* or *aestivum*			
Common millet	*Milium*	*Panicum miliaceum*	Cultivated from Po Valley to Campania, but also in Gaul. More important than agronomists tell us. Short cultivation cycle (3 months) and high resistance to drought, so important in famines.	Used in soups.	Strabo 4, 1, 2; 4, 2, 1; 5, 1, 12. Plin. *HN* 18, 24; 18, 49.

Foxtail millet	*Milium* (?)	*Setaria italica*	Longer duration of cultivation cycle compared to common millet (5 months).		Columella *Rust.* 2, 9, 17-19.
Rye	*Secale, centenum*	*Secale cereale*	In 1st c. CE only cultivated by the Ligures (Taurini). Later also cultivated in Pavia, Germania, Macedonia. Disliked for human consumption, and usually mixed with *T. dicoccum*.		Plin. *HN* 18, 40.
Oat	*Avena*	*Avena sativa*	By Cato still considered as weed. Only later cultivated as green forage or for grain, used as feed. Cheapest of the cereals.		Cato *Agr.* 37, 5. Columella *Rust.* 2, 10, 24; 2, 10, 32. Plin. *HN* 18, 44. *Ed. Diocl.* 1, 17.
Sorghum	*Sorghum*	*Sorghum bicolor*	According to Plin. introduced in 70 CE from India. Use unknown. Probably corresponds to the *olyra* of Egypt cited by Plin. (*HN* 18, 62).		Plin. *HN* 18, 10.
Rice	*Oryza*	*Oryza sativa*	Not cultivated in South Europe before the Arabs, but grown in Syria and Babylon. Imported from India as medicine. Very expensive in time of Horace.	A decoction could be prepared with it. Used to thicken sauces. Elagabalus made it cook, and pearls were added (SHA *Heliogab.*, 21, 3; Apicius *RC* 2, 2, 9).	Hor. *Sat.* 2, 3, 155. Celsus, 2, 18, 10.

Tab. 2. 'Legumes' (*Legumina*).

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Fava bean	*Faba*	*Vicia faba*	Forbidden to Flamen dialis, but always been present in ancient diet in Mediterranean. Several types (white, black, of '3 months', of Baia - *Baiana*). *Lomentum*: flour. Cooked and mashed: *puls fabata*, or *conchis*, *concha*, *conchicula*. These preparation were eaten with lard. Fava beans were also eaten raw as titbit. The tender pods (*fabaciae*) were eaten as our green beans. This was probably only for rich people (only mentioned by Apicius).	*Concha* (Apicius *RC* 5, 4, 1). *Fabaciae* (Apicius *RC* 5, 6, 1-4).	Columella *Rust.* 2, 9, 8; 2, 10, 9; 11, 2, 50. Plin. *HN* 18, 30. *Ed. Diocl*. 1, 9-10.
Pea	*Pisum*	*Pisum sativum*	Not mentioned before Varro. Only sold in dried form (broken or unbroken).	*Conciclae* (Apicius *RC* 5, 4, 3-6). *Indicum pisum* (Apicius *RC* 5, 3, 1-9).	Varro *Rust.* 3, 7, 8. Columella *Rust.* 2, 10, 4. Plin. *HN* 18, 31. *Ed. Diocl*. 1, 13. Pal. 6, 1, 1.
Chickpea	*Cicer*	*Cicer arietinum*	Known var.: ram, black, Punic, of Venus... Sold both dried and green, in bunches.	Grilled as snack, boiled, with a cheese pie (Apicius *RC* 5, 8, 1-2).	Columella *Rust.* 2, 10, 20; 9, 1, 8.Plin. *HN* 18, 32. Petr. 35, 3; 66, 4. *Ed. Diocl*. 1, 35; 6, 37.
Grass pea, blue sweet pea, Indian pea	*Cicercula*	*Lathyrus sativus*	Uses better described by comic/ satiric Greek authors.	Difficult to cook and digest. Still, used even nowadays.	Plin. *HN* 18, 26; 22, 72; 18, 32.
Red pea	*Eruilia*	*Lathyrus cicera*	More expensive than fava beans and broken beans; as expensive as lentils.	First baked and peeled, than boiled.	Plin. *HN* 18, 23. *Ed. Diocl*. 1, 12.
Bitter vetch	*Ervum*	*Vicia ervilia*	First of all, animal forage. Eaten only during famines. According to Plin., it gives vomit, diarrhoea, headache.		Plin. *HN* 22, 73. Gal. VI, 546.
Vetch	*Uicia*	*Vicia sativa*	More or less the same as bitter vetch.		*Ed. Diocl*. 4, 551.
Lentils	*Lens*	*Lens culinaris*	Considered more nutritious than pea. Famous those from Gela, Alexandria, Syria.	Cooked or baked, or made in soups, also after being peeled.	Cato *Agr.* 116; 132. Varro *Rust.* 1, 32, 2. Columella *Rust.* 2, 7,

					1. Plin. *HN* 18, 31; 18. 46; 18, 55.
Lupine	*Lupinus*	*Lupinus albus*	Important for both humans and animals. Bitter, was long cooked to remove the taste. Sold in cities already cooked (see *lupinarii* in Pompeii). Cheap.	Not cited by Apicius, but highly considered by Plin.	Columella *Rust.* 10, 115; 2, 10, 1. Plin. *HN* 18, 10; 18, 36; 22, 74. *Ed. Diocl*. 1, 19; 1, 20.
Cow pea	*Phaseolus*	*Vigna unguiculata*	Called *phaseolus*, but not our bean. Unknown before Cato, it arrived from Greece. Cultivated in Varro's time. Also eaten as green beans (*ph. virides*; see remark for fava beans).	For Apicius, *P. virides* were also the fresh grains (Apicius *RC* 5, 8, 1-2).	Diosc. 2, 146. Virg. *G.* 1, 227. Plin. *HN* 18, 33. *Ed. Diocl*. 6, 33; 1, 21; 6, 39.
Flax	*Linus*	*Linum usitatissimum*	After peeling, used for *polenta* (3 pounds flax/ 20 pounds barley flour). Probably more a Greek recipe.	For recipe prepared in Cisalpine Gaul, see Plin. HN 19, 16.	Columella *Rust.* 2, 7, 1. Plin. *HN* 18, 14; 19, 2-4.
Sesame	*Sesamum*	*Sesamum indicum*	Classified as both *frumenta* and *legumina*. Not discussed by Cato. Plin. knew it came from India. Grain mentioned by Plaut.	Used in bakery products and salads.	Plaut. *Poen*. 326. Columella *Rust.* 2, 7, 1; 12, 59, 2. Plin. *HN* 18, 10; 18, 22.
Poppy	*Papaver*	*Papaver somniferum*	Already grown in the garden of Tarquinius Superbus.	Mainly used in baked goods. Ancient Romans ate it also as ingredient of a dessert (grilled and with honey) and in *cocetum* (drink offered to brides before the marriage night.	Liv. I, 54, 6. Plin. *HN* 19, 53. Ov. *Fast*. 4, 151-152.
Hemp	*Cannabis*	*Cannabis sativa*	Mentioned in Columella *Rust.* between chickpea and millet.	Baked as ingredient of a dessert. Also in soups.	Diosc. 3, 148. Columella *Rust.* 2, 7, 1-2. Plin. *HN* 19, 56 (he does not mention food uses). Gal. VI, 549. *Ed. Diocl*. 1, 29.

Tab. 3. Roots.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Turnip	*Rapa*	*Brassica rapa*	That from Amiternum was better than that from Nursia. That from Nursia was better than that from mount Algidus.	Apicius *RC* 3, 13, 1 and 2.	Plin. *HN* 18, 34-35.
Radish	*Raphanus*	*Raphanus sativus*	To limit the effect on breath, Plin. suggests to eat it with very ripe olives.		Plin. *HN* 19, 26; 19, 87.
Carrot	*Pastinaca*, (*staphylinus* for Columella) later *carota*	*Daucus carota*	Sold in bunches with 25-50. Preferred when large and at least 1 y.o.	Apicius *RC* 3, 21	Columella *Rust.* 9, 4, 5; 10, 168. Plin. *HN* 19, 27. Pal. 3, 24, 9.
Parsnip	*Pastinaca*, *siser* (?)	*Pastinaca sativa*	Confused with carrot in sources. Popular after Tiberius promoted it.	Popular.	Columella *Rust.* 10, 114;11, 3, 35. Plin. *HN* 19, 27.
Alexanders, horse parsley	*Smyrnium*	*Smyrnium olosatrum*	Leaves, buds, roots, stems were all eaten.		Diosc. 3, 67. Columella *Rust.* 10, 123; 11, 3, 36; 12, 58. Plin. *HN* 19, 62. Pal., 5, 3, 2.
Elecampane	*Inula*	*Inula helenium*	Very bitter, Columella describes the *inulae curatio* (12, 48). Plin. also suggests ways to contain the taste. Livia ate it every day.		Columella *Rust.* 11, 3, 35. Plin. *HN* 19, 29. Pal. 3, 24, 13
Beet	*Beta nigra*	*Beta vulgaris* var. *rapacea*			Plin. *HN* 19, 40.
Caraway	*Careum*	*Carum carvi*	Today only used for the seeds, but at that time also the root was eaten.		Plin. *HN* 19, 49.
Eryngium	*Centum capita*	*Eryngium campestre*	Plin. says that the Greeks ate the root, and André adds that it would be strange if the Roman peasants only gathered the wild kind without cultivating it.		Plin. *HN* 22, 10.
Colocasia	*Aros*, *colocasia*	*Colocasia antiquorum* or *esculenta*	Starch rich roots eaten raw or cooked. Introduced shortly before the time of Plin.	Apicius *RC* 3, 4, 2; 6, 9, 9; 7, 17.	Plin. *HN* 19, 30; 21, 51; 24, 91. Pal. 3, 24, 142.
Cachris	*Libanotis*	*Cachrys libanotis*	Belonging to the Apiaciae family. The root was used, above all in medicine.		Plin. *HN* 19, 62; 24, 59.

Tab. 4. Bulbs.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Onion	*Cepa*	*Allium cepa*	The Latin agronomists had developed various kinds.	Apicius *RC* 4, 2, 24.	Columella *Rust.* 12, 10, 1. Plin. *HN* 19, 32.
Garlic	*Allium*	*Allium sativum*	In 4th c. CE more expensive than dried onion. As the onion, it was considered food for poor people (see *aleatum* of Plaut. – *Most.* 48). Famous: *ulpicium* (large), Punic, of Cyprus.	With the Cyprus variety a kind of aioli was made by mixing pureed garlic with vinegar and oil.	Columella *Rust.* 11, 3, 20. Plin. *HN* 19, 34. *Ed. Diocl*. 6, 20 and 23.
Muscari	*Bulbus*	*Muscari comosum*	Bitter, required long cooking. In 4th c. CE more expensive than onion and garlic. Regarded as aphrodisiac.	Was eaten cooked and with oil, *garum,* wine or vinegar or fried (Apicius *RC* 4, 5, 1-2; 7, 14, 1-4).	Cato *Agr*. 8, 2. Plin. *HN* 19, 30; 20, 40. *Ed. Diocl.* 6, 41 and 42.
Gladiolus, Sword lily	*Gladiolus*	*Gladiolus segetum*		Crushed through bread dough.	Plin. *HN* 21, 67.
Asphodel	*Asphodelus*	*Asphodelus* spp.	Galenus found it uneatable (VI, 652). Still used nowadays: young buds blanched in water and conserved in oil; leaves used to wrap burrata.	Cooked under ash and then seasoned with salt and oil.	Plin. *HN* 22, 32.

Tab. 5. 'Asparaguses' (shoots and sprouts).

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Asparagus	*Asparagus*, *corrudae* (wild types)	*Asparagus officinalis*, *tenuifolius*, *aphyllus*, *acutifolius*	The wild types were 3 times cheaper than the cultivated. Famous those of Nisida and Ravenna (3 pieces weighted about a pound).	Apicius *RC*, 3, 3; 4, 2, 5-6.	Plin. *HN* 19, 19; 19, 42. *Ed. Diocl*. 6, 34 and 35.
Broccoli	*Cymae*, *caules*, *cauliculi*	*Brassica oleracea* var. *asparagoides*	In 4th c. CE, one bunch was as expensive as 5 first choice cabbages.	Cooked in water and in sauces (Apicius *RC* 3, 1-6).	Columella *Rust*. 11, 3, 24. Plin. *HN* 19-41. *Ed. Diocl*. 6, 9-11.
Calabash	*Lagenaria*?	*Lagenaria siceraria*			Plin. *HN* 19, 24.
Samphire, sea fennel	*Batis marina*	*Crithmum maritumum*			Plin. *HN* 21, 50.
Star of Bethlehem, grass lily	*Ornithogala*	*Ornitoghalum umbellatum*			Plin. *HN* 21, 62.
Broomrape		*Orobanche* spp.			Diosc. 2, 142.
Strawberry	*Fraga*	*Fragaria vesca*	The wild type. Non cultivated in antiquity.		Plin. *HN* 21, 50.
Field bindweed	*Iasine*	*Convolvolus* spp.	Eaten raw with vinegar, probably also cooked with salt and oil. We know nowadays that this plant is a purgative.		Plin. *HN* 22, 39.
Spotted golden thistle	*Scolimus*	*Scolymus maculatus*	Very young buds.		Diosc. 3, 14. Plin. *HN* 22, 43.
Hop	*Lupum*	*Humulus lupulus*			Plin. *HN* 21, 50.
Black bryony	*Tamnus*	*Dioscorea communis*, *Tamnus communis*	Still eaten in England in the 17th c.	Apicius *RC* 4, 2, 7.	Diosc. 4, 184. Plin. *HN* 21, 50.
Grape	*Vitis*	*Vitis vinifera*			Plin. *HN* 14, 23.
Butcher's broom	*Ruscus*	*Ruscus aculeatus*			Diosc., 4, 144, 2. Plin. *HN* 21, 50; 23, 83. *Ed. Diocl*. 6, 36.
Fig	*Ficus*	*Ficus carica*	Cato describes the conservation of both the young buds and the leaves.		Cato *Agr*. 101. Plin. *HN* 15, 34.

Tab. 6. 'Artichokes' (flowers and parts of flowers).

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
'Artichoke'	*Carduus*	*Cynara cardunculus*	Not the artichoke we know, but the cardoon. The stems were called *cardui*, the receptacles *sponduli* or *sphondyli*. In the 4th century CE, the price of *sponduli* was 6 *denarii*/ 12 pieces; that of *cardui* 10 *denarii*/5.	Apicius gives 3 recipes for the *cardui* (3, 19, 1-3) and 7 for the *sponduli* (3, 20, 1-7).	Columella *Rust.* 10, 235; 11, 3, 28. Plin. *HN* 21, 57; 19, 19; 19, 43. *Ed. Diocl*. 6, 1; 6, 2. Pal. 4, 9, 1-2.
Eryngium	*Centum capita*	*Eryngium campestre*			Plin. *HN* 22, 8-9.
Carline thistles	*Spina alba*	*Carlina vulgaris*			Plin. *HN* 15, 34.

Tab. 7. Salads (green parts of plants eaten raw).

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Lettuce	*Lactuca*	*Lactuca sativa*	Eaten either at the beginning of the meal or, in early Rome, at the end.	Eaten with a sauce of *garum* and vinegar (Apicius *RC* 3, 18, 2).	Mart. 13, 14, 1-2
Chicory	*Intubus*	*Cichorium endivia*		Apicius *RC*, 3, 18, 1.	Columella *Rust.* 10, 111-112. Plin. *HN* 19, 39. *Ed. Diocl.* 6, 3. Pal. 11, 11, 1.
Wild chicory	*Intubus*	*Chicorium intubus*			
Garden cress	*Nasturtium* or *cardamom*	*Lepudium sativum*	Cultivated. Because of the strong taste, it was mixed with lettuce.		Columella *Rust.* 10, 231. Plin. *HN* 19, 35; 19, 44. Pal. 2, 14, 3.
Water cress	*Sisymbrium*	*Nasturtium officinale*	In the 4th c. CE, sold in bunches of 20 plants.		Varro *Ling.* 5, 103. Plin. *HN* 19, 55. *Ed. Diocl.* 6, 24.
Purslane	*Portulaca, porcillaca*	*Portulaca oleracea*			Columella *Rust.* 10, 376. Plin. *HN* 20, 81. Celsus, 2, 20, 1.
Samphire, sea fennel	*Batis marina*	*Crithmum maritumum*			Plin. *HN* 26, 50.
Water parsnip	*Sium, lauer*	*Sium angustifolium or erectum*	Remained wild.		Plin. *HN* 22, 41.
Fenugreek	*Fenum Graecum*	*Trigonella foenum-graecum*	Recent introduction from orient.	With sauce with *garum* oil and vinegar (Apicius *RC* 5, 7).	
Leek	*Porrum sectile, sectiuum, sectum, tonsile*	*Allium ampeloprasum*	That of Tarentum was known for its strong smell. Nero ate it for its voice, without bread. For the rest, it was a food for poor people.		Columella *Rust.* 11, 3, 30. Plin. *HN* 19, 33.

Tab. 8. 'Spinaches' (green parts of cultivated or wild plants prepared in soups).

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Cabbage	*Brassica*	*Brassica oleracea*	Consumed after cooking in water, seasoned with salt, herbs and oil, or raw, with vinegar (Cato) or lard. See in Hor. also remark on preferences of citizens for relatively wild types compared to cabbages coming from gardens. Known types: kale (*B. ol.* var. acephala); of Aricia; of Bruttium; of Cuma; soft; with smooth leaves; *Lacuturnensis*; of the Marrucini; of Pompeii; of the Sabellians; of Signa; *Tritianum* (or *Tritanum*).		Cato *Agr.* 156-157. Columella *Rust.* 10, 130-131; 10, 139. Plin. *HN* 19, 19; 19, 41; 20, 33. Hor. *Sat.* 2, 2, 117.
Mallow	*Malva*	*Malva sylvestris*	Sold in bunches, considered as laxative.	Simply prepared with sauce of *oenogarum*, with oil and vinegar, *oenogarum* and pepper, *garum* and cooked wine (Apicius *RC* 3, 8).	Columella *Rust.* 10, 247. Plin. *HN* 19, 44; 20, 84.
Lettuce	*Lactuca*	*Lactuca sativa*	Cooked and chopped, as side dish for boar. Several varieties were developed: white, red, black, purple, Greek, of Cyprus, of Cadix, of Cappadocia, of Cilicia, of Laconia. Probably also food for poor people.	Apicius *RC* 3, 15, 3; 3, 18, 2.	Columella *Rust.* 10, 181-186; 10, 187-188; 10, 191. Plin. *HN* 19, 38; 20, 26.
Celery	*Apium*	*Apium graveolens*	Not much used, because not enough improved, and therefore not very pleasant.	Apicius *RC* 3, 15, 2. Eaten together with cabbage.	Columella *Rust.* 10, 166; 11, 3, 33. Plin. *HN* 19, 35. Pal. 5, 3, 1.
Chard	*Beta candida*	*Beta vulgaris cicla*	Seeded three times a year, so always present. Appreciated as frugal food, but considered insipid, so, strongly seasoned.	Eaten with lentils or fava beans with mustard (Apicius *RC* 3, 11, 1-2).	Plin. *HN* 19, 40. Mart. 13, 13, 1-2; 3 47, 9.
Orache, arrach, mountain spinach	*Atriplex*	*Atriplex hortensis*	Cultivated for the leaves, until the spinach appeared.		Plin. *HN* 19, 35; 20, 83. Pal., 5, 3, 3.
Purple amaranth	*Blitum*	*Amaranthus blitum*	Considered insipid. The consumption is mentioned by Plaut. Leaves and shoots consumed cooked with oil, salt and lemon juice.		Plaut. *Cas.* 748; *Pseud.* 815. Plin. *HN* 19, 35; 20, 23. Pal. 4, 9, 17.

Patience dock	*Rumex, lapathum*	*Rumex patientia*	Plin. argues that the wild type was better than the cultivated. Ignored by Cato, but cultivated in the time of Varro. According to Plin. eaten only with barley porridge, probably because the doctors considered it bad for the stomach.		Varro *Ling.* 5, 103. Columella *Rust.* 10, 373. Plin. *HN* 19, 37; 19, 40. Celsus 2, 21; 2, 25, 2.
White mustard	*Sinapis*	*Sinapis alba*	Cultivated for the grains, but the leaves were also consumed.	Apicius *RC* 4, 2, 7.	*Columella Rust. 10, 1222*. Plin. *HN* 19, 35; 19, 54. Pal. 3, 24, 5.
Black mustard	*Sinapis*	*Brassica nigra*	See above.		See above.
Alexanders, horse parsley	*Smyrnium*	*Smyrnium olosatrum*	Leaves, buds, roots, stems were all eaten.		Diosc. 3, 67. Columella *Rust.* 10, 123; 11, 3, 36; 12, 58. Plin. *HN* 19, 62. Pal., 5, 3, 2.
Radish	*Raphanus*	*Raphanus sativus*			Galenus, *De alim. fac.*, 2, 70.
Parsnip	*Pastinaca, siser*	*Pastinaca sativa*	When the leaves were young.		Diosc. 3. 69.
Turnip	*Rapa*	*Brassica rapa*	Young leaves and shoots.	Apicius *RC* 3, 13, 1 and 2.	Plin. *HN* 18, 34.
Broadleaved pepper-weed	*Lepidium, siliquastrum*	*Lepidium latifolium*	Only young leaves, otherwise irritant.		Diosc. 1, 174. Columella *Rust.* 11, 3, 41. Plin. *HN* 19, 51; 19, 61-62.
Leek	*Porrum capitatum*	*Allium ampeloprasum*	The best came from Aricia and Ostia.	Eaten with cabbage, fava beans and other vegetables (Apicius *RC* 3, 10, 1-4).	Columella *Rust.* 10, 139; 11, 3, 32. Plin. *HN* 19, 33.
Nettle	*Urtica*	*Urtica dioica*, *Urtica urens*	Considered healthy, also by Apicius. Food for poor people.	Apicius *RC* 3, 17.	See, D. Bois, *Les plantes alimentaires*, 452-453.
White nettle	*Urtica*	*Lamium album*	See above.	Apicius *RC* 3, 17.	See, D. Bois. Plin. *HN* 21, 55.

Horse-radish	*Armoracia*	*Armoracia rusticana*			Diosc. 112, 2. Columella *Rust.* 12, 9, 2.
Nipplewort	*Lapsana*	*Lapsana rusticana*	Identification uncertain.		Plin. *HN* 20, 37.
Sow thistle	*Sonchos*, *cicirbita*	*Sonchus oleraceus*, *Sonchus asper*			Plin. *HN* 22, 44.
Plantains	*Plantago*	*Plantago maior*			Diosc. 2, 130.
Garland chrysanthemum	*Buphthalmus caltha*, *caltha*.	*Chrisanthemum coronarium*, now *Glebionis coronaria*			Plin. *HN* 25, 42.
Common salsify	*Tragos*	*Tragopogon porrifolius*			Plin. *HN* 27, 116.
Giant fennel	*Ferula*	*Ferula communis*			Plin. *HN* 15, 34; 19, 56; 20, 98.

Tab. 9. Botanical fruits presently considered vegetables.

English name	**Latin name**	**Scientific name**	**Use/ notes**	**Recipes**	**Source**
Cucumber	*Cucumis*	*Cucumis sativus*	Important food, but judged as non-nutritious by doctors. Bitter. To try to improve the taste, the seeds were soaked in milk and honey before seeding. As expensive as turnip.	Eaten both raw, with or without skin, with honey and sweet wine or cooked, accompanying fish or chicken (Apicius *RC* 3, 6, 1-3; 4, 2, 7).	Plin. *HN* 19, 23. *Ed. Diocl*. 6, 28.
Squash, calabash	*Cucurbita*	*Lagenaria sativa* (or *siceraria*?)	Not mentioned before Varro. Martial used it to characterize ridicule meals. Considered not very nourishing by Celsus, but healthy by Plin. As expensive as cucumber.	Apicius (3, 4, 1-8, 4, 5, 3) gives 9 recipes: cooked, fried, filled...	Columella *Rust.* 10, 234. Plin. *HN* 19, 24. Mart. 11 31. Celsus 2, 18, 3. *Ed. Diocl*. 6, 26; 6, 27.

Tab. 10. Mushrooms, truffles.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Mushrooms, chanterelles	*Fungi*, among other *funghi farnei*	*Cantarellus cibarius* (?)		Apicius *RC* 7, 15, 1-3.	Plin. *HN* 16, 11; 16, 35; 22, 47; 22, 99.
Boletus	*Boletus*	*Boletus* spp., *Agaricus* spp.		Apicius *RC* 7, 15, 4-6.	Plin. *HN* 16, 11; 16, 35; 22, 47; 22, 99.
Porcino	*Suilli*	*Boletus edulis*	Dried ones imported from Bithynia.		Plin. *HN* 16, 11; 16, 35; 22, 47; 22, 99.
Truffles	*Tuber*	*Tuber magnatum* (white truffle)		Apicius gives 6 recipes (7, 16, 1-6)	Plin. *HN* 19, 11
		Tuber aestivum (summer truffle)	Brown outside, white inside.		
		Tuber rufum (red truffle)			
		Tuber brumale (black truffle)			
		Terfezia leonis (desert truffle)	Imported from Libya.		

Tab. 11. Fruits.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Fig	*Ficus*	*Ficus carica*	Very important food; at least 44 var. were known. Imported from Caria, Syria and Africa.	Together with bread (Cato decreased the bread ration from 5 to 4 pounds when the figs started to be available.	Cato *Agr.* 56, Plin. *HN* 15, 21. Sen. *Ep.* 87, 3.
Apple	*Malus*	*Malus domestica*	Thirty two var. were known, different in shape, colour, quality of the pulp and keepability.		Plin. *HN 15,* 14-15.
Pear	*Pirus*	*Pirus communis*	Six var. in the time of Cato, 44 in Plin. time.		Cato *Agr.* 7, 3-4. Plin. *HN* 15, 16-17.
Prune	*Prunus*	*Prunus domestica*	About 12 var. were known. Also the *Prunus damascena* (from Damascus), with goof attitude to be dried, was cultivated in Italy. In the 1st c. CE people thought it was of ancient introduction.		Diosc. 1, 121. Cato *Agr*. 133, 2. Plin. *HN* 13, 10; 15, 12. Gal. VI, 213.
Quince	*Malum cotoneum*	*Cydonia vulgaris*, *C. oblonga*	Originally from orient (Armenia, Persia, Turkestan), cultivated in Italy already in 3rd c. BCE. Several varieties were known: *malum chrysomelinum* (gold yellow), of Italy, of Naples, *malum strutheum* or *strutium*, *malum mulvianum* (could be eaten raw).		Cato *Agr.* 7, 3; 133, 2. Columella *Rust.* 5, 10, 19. Plin. *HN* 15, 10.
Pomegranate	*Malum Punicum*, *malum granatum*	*Punica granatum*	Arrived in Rome from Carthago. According to Plin., 9 var. were known, with different acidity. A specific var. had soft pits, even though it was called *apyreum*.	Mentioned as part of meals.	Plin. *HN* 13, 34; 15, 34. Sen. *Ep.* 85, 5. Petron. 31, 11. Mart. 7, 20, 10; 13, 42-43.
Black mulberry	*Morus*	*Morus nigra* (*M. alba* introduced in Italy only in Middle Ages)	Pliny the Younger had a lot of these trees (together with figs) in his garden in Lavinium. Sold at markets, considered very healthy.	Eaten fresh or conserved, used as dessert.	Columella *Rust.* 10, 401; Plin. *HN* 24, 54; 25, 73. Plin. the Younger, *Ep*. 2, 17, 15. Hor. *Sat*. 2, 4, 22. *Ed. Diocl*. 6, 77. Pal. 3, 25, 28-30.

Service tree	*Sorbus*	*Sorbus domestica*	The fruits need to be over ripened to lose their astringency. Kept for the winter, in different ways.		Plin. *HN* 17, 37. Mart. 13, 26.
Grape vine	*Vitis*	*Vitis vinifera*	*Vites escariae* (vines for table grapes), according to Plin., and *vites suburbanae*, according to Isidorus. The plant with the most cultivated varieties: *ambrosia* (could be long kept on vine), *bumastus* (large cluster), *ceurania*, *cydonites* (taste and aroma of quince), *dactylus* (long grain), *duracina* (firm pulp), *forensis* (of the market, well suitable to be trasported), *Lybica*, *purpurea*, *Rhodia*, *scripula* (small grain), *stephanites* (forming 'crowns'), *tripedanea* (3 feet high), *unciaria* or *uncialis* (long grain, 1/12 feet).		Varro *Rust.* 1, 54, 1. Columella *Rust.* 3, 2, 1; 3, 2, 2. Plin. *HN* 14, 4. Isid. *Or*. 17, 5, 15-17.
Cherry	*Cerasum*	*Prunus avium*, *P. cerasum*	According to Latin authors, introduced by Lucullus from Pontus in 73 BCE. The cultivation developed quickly and new var. were obtained: of Apronius (more red), of Caecilius (black and round), *duracina* (in Campania called cherry of Pliny), of Junius (not suitable for transportation), of Lusitania (3 colours), of Lutatius (very black).		Plin. *HN* 15, 30. Tert. *Apol.* 11, 8. Athen. 50 f-51 a.
Citron	*Malum Assyrium*, *M. medicum*, *M. citreum*	*Citrus medica*	Originally from north India, not mentioned by Varro and Columella. Virg., between 37 and 29 BCE, mentions his bitter juice, but he gives the impression it is an exotic tree. According to Plin. well known in Greece and used as medicine. Probably introduced in Italy only in 4th c. CE In 4th c. CE 30 times more expensive than pomegranate.	Apicius uses it in 'minutal', and uses its leaves for a wine of roses without roses (1, 3, 2; 4, 3, 5)	Diosc. 1, 115, 5. Virg. *G*. 2, 126. Plin. *HN* 12, 7; 23, 56. Mart. 13, 37. *Ed. Diocl*. 6, 75. Pal. 4, 10, 11; 4, 10, 16.
Peach	*Malum Persicum*, *Persicum*	*Prunus persica*	Unknown to Cato and Varro, it was introduced in Italy at the beginning of the 1st c. CE Mentioned the first time by Celsus, Plin. knew already several varieties: *Asiaticum* (ripened after autumn), *duracinum* (with pulp adherent to pit) *Gallicum* (*precocious*), *populare*, *supernas* (of Sabinia). Still, not very appreciated for its taste and aroma.		Plin. *HN* 15, 11; 23, 67. Celsus, 6, 7.
Apricot	*Malum praecox*, *praecoquum*	*Prunus armeniaca*	Same origin as the peach, introduced in Italy around 50 CE. At the beginning, the price was absurd: 30 *sestertii* for one piece. In 4th c. CE, 4 *denarii* for 10.		Diosc., 1, 115, 5. *Ed. Diocl*. 6, 50.

Lasura, Assyrian plum	*Myxa*	*Cordia myxa*	Arrived in Italy during the time of Plin. Used more in medicine than as food.		Plin. *HN* 15, 12; 22, 57.
Jujube, red date	*Zizyphus*	*Zizyphus jujuba*	Originally from Asia, introduced around 10 CE by Sextius Papinius. Known to Columella. The sweet fruits were sold at the same price as mulberries.		Columella *Rust.* 9, 4, 3. Plin. *HN* 15, 14; 17, 14. Pal. 1, 37, 2. *Ed. Diocl.* 6, 56.
Azerole, Medit. medlar	*Tubur*	*Crataegus azarolus*	Introduced in Italy from the Near East, even though Plin. wrote that it came from Africa at the same time as jujube. Sweet fruits were much appreciated.		Columella *Rust.* 11, 2, 11; 11, 2, 96. Plin. *HN* 15, 14; 17, 14. Mart. 13, 42-43. Pal. 10, 14, 1.
Carob	*Siliquae, siliquae Graecae*	*Ceratonia siliqua*	Also from the Near East, Columella is the first to mention it.		Columella *Arb.* 25, 1. Plin. *HN* 15, 26. Pal. 3, 25, 27.
Medlar	*Mespilus*	*Mespilus germanica*	The type of fruit is mentioned for the first time by Diosc., but only from Pal. we know that this species was cultivated. Could be eaten only overripe.		Diosc. 1, 118; Plin. *HN* 15, 22. Pal. 4, 10, 19-22; 14, 69.
Watermelon	*Pepo*	*Citrullus lanatus*	From tropical Africa, mentioned as *pepo* for the first time by Plin. Diosc. highly valued its pulp. It was sold for 1 *denarius* per piece. They were much smaller than now.	Served with a sauce of pepper, mint, honey, *liquamen*, vinegar and sometimes *silphium* (Apicius RC 3, 7).	Diosc. 2, 135. Plin. *HN* 19, 23. *Ed. Diocl.* 6, 32.
Melon	*Melo, melopepo*	*Cucumis melo*	The same origin as *pepo*, arrived in Italy (Campania) during the time of Plin. In the 4th c. CE the large ones were sold at twice the price of *pepo*.	See above.	Plin. *HN* 19, 23. Pal. 5, 3, 5. *Ed. Diocl.* 6, 30-31.
Cornelian cherry, European cornel	*Cornum*	*Cornus mas*	Eaten frequently by shepherds.		Virg. *Aen.* 3, 649. Calp. Sic. 4, 24. Hor. *Sat.* 2, 2, 57.
Strawberry tree	*Arbutum, unedo*	*Arbutus unedo*	Plucked during the winter in forests		Virg. *G.* 2, 520. Ov. *Met.* 1, 104.
Elderberry	*Sambucus*	*Sambucus nigra*	Eaten as jam.		Plin. *HN* 16, 121.

Blackberry	*Rubus*	*Rubus fruticosus*	Eaten fresh or cooked.		Plin. *HN* 24, 73. Ov. *Fast*. 4, 509; *Met.* 1, 105. Pal. 14, 16.
Wood strawberry	*Fraga*	*Fragaria vesca silvestris*	Not cultivated (it takes a lot of space, only for one harvest).		Virg. *B*. 3, 92. Ov. *Met*. 1, 104.
Raspberry	*Rubus*	*Rubus idaeus*	Used above all in medicine.		Diosc. 4, 38. Plin. *HN* 16, 71.
Blueberry	*Vaccinium*	*Vaccinium myrtillus*	Planted on hunting grounds to attire birds.		Virg. *B*., 2, 18. Plin. *HN* 16, 31.
Dates	*Palmae, dactyli*	*Phoenix dactylifera*	Eaten fresh only in Orient and Africa, for the rest imported to Rome dried. Several var. known: *nicolai* (the most famous), *patetae* (very juicy). Folded in golden colour paper, they were sold at theatre shows.	Used to sweeten different recipes, among others, hare, crayfish (Apicius *RC* 8, 8, 2; 8, 8, 3; 9, 1, 1; 9, 12).	Varro *Rust.* 2, 1, 27. Plin. *HN* 13, 9; 15, 34. Mart. 8, 33, 11-12; 13, 27; 11, 31, 10.

Tab. 12. Nuts.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Chestnut	*Castaneae*	*Castanea sativa*	Not mentioned before Varro, according to Virg. it was the food of shepherds. Plin. mentions already several var.: *Tarentina*, *balanitis*, *Salariana*, *Corelliana, Tereiana*, black, of Naples.	Eaten cooked, baked, in puree (Apicius *RC* 5, 2, 2).	Virg. *B*. 1, 81; 2, 52; 7, 53. Varro *Rust*. 3, 15, 1-2. Plin. *HN* 15, 25.
Walnut	*Nux*	*Juglans regia*	In the 4th c. CE, fresh were twice as expensive as dried.	Eaten as dessert with figs and grapes/ raisins, also grilled, and in other preparations.	Plaut. *Poen*. 326. Virg. *B*. 8, 39. Catull. 61, 131. Plin. *HN* 15, 24. Hor. *Sat*. 2, 2, 121-122. *Ed. Diocl*. 6, 50 and 52.
Hazelnut	*Nux Pontica*, *nux Abellana* (*Abella* in Campania)	*Corylus avellana*	Cato kept them fresh in earth in vases. They were sold also shelled.	Eaten fresh or grilled (Apicius *RC* 6, 5, 2; 7, 13, 4).	Cato *Agr*. 8, 2; 143, 3. Plin. *HN* 15, 24; 17, 96; 17, 21. *Ed. Diocl*. 6, 53.
Almond	*Nux Graeca*	*Prunus amygdalus*	Romans got to know it through the Greeks.	Eaten fresh or dried, raw or grilled, and in several recipes (Apicius *RC* 2, 2, 10; 6, 5, 3).	Cato *Agr*. 8, 2. Plin. *HN* 15, 24.
Pine nut	*Nuclei pinei*, *pinei*	*Pinus* spp.	Highly valued by the Romans, they were more expensive than almonds and shelled hazelnuts.	Used in several recipes, were also put in puls and meat preparations (Apicius *RC* 2, 2, 10; 2, 3, 1; 2, 5, 1).	Plin. *HN* 15, 9. *Ed. Diocl*. 6, 54. Pal. 12, 7, 12.
Pistachio	*Pistacium*	*Pistacia vera*	Introduced in 37 CE by Vitellius from Syria. The nut was initially used only in medicine. Unknown the application as food.		Plin. *HN* 13, 10; 15, 9; 23, 78. Pal. 4, 10, 37; 11, 12, 3.

Tab. 13. Molluscs.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Common barnacle	*Balanus*	*Balanus* spp.	Offered as entry in the banquet in honour of Lentulus. It was also farmed.		Plaut. *Rud*. 297. Columella *Rust.* 8, 16, 7. Macr. 3, 13, 12.
Common whelk	*Bucinum*	*Buccinum* spp.	Easy to digest and nourishing.		Cael. Aur. Acut. 2, 210; Chron. 3, 35. Plin. *HN* 9, 61.
Dog whelk	*Purpura*	*Nucella lapillus*	Also used to prepare purple dye. Farmed for this purpose.		Columella *Rust.* 8, 16, 7. Celsus 2, 24, 3.
Sea urchin	*Echinus*	*Echinus* spp.	Highly appreciated, particulary those of Misenum. Offered as entry in the banquet in honour of Lentulus. Sold at half the price of oysters.	Apicius *RC* 4, 2, 13; 9, 8, 1-5.	Plaut. *Rud*. 297. Ennius cit. Apul. *Apol.* 39, 3. Hor. *Sat.* 2, 4, 33; 2, 8, 52. Sen. *Ep.* 95, 26. Juv. 4, 143. Mart. 13, 86.
Bitter-sweet clams	*Glycymaris*	*Glycymeris* spp.	Offered as entry in the banquet in honour of Lentulus.		Plaut. *Rud*. 297.
True limpet	*Lopada*	*Patella vulgata*			Plaut. *Cas.* 493; *Rud.* 297.
Mussels	*Mitulus*, *mys*, *musculus*	*Mytilus* spp.		Apicius *RC* 9, 9.	Plaut. *Rud*. 297. Ennius cit. Apul. *Apol.* 39, 3. Hor. *Sat.* 2, 4, 28. Mart. 3, 60, 4.
Murex, rock snail	*Murex*, *muriculus*	*Murex* spp. (Spp. from Atlantic sea are transferred to genera *Haustellum* and *Hexaplex*). See also *Bolinus brandaris*.	Cultivated for the purple dye.		Columella *Rust.* 8, 16, 7. Celsus 2, 24, 3.

Great scallops	*Pecten*	*Pecten* spp.	The best were from Tarentum, Altinum and Venetia.		Hor. *Sat.* 2, 4, 34. Petron. 70, 6. Plin. *HN* 32, 53.
Banded venus	*Pectunculus*	*Clausinella fasciata* (or other spp. from Veneridae)	Highly appreciated. Farmed.		Varro cit. Gell. 6, 16, 5. Columella *Rust.* 8, 16, 7.
Clam (a type of)	*Peloris*	-	Offered as entry in the banquet in honour of Lentulus. Mart. found it tasteless. Appreciated that of the Lucrinus lake.		Macr. 3, 13, 12. Mart. 10, 37, 9. Hor. *Sat.* 2, 4, 32.
Perna	*Perna*	*Perna* spp.	A type of mussel.		Plaut. *Capt.* 850. Plin. *HN* 32, 54.
Spondilus, thorny oyster	*Spondylus*	*Spondilus* spp.	Considered by Sen. as a very refined dish, served to sick people with no appetite. Farmed. Sold at the same price of sea urchins, half of the price of oysters.	It could be prepared as quenelle (Apicius *RC* 2, 1, 6).	Columella *Rust.* 8, 16, 7. Sen. *Ep.* 95, 26. Macr. 3, 13, 12. Cael. Aur. *Acut.* 2, 210; *Chron.* 3, 35. *Ed. Diocl.* 5, 10.
Cowrie	*Ueneria*	Fam. Cypraeidae			Sen. *Ep.* 95, 26
Sea anemone	*Urtica marina*	Order Actiniaria		Served as entry, garnishment, or in fish *minutal* (Apicius *RC* 4, 2, 12; 4, 3, 1).	Plaut. *Rud.* 298. Macr. 3, 13, 12.
Oyster	*Ostreum*	Fam. Ostreidae	A species with smoth scales was called *leiostreum* or *liostracon*. C. Sergius Orata was to first to farm them in 108 BCE. Famous those of the Lucrinus and Averna lakes, Brundisium, Tarentum. In the 1st c. CE also those of Britanny were famous. In 4th c. CE they were sold for 100 *denarii* for 100 pieces.	Mostly raw with *garum* or a sauce with cumin or other sauces, but also cooked and in quenelles (Apicius *RC* 1, 14, 1-2; 9, 6).	Plaut. *Rud.* 298. Columella *Rust.* 8, 16, 7. Plin. HN 9, 79; 32, 21. Sen. *Ep.* 77, 16; 78, 23; 95, 26. *Ed. Diocl.* 5, 6.
Squid	*Lolligo, lolliguncula*	Order Teuthida		Eaten as quenelle (Apicius *RC* 2, 1, 1-2; 9, 3, 1-2)	Plaut. *Cas.* 493. Ov. *Hal.* 132.
Common octopus	*Polypus*	*Octopus vulgaris*		Apicius *RC* 9, 5.	Plaut. *Rud.* 1010.

Cuttlefish	*Sepia*, *sepiola*	*Sepia* spp.	Already consumed in the time of Plaut.	Quenelles, stuffed, in court-bouillon, cooked in its ink (Apicius *RC* 2, 1, 1, ; 9, 4, 1-4; 5, 3, 3)	Plaut. *Cas.* 493; *Rud.* 659.
Snails	*Cochlea*	Class Gastropoda	Since about 50 BCE, the first cochlearia was built to farm them in captivity. Before that year they were only gathered. They were fed on cooked wine and flour. They were considered by some as aphrodisiac. Not appreciated by Plin. and Mart., but eaten by Plin. the Younger when he was in the countryside. In the 4th c. CE, sold in two sizes: 4 *denarii*/ 20 pieces for the large, 4/ 40 for the small.	After purging for several days, Apicius fried them in oil, or roasted them (*RC* 7, 18, 1-4).	Varro *Rust.* 3, 3, 3; 3, 14, 1; 3, 14, 4. Hor. *Sat.* 2, 4, 58-59. Petron. 130, 7. Plin. *HN* 30, 15. Plin. the Younger, *Ep.* 1, 15, 2. Mart. 13, 53. *Ed. Diocl*. 6, 46 and 47.

Tab. 14. Crustaceans.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Spiny lobster	*Astacus* (also *Carabus* and *locusta*?)	*Palinurus elephas*	Mentioned only in one text. Not much used?	Quenelle (Apicius *RC* 2, 1, 1).	
European or common lobster	*Cammarus*	*Homarus gammarus*	According to Juv., it could be put in a half egg as garnishing. Was this the size used at the time? Or did Juv. mean other crustaceans (e.g., shrimps, also called *caris* and *squilla*)?	Two recipes of quenelles, of which Elagabalus was very fond, described by Apicius (*RC* 2, 1, 1; 2, 1, ;3)	Juv. 5, 80-85.
Mantis shrimp	*Squilla*	*Squilla* spp.	More appreciated than nowadays.	Roasted, as garnishing or quenelle (Apicius *RC* 2, 1, 3)	Lucilius, cit. Cic., *Fin*. 2, 24. Hor. *Sat.* 2, 4, 58; 2, 8, 42.
Shrimp	*Carides* (Greek name)	Order Decapoda	According to Athen., Apicius ate in Minturne shrimps (*carides*; or were they lobsters in the first place?) larger than Alexandrian lobsters.		Athen. 7 a-b.
Crabs (probably)	*Plagusia striata*	*Plagusia* spp.	Mentioned by Plaut.		Plaut. *Rud*. 298.

Tab. 15. Salt water fishes.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Sturgeon	*Acipenser*	*Various genera*	The most appreciated by Plaut. (end of the Republic). Less appreciated at the beginning of the CE, and therefore absent in Apicius, but again valued by Martial.		Plaut. frg. cit. Macr. 3, 16, 1-4; Lael. cit.. Cic. *Fin*. 2, 24. Cic. *Tusc*. 3, 43; *Fin*. 2, 91. Mart. 13, 91.
Garfish, sea needle	*Acus*, *belone*	*Belone belone*	Easy to digest, and still not very appreciated.		Plin. *HN* 9, 76. Mart. 10, 37, 6.
Eel	*Anguilla*	*Anguilla anguilla*	Fished above all in the Garda lake and in the Messina channel; fish for common meal, but Mart. appreciated it.	Apicius *RC* 10, 4, 1-2.	Plin. *HN* 9, 38. Macr. 3, 15, 7. Juv. 5, 103. Mart. 12, 31, 5.
Anchovy	*Apua*	*Engraulis encrasicolus*	Fried or boiled.	Apicius gives the recipe of a dish of anchovies without anchovies (*patina de apua sine apua*; *RC* 4, 2, 12; 4, 2, 20)	
Hake and whiting	*Asellus*	*Merluccius merluccius, Merlangius merlangius*	Took the place of sturgeon when this became less appreciated.		Plin. *HN* 9, 28.
Sea breams	*Aurata*, *chrysophrys*, *cantharus*	Sparidae family	Farmed in sea or lake ponds. Appreciated the one from the lake Lucrinus. The taste of chantarus was considered not particularly pleasant.	Fried or with sauces (Apicius *RC* 4, 2, 31; 10, 3, 8-9).	Columella *Rust*. 8, 16, 2. Mart. 13, 90. Ov. *Hal*. 103.
Haddock	*Bancus*	*Melanogrammus aeglefinus*	For Caelius Aurelianus easy to digest. Probably the *bacchus* of Plin. According to André, from the genus 'Asellus'.		Cael. Aur. *Acut*. 2, 210. Plin. *HN* 9, 28; 32, 77.
Shad, river herring	*Chalcis*	*Alosa* spp.	They spawn in rivers.		Columella *Rust*. 8, 17, 12. Plin. *HN* 9, 71; 9, 74. Athen. 328 c.

Spotted flounder	*Citharus*	*Citharus linguatula*	According to Plin., the less tasty of the flounders, even though the Greek found it excellent.		Plin. *HN* 32, 53. Athen. 305f-306a
Conger eel	*Conger*	*Conger* spp.	Fished since ancient times, eaten cold, it could be roasted.	Apicius *RC* 10, 1, 9.	Plaut. *Aul*. 399; *Mil*. 760; *Persa*, 110. Ter. *Ad*. 377.
Skate	*Cornuta*	Fam. Rajidae		Apicius *RC* 10, 1, 10.	
Damselfish	*Coruus*, *Coracinus*	*Chromis chromis*	Flesh quite tough according to Celsus.		Celsus 2, 18, 7.
Common dentex	*Dentex*	*Dentex dentex*	Highly appreciated, searched also to be farmed in coastal ponds.	Fried or boiled (Apicius *RC* 4, 2, 31; 10, 3, 6-7).	Columella *Rust.* 8, 16, 8.
John Dory	*Faber*	*Zeus faber*	Fished above all in the Atlantic ocean (Cadix).		Columella *Rust.* 8, 16, 9. Plin. *HN* 9, 31.
Picarel	*Gerres*	*Spicara smaris*	For poor people, not appreciated.		Mart. 3, 77, 7; 12, 32, 15.
Shark	*Glaucus*	Superorder Selachimorpha	The head was highly appreciated. The best was sold in Cuma.		Ennius cit. Apul. *Apol.* 39, 3. Athen. 295c, 295e-f.
Gobius	*Gobius*, *Gobio*	*Gobius* spp.			Ov. *Hal*. 130. Plin. *HN* 9, 83; 32, 53. Juv. 11, 37.
Sterlet	*(H)elops*	*Acipenser ruthenus*	According to Ov., not known in Italian seas, famous that of Rhodes, bought in Sorrentum. Some people found it the best of the fishes.		Ennius cit. Apul. *Apol.* 39, 3. Varro cit. Gell. 6, 16, 5. Ov. *Hal*. 96. Plin. *HN* 9, 79; 32, 54.
Bass	*Lupus*	Order Perciformes	It took the place of the sturgeon as well, when this became less appreciated. The most famous was the one fished in Rome between the two bridges, where the sewer came into the river. This variety was called *catillo* (dishes licker). It was farmed in ponds and was used to populate lakes.	Apicius *RC* 4, 2, 32.	Columella *Rust.* 8, 16, 1; 8, 17, 8. Plin. *HN* 9, 28; 9, 79. Mart. 2, 37, 4-5; 2, 40, 4. Hor. *Sat.* 2, 2, 31..
Blotched picarel	*Maena*	*Spicara maena*	Not appreciated.		Plaut. *Poen*. 1312. Lucil. 1077. Cic. *Fin.*

					2, 91. Mart. 12, 32, 15.
Saddled seabream	*Melanurus*	*Oblada melanura*	Farmed in sea ponds.		Ennius cit. Apul. *Apol.* 39, 3. Columella *Rust.* 8, 16, 8.
Brown wrasse	*Merula*	*Labrus merula*	Appreciated, and farmed in sea ponds		Columella *Rust.* 8, 16, 8; 8, 17, 8. Plin. *HN* 32, 53.
Mullets	*Mugil*	*Mugil* spp.	Also farmed in ponds.	Apicius *RC* 4, 2, 31; 9, 10, 6-7.	Columella *Rust.* 8, 16, 1; 8, 17, 8.
Mullus, goatfish	*Mullus*	*Mullus* spp.	Very often cited. Large fishes were paid even 5000-8000 *sestertii*. In the time of Petronius it was considered as common by refined palates.	With *garum*. From its liver, *allec* could be prepared (Apicius *RC* 4, 2, 22; 9, 12; 10, 2, 11-12	Columella *Rust.* 8, 17, 7-8. Mart. 13, 79. Sen. *Ep.* 95, 42. Plin. *HN* 9, 31. Petron. 93, 2, v. 8.
Muraena	*Muraena*	*Muraena* spp.	Very often cited for human consumption. Those from the strait of Sicily were highly appreciated and were called *flutae*. They were also farmed in sea ponds.	Grilled of cooked, with a sauce (Apicius *RC* 10, 2, 1-6).	Plaut. *Amph*. 319; *Aul*. 399; *Persa* 110. P. 9, 169. Mart. 13, 80. Macr. 3, 15, 7-8.
Anglerfish	*Mustela marina*	Order Lophiiformes	They were also farmed in sea ponds. The best were those from Clupea (Cap Bon, today's Kelibia or Calibia).		Ennius cit. Apul. *Apol. 39, 3.* Columella *Rust.* 8, 17, 8.
European plaice	*Passer vulgarus*	*Pleuronectes platessa*	Also farmed in sea ponds.		Columella *Rust.* 8, 16, 7. Hor. *Sat.* 2, 8, 29.
Painted comber	*Perca*	*Serranus scriba*		Apicius *RC* 10, 1, 14.	
Monkfish, fishing-frog	*Rana marina, rana*	*Lophius piscatorius*	Fished above all along the coast of Laurentum.		Cic. *Nat. deor*. 2, 125. Mart. 10, 37, 5.
Turbot	*Rhombus*	*Scophthalmus maximus*	Fish for rich people, fished in Adriatic sea, above all close to Ravenna.		Hor. *Epod*. 2, 50; *Sat*. 1, 2, 116; *Perse* 6, 23. Mart. 3, 45, 5;

					13, 81. Ov. *Hal*. 125. Juv. 4, 39. Plin. *HN* 9, 79.
Salmon	*Salmo*	*Salmo* spp.	Not present in Mediterranean, so known by the Romans, but unclear if it really was eaten.		Plin. *HN* 9, 31.
Salema porgy	*Salpa*	*Sarpa salpa*	Appreciated only in Ibiza, disliked elsewhere. It needed to be beaten with a stick to tenderize him before cooking. We are now aware of its psychoactivity. It was consumed as a recreational drug.		Ov. *Hal*. 121. Plin. *HN* 9, 31. Athen. 321. Pommier, De Haro. (2006). *Clinical Toxicology*, 44, 2 , 187.
Sardine	*Sardina*	*Sardina* spp. and *Sardinella* spp.	Sold at the price of second quality sea fish.		Columella *Rust.* 8, 17, 12. *Ed. Diocl*. 5, 12.
White seabream	*Sargus*	*Diplodus sargus* (probably)	Fished close to Brundisium.		Ennius cit. Apul., *Apol.* 39, 3. Plin. *HN* 9, 30.
Mediterranean parrotfish	*Scarus*	*Sparisoma cretense*	First choice dish, above all in the time of Plin. Tasteless according to Mart. who appreciated above all the viscera, like Vitellius who liked the liver. It could be fished only from Sicily to Asia minor, but under Claudius an attempt was done to introduce it on the coast between Ostia and Campania.		Ennius cit. Apul., *Apol.* 39, 3. Columella *Rust.* 8, 16, 9. Hor. *Epod*. 2, 50; *Sat*. 2, 2, 22. Petr. 93, v. 6. Plin. *HN* 9, 29. Mart. 13, 84. Suet., *Vit*. 13, 5.
Mackerel	*Scomber*	*Scomber* spp.	One of the most consumed fishes.		Plaut. *Capt*. 851. Cato *Agr*. 95, 8. Mart. 3, 50, 9; 4, 86, 8.
Scorpionfish	*Scorpio*, *scorpio marinus*	*Scorpaena* spp.	Prepared in court-bouillon with dill, celery, coriander, leek, oil and salt.	Apicius gives a recipe of this fish cooked and one with turnip (*RC* 10, 3, 10; exc. 7).	Plin. *HN* 32, 31.

Sole	*Solea*, *lingulaca*	*Solea solea*	It could be bred in sea ponds.	Apicius gives also a recipe with eggs (RC, 4, 2, 138; 4, 2, 155; exc. 19).	Plaut. *Cas*. 497. Varro *Ling*. 5, 77. Columella *Rust.* 8, 16, 7.
Gilt-head (sea) bream	*Sparus*, *sparulus*	*Sparus aurata*	Hard flesh, so not appreciated.		Mart. 3, 60, 6. Ov. *Hal*. 106-107. Celsus 2, 18, 7.
Tuna	*Thunnus*, *thynnys*	*Thunnus* spp., *Neothunnus* spp.	One of the most consumed, both fresh and conserved. Its name was different depending on the age: *cordula* (young), *pelamys* (at least 1 year), *sarda* (Atlantic tuna). Particularly appreciated were the belly, the tail and the neck.	Apicius gives 2 recipes of *thunnus* and 6 of *cordula* (*RC* 10, 3, 4-5; 9, 10, 1-5)	Plin. *HN* 9, 18. Cael. Aur. *Chron*. 1, 27.
Marbled electric ray	*Torpedo*	*Torpedo marmorata*	According to Plin., its the liver very tender.	Apicius gives 2 recipes (*RC* 9, 2, 1-2).	Plin. *HN* 9, 67.
Stingray	*Trygon*, *pastinaca*	*Dasyatis* spp.			Plaut. *Capt*. 851.
Green wrasse	*Turdus*	*Labrus viridis*	Farmed in sea ponds.		Columella *Rust.* 8, 16, 8; 8, 17, 8.
Maigre, shade fish	*Umbra*, *umbra marina*	*Argyrosomus regius*	Farmed in sea ponds.		Ennius cit. Apul., *Apol.* 39, 3. Columella *Rust*. 8, 16, 8.

Tab. 16. Undetermined salt water fishes.

Latin name	Use/ notes	Recipes	Source
Acharna	Maybe the bass (oder Perciformes). The head, and above all the brain, were much appreciated.		Athen. 311 d.
Apriculus	The best one was fished in Taranto.		Enn. cit. Apul. *Apol.* 39, 3.
Elacata	Suitable to be salted.		Columella *Rust.* 8, 17, 12.
Iulida	With soft flesh. Plin. calls it iulis, but it does not describe it.		Cael. Aur. *Chron.* 1, 22. Plin. *HN* 32, 31.
Lacertus, *lacerta*	Group of undetermined fishes. For poor meals.	Cooked and seasoned with rue (Apicius *RC* 10, 3, 1).	Mart. 7, 78, 1; 12, 19, 1. Juv. 14, 131.
Lagitus		Apicius *RC* 4, 2, 21 and 26.	
Oculata	Soft flesh, probably the ophthalmias of Plaut.		Plaut. *Capt.* 850. Celsius 2, 18, 7.
Rubellio	Perhaps identical to the Erythinus.		Apicius *RC* 10, 1, 15.
Thursio	Mentioned by Plin. but not identified. Perhaps it is the shark. In Athen. this is the name for a delicate cut of the shark. In Apicius it seems a word for a cut of fish in general. Perhaps it is the low belly of fish.	*Patella esiciata de tursione* (Apicius *RC* 4, 2, 18).	Athen. 310.

Tab. 17. Freshwater fishes.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Shad	*Alausa*	*Alosa* spp.	They spawn in rivers.		Auson. *Mos.* 127.
Common bleak	*Alburnus*	*Alburnus alburnus*			Auson. *Mos.* 127.
Adriatic sturgeon	*Attilus*	*Acipenser naccarii*	Present in the Adriatic sea, but spawning in the Po river.		Plin. *HN* 9, 17.
Barbel	*Barbus*	*Barbus barbus*			Auson. *Mos.* 94 and 134.
Chub	*Capito*	*Squalius cephalus*			Ibid.
Carp	*Carpa*	Fam. Cyprinidae			Cassiod. *Var.* 12, 4.
Gudgeon	*Gobio*	*Gobio gobio*			Columella *Rust.* 8, 17, 14. Auson. *Mos.* 132.
Pike	*Lucius*	*Esox lucius*	According to Auson., it could be eaten only in cheap restaurants, but Anthimus considered it later a good fish.		Auson. *Mos.* 120-124. Anthim. 46.
Burbot, bubbot	*Mustela*	*Lota lota*	Mentioned by Plin. with reference to the lake of Constance and by Auson. with reference to Danube and Moselle.		Plin. *HN* 9, 29. Auson. *Mos.* 120-124.
European river lamprey	*Nauprida*	*Lampetra fluviatilis*	Not appreciated.		Anthim. 47.
Perch	*Perca*	*Perca* spp.	Higly appreciated.		Auson. *Mos.* 113. Anthim. 39.
Trout	*Salar*, *tructa*	*Salmo* spp., *Oncorhynchus* spp.			Auson. *Mos.* 88. Anthim. 39.
Salmon	*Salmo*	*Salmo* spp.			Auson. *Mos.* 97.
Catfish	*Silurus*	Order Siluriformes	Considered mediocre.	Apicius *RC* 9, 11.	Juv. 4, 33; 14, 132. Cael. Aur., *Chron*. 3, 142.
Tench	*Tinca*	*Tinca tinca*			Auson. *Mos.* 125.
Grayling	*Umbra*	*Thymallus thymallus*			Ibid. 90.

Tab. 18. Undetermined freshwater fishes.

Latin name	Use/ notes	Recipes	Source
Anchorago	Fished in the Rhine.		Cassiod. *Var.* 12, 4.
Cracatius			Anthim. 46.

Tab. 19. Hunted birds.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Wild duck	*Anas, boscis*	*Anas platyrhynchos*	Also farmed in aviaries.		Columella *Rust.* 8, 15, 1.
Wild goose	*Anser ferus*	*Anser anser*	Difficult to domesticate.		Varro *Rust.* 3, 10, 2. Plin. *HN* 10, 27; 10, 29.
Ring-dove	*Palumbes, palumbus*	*Streptopelia capicola*	Plin. mentions the yearly arrival in Etruria. Fattened in cages.	Roasted or cooked (Apicius *RC* 6, 4, 1-4).	Varro *Rust.* 3, 7, 1. P. 10, 72; 78. Hor. *Sat.* 2, 8 , 91. Mart. 2, 37, 6; 13, 67.
Rock dove	*Columba saxatilis*	*Columba livia*	Fattened in cages. Sold per pair.	Roasted or cooked (Apicius *RC* 6, 4, 1-4).	Hor. *Sat.* 2, 8 , 91. Mart. 2, 37, 6; 13, 67.
Turtle dove	*Turtur*	*Streptopelia turtur*	Already highly appreciated in the time of Plaut., above all if well fattened. Captured in harvest time, it was fattened in cages, but it could not be bred in captivity. More expensive than ring and rock doves.	Apicius gives different recipes (*RC* 6, 2, 1; 6, 3, 3)	Plaut. *Most.* 46. Varro *Rust.* 3, 3, 3; 3, 8, 1. Mart. 3, 60, 7; 3, 82, 21, 13, 53. *Ed. Diocl.* 4, 25.
Crane	*Grus*	*Grus* spp.	Already bred in Ancient Egypt, they were trapped in the winter when they were migrating south, or bred in captivity. The meat was considered nourishing.	Apicius gives 6 recipes, boiled, roasted, with turnip,... (*RC* 6, 2, 1-6).	Virg. *G.* 1, 307. Varro *Rust.* 3, 2, 14. Hor. *Epod.* 2, 35; *S.* 2, 8, 87. Plin. *HN* 10, 30. Celsus, 2, 18, 2.
Rock partridge	*Perdix*	*Perdix graeca*	Captured for breeding in cages. Not often consumed, probably because expensive.	Apicius *RC* 6, 2; 6, 3, 1-3.	Varro *Rust.* 3, 11, 4. Plin. *HN* 10, 51. Mart. 13, 65. *Ed. Diocl.* 4, 24. .
Grey partridge	*Perdix*	*Perdix perdix*	See above.	See above.	See above.
Thrush	*Turdus*	*Turdus* spp.	One of the favourite hunted birds, it was given as present. Widespread, so in the winter quite cheap (in 4th c. CE 60 *denarii*/ 10 pieces). Lucullus bred it to have it also in other season. Served at the table of higher classes. Elagabalus was fond of the brains.	Apicius gives 2 recipes (*RC* 4, 2, 14; exc. 29)	Varro *Rust.* 3, 3, 3. Columella *Rust.* 8, 9, 1; 8, 10, 1. Mart. 3, 47, 10. Petron. 40, 5. Plin. *HN* 10, 30. Hor. *Sat.* 2, 5, 10. Ov. *Ars. am.* 2,

					269. Plin. the Younger, *Ep.* 5, 2, 1. Macr. 2, 4, 22. *Ed. Diocl*. 4, 27.
Quail	*Coturnix*	*Coturnix coturnix*	Fattened in cages, but in time banned from tables because it ate seeds of a poisonous plant (Helleborus). For this reason, in the 4th c. CE it was sold at low price (20 *denarii*/ 10 pieces).		Varro *Rust.* 3, 5, 2. Plin. *HN* 10, 33. *Ed. Diocl*. 4, 41.
Francolin	*Attagena*	Fam. Phasianidae, subfam. Percidinae	Farmed in aviaries, sold in the 4th c. CE at 20 d*enarii*/ piece.	Apicius *RC* 6, 3, 3.	Plin. *HN* 10, 68. Hor. *Epod*. 2, 54. Ov. *Fast.* 6, 175. Mart. 13, 61. *Ed. Diocl*. 4, 30.
Ortulan bunting	*Ficedula*	*Emberiza hortulana*	The meat was delicate because the bird ate figs and grapes. It was eaten completely, it was a luxury food item. In the 4th c. CE it was sold at 4 *denarii*/ piece.	Part of 2 complicated recipes of Apicius (*RC* 4, 2, 5; 4, 2, 14).	Mart. 13, 49. Gell. 15, 8, 2. Juv. 14, 9. Petron. 33, 8. Suet. *Tib.* 42, 2. Macr. 3, 13, 12. *Ed. Diocl*. 4, 36.
Common teal	*Querquedula*	*Anas crecca*	Farmed in aviaries.	Mentioned once, boiled (Macr. 3, 13, 12).	Varro *Rust.* 3, 3, 3; 3, 11, 4. Columella *Rust.* 8, 15, 1.
Coot	*Phalaris*, *phaleris*, *fulica*	*Fulica atra*	Farmed in aviaries at the edge of ponds.		Varro *Rust.* 3, 11, 4. Columella *Rust.* 8, 15, 1
Western capercaillie, wood grouse, heather cock	*Tetras, tetrao*	*Tetrao urogallus*	Captured in the Alps or Apennines, it was considered to lose its taste if farmed in aviaries.		Plin. *HN* 10, 29.
Woodcock	*Scolopax*	*Scolopax* spp.	Also called *rustica* or *rusticola*, it had the same taste of the partridge.		Plin. *HN* 10, 54. Mart. 13, 76.
Great bustard	*Otis*, *Avis tarda*	*Otis tarda*	Originally from Spain, not consumed anymore after Plin. time, but appreciated by some people.		Plin. *HN* 10, 29. Synesius, *Ep*. 4, 165.
Stork	*Ciconia*	*Ciconia* spp.	More appreciated than the crane in the time of Augustus, but almost not consumed anymore 50 years later. Forbidden to Christians by pope Zacharias (741-752).		Hor. *Sat.* 2, 2, 49. Plin. *HN* 10, 30. Zach. *Epist.* 13, Migne, P.L. LXXXIX, c. 951 A.

Swan	*Cygnus*	*Cygnus* spp.	Not often mentioned as food, but farmed in aviaries. Its meat was considered heavy to digest. Its fat was used in medicine.		Plut. *De esu*. 2, 1, 6. Plin. *HN* 30, 10; 30, 22. Oribasius, 4, 77.
Flamingo	*Phoenicopterus*	*Phoenicopterus* spp.	It appeared on tables only during the Empire. Appreciated the brains and the tongs. Also farmed in aviaries.	Apicius RC 6, 6, 1-2.	Mart. 3, 58, 14; 13, 71. Juv. 11, 139. Sen. *Ep.* 110, 12. Plin. *HN* 10, 68. Suet. *Vit.* 13, 5. Celsus 2, 18, 3.
Sparrow	*Passer*	*Passer* spp.	It comprised several different species. In the 4th c. CE sold at 16 *denarii*/10 pieces.		*Ed. Diocl*. 4, 37.
Starling	*Sturnus*	*Sturnus* spp.	Sold at the same price of quails.		*Ed. Diocl*. 4, 42.
Lark	*Alauda*	*Alauda* spp.	Elagabalus ate plates of its tongs.		SHA *Heliogab.* 20, 5.
Common blackbird	*Turdus*	*Turdus merula*		Eaten roasted.	Varro *Rust.* 3, 5, 1; 3, 5, 14. Hor. *Sat.* 8, 91.
Cuckoo	*Cuculus*	*Cuculus* spp.	The meat was most delicate when the bird started to fly.		Plin. *HN* 10, 11.
Magpie	*Pica* (?)	*Pica* spp.			Mart. 3, 60, 8.
Crow	*Corvus*	*Corvus* spp.			Zach. *Epist.* 13, Migne, P.L. LXXXIX, c. 951 A.

Tab. 20. Undetermined hunted birds.

Latin name	**Use/ notes**	**Recipes**	**Source**
Ampelion	Farmed in aviaries.		*Ed. Diocl*. 4, 34.
Miliaria or Miliaca	Fattened in aviaries.		Varro *Rust.* 3, 5, 2. Cael. Aur. *Chron.* 1, 27.
Novae aves	Plin. mentions its arrival above the Po river in 69 CE		Plin. *HN* 10, 69.
Gallina rustica	Literature and identification attempts are contradictory.		Varro *Rust.* 3, 9, 1; 3, 9, 16-17. Columella *Rust.* 8, 2, 2-3; 8, 12.
Galbulus	Maybe the Old World orioles of the green finch.		Mart. 13, 68.
Aucellae	A mixed groups of small birds.	Apicius *RC* 5, 3, 2; 5, 3, 8.	

Tab. 21. Bred birds.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Chicken	*Pullum, gallinae*	*Gallus gallus domesticus*	Arrived from India through Persia, it was known by Aristophanes as Persian bird. From Plaut. we get the impression that it was long naturalised in Italy. The Greek varieties were large, but bad in egg production. Columella preferred an 'Italian' variety because highly productive. In Cato's time the fattening of fowl was already practised (*gallinae altiles* or *pastae*). To do this, wood melick was often used. Columella suggested to get rid (eat) chicken older than 3 years, because they produced less eggs. Castration of cocks was normally applied.	Several preparations were known: Parthian, Numidian, with vinaigrette, with silphium, with milk, stuffed... (Apicius *RC* 4, 2, 21; 4, 3, 3; 4, 5, 1; 5, 3, 8).	Arist. *Aves*, 485; 707; 833. Cato *Agr.* 89. Varro *Rust.* 3, 9, 6 and 19. Columella *Rust.* 8, 2, 4-13; 8, 5, 24. Plin. *HN* 10, 71. *Ed. Diocl*. 4, 23.
Goose	*Anser*	Fam. Anatidae, subfam. Anserinae	Domesticated in ancient time, they were fattened in *chenoboscion*. The fattened one was twice as expensive (in the 4th c. CE 100 *denarii*, vs. 200). Considered food for special occasions. The foie gras was already appreciated: it was obtained by feeding figs.	Apicius gives a recipe for boiled goose (*RC* 6, 5, 5; 6, 8) and 2 for foie gras (*RC* 7, 3, 1-2).	Cato *Agr.* 89. Varro *Rust.* 3, 2, 14; 3, 10, 1. Columella *Rust.* 8, 13, 1-3; 8, 14, 1. Mart. 13, 73. Plin. *HN* 10, 26-27. *Ed. Diocl*. 4, 21-22.
Duck	*Anas*	*Anas* spp.	Also domesticated in ancient time, they were fattened in *nessotrophium*. First served in banquets, from the 1st c. it was considered as a plebeian food. In the 4th c. CE it was sold for 40 *denarii* a pair (much cheaper than chicken - 60 *denarii* a pair).	Apicius gives 6 recipes, showing that it was an important product (*RC* 6, 2, 1-6).	Macr. 13, 52. Petron. 93, v. 4. *Ed. Diocl*. 4, 31.
Domestic pigeon	*Columba*	*Columba livia domestica*	Bred and fattened in *columbarium*. Several breeds were known (of Campania, of Alexandria,…). It was sold in the 4th c. CE for 24 *denarii* a pair.	Eaten either roasted or boiled (Apicius *RC* 6, 4, 1-4).	Varro *Rust.* 3, 7, 2. Columella *Rust.* 8, 8, 1; 8, 8, 8. *Ed. Diocl*. 4, 31. Pallad. 1, 24.
Guinea fowl	*Africana gallina*	Fam. Numididae (*Numida meleagris*)	Probably arrived in Italy after the conquest of Carthago. The detailed description of it by Columella allows the identification of the species and tells us that the bird was not	Not cited by Apicius, probably because rare.	Varro *Rust.* 3, 9, 18. Columella *Rust.* 8, 2, 2. Plin.

			well known in his time. Food only for rich. Not mentioned by the Ed. Diocl.		*HN* 10, 37. Mart. 13, 73.
Peacock	*Pavo*, *pavus*	*Pavo* spp.	Originally from India to Greece through Persia. Probably its breeding started in the first part of the 1st c. BCE. In Varro's time the price of an egg was 5 *denarii*, and that of a bird 50. In the 4th c. CE a male was sold for 300 *denarii*, and a female for 200. Elagabalus asked his cooks to prepare tongues and heads.	Apicius *RC* 2, 2, 6.	Varro *Rust.* 3, 2, 2; 3, 6, 6. Columella *Rust.* 8, 11, 1. Plin. *HN* 10, 23. *Ed. Diocl*. 4, 39-40.
Sultan chicken	*Porphyrio*	*Gallus gallus domesticus*	Kept in house to eliminate insects, mice and reptiles, it was also appreciated as food.		Plin. *HN* 10, 63 and 69. Mart. 13, 78.
Pheasant	*Phasiana avis*, *phasianus*	Fam. Phasianidae, subfam. Phasianinae	The last kept in captivity of the cited birds, only cited by Plin. and Juv. In the 3rd c. *phasianarii* were devoted to its breeding/ fattening. In the 4th c. CE its price was 250 *denarii* when fattened (the male). Elagabalus liked the heads.	Apicius gives 2 recipes of quenelles (*RC* 2, 2, 1; 2, 2, 6).	Plin. *HN* 10, 67. Juv. 11, 139. *Ed. Diocl*. 4, 17.
Ostrich	*Struthio*	*Struthio camelus*	Only rarely consumed, mentioned in the fantasies of Elagabalus.	Apicius gives 2 recipes, boiled (*RC* 6, 1, 1-2).	SHA *Heliogab.* 30, 2.
Parrot	*Psittacus*	*Order Psittaciformes*	Only consumed as curiosity and present in the fantasies of Elagabalus.	Apicius *RC* 6, 6, 1.	SHA *Heliogab.* 20, 6.

Tab. 22. Hunted mammalians.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Boar	*Aper*	*Sus scrofa*	Present everywhere in Italy and the empire. Particularly appreciated were those from Tuscany, Umbria, Lucania. Sen. found its flesh quite common (*Epist*. 78, 24). Originally only the back was eaten, later tenderloin, breast, haunch, head, teat and vulva were the preferred cuts. Breeding in *viviaria* allowed for rich people to eat only the young animals (< 4 y.o.), with more delicate flesh. It was the most expensive of the hunted mammalians (in the 4th c. CE 16 *denarii*/ pound; pork was 12 *denarii*/ pound).	Often marinated in salt for 1 day. The ancient Romans liked it gamey (Hor. *Sat.* 2, 2, 89). It was spit roasted, cooked, baked in the oven, and was always served with sauces (Apicius *RC* 8, 1, 1-10; 8, 1, 4-8)	Varro *Rust.* 3, 13, 1. Columella *Rust.* 9, 1, 1; 9, 1, 7. Mart. 3, 82, 20; 7, 27, 1; 10, 45, 3-4. Hor. *Sat.* 2, 2, 40; 2, 4, 42; 2, 8, 6. Hor. *Od*. 1, 1, 28. Plin. *HN* 8, 78. Plin. the Younger, *Ep*. 1, 6, 1.
Deer	*Cervus*	*Cervus* spp. (*C. elaphus*)	Delicacy, even though doctors did not agree on its properties. Hunted during the winter by peasants. Eaten by rich ladies every morning to avoid fevers. Sold at the price of pork. Also bred in game reserves.	Apicius gives 7 recipes (*RC* 8, 2, 1; 8, 3-8). The large pieces were sometimes cooked before being roasted.	Virg. *G*. 1, 307. Columella *Rust.* 9, 1, 1. Plin. *HN* 8, 49. Celsus 2, 18, 2. Galenus VI, 664. *Ed. Diocl*. 4, 44.
Roe-deer	*Caprea*, *Capreolus*	*Capreolus capreolus*	For rich people. In Rome sold at the same price of deer. Also bred in game preserves.	Apicius gives 3 recipes (*RC* 8, 3, 1-3).	Varro *Rust.* 3, 3, 3; 3, 13, 3. Juv. 11, 142. Celsus 2,18, 2. *Ed. Diocl.* 4, 45.
Fallow deer	*Damma*	*Dama dama*	Also bred in game reserves. It was largely consumed, so it became too common for rich people.		Columella *Rust.* 9, 1, 1. Mart.13, 94. Juv. 11, 121.
White oryx	*Oryx*	*Oryk leucoryx*	Originally from North Africa, it was also bred in game reserves. It had to be sold and consumed before its 4th year.		Herodotus, 4, 192. Mart. 13, 95. Juv. 11, 138; 11, 140.
Wild goat	*Caprae ferae*, *caprae silvestres*	*Capra aegarus*	Present in the mountains, for examples those of Sabina. Considered nourishing and easy to digest.		Varro *Rust.* 2, 1, 5; 2, 3, 3.
Wild sheep	*Ovis fera*, *ovifer*	*Ovis* spp.	Quite widely spread, it was also bred in *viviaria*. *Musmo* was the wild sheep of Corsica.	Apicius gives 2 recipes (*RC* 8, 4, 1; 8, 4, 3)	Polybius 12, 3. Varro *Rust.* 2, 1, 5;

					3, 12, 1. Strabo, 5, 2, 7. Plin. *HN* 8, 75; 28, 42; 30, 52.
Bear	*Ursus*	*Ursus* spp.	Both the animals hunted and killed in the arena were eaten. The paws were the favourite cut. It was eaten during funerals.		Petron. 66, 5. Plut. *Quaest.* Nat. 22. Tert. *Apol.* 9, 11.
Hare	*Lepus*	*Lepus* spp.	Frequently hunted, both the common hare and the hare of the Alps (brown in summer and white in winter) were known. Bred in *leporaria* (semi-freedom), it was put in cages to be fattened before slaughtering. Breeding stopped at the end of the 4th c. CE, and later Romans were surprised that it was ever bred. The most appreciated cut was the shoulder.	Apicius gives 14 recipes (*RC* 8, 8, 1-13; 4, 3, 7), which demonstrates the importance of the animal. It was consumed roasted, cooked, stuffed, with sauce. With liver, longs, and blood a *minutal* was prepared.	Varro *Rust.* 3, 3, 8; 3, 12, 5-6. Columella *Rust.* 9, 1, 8. Plin. *HN* 8, 81. Macr. 3, 13, 14-15. Mart. 13, 92 ; 6, 75, 2 ; 7, 78, 3. Hor. *Sat.* 2, 4, 44 ; 2, 8, 89.
Rabbit	*Cuniculus*	*Oryctolagus cuniculus*	Much less appreciated, and much cheaper than hare. Originally from Spain, it was reported to be introduced in Italy after 218 BCE. Bred in *leporaria*. According to Plin. the Spanish ate also fetuses, or baby rabbits, even without eliminating the entrails. Probably more consumed by low classes.	Only 1 recipe in Apicius (*RC* 2, 2, 6).	Cato *Agr.* 37, 18. Varro *Rust.* 3, 12, 6-7. Plin. *HN* 8, 81. Mart. 13, 60. Strabo 3, 2, 6. *Ed. Diocl.* 4, 32-33.
Dormouse	*Glis*	*Glis glis*	Highly appreciated. It was bred and fattened either in pots or in *gliraria* (large facilities with walls). They were fed chestnuts, nuts, acorns. The larger were preferred. In 115 BCE a law by M. Aemilius Scaurus tried to limit its consumption, but without success. In the 4th. c. CE it was sold at 4 *denarii*/ piece (so, quite cheap; probably by that time it was less appreciated).	It was eaten roasted, dipped in honey, sprinkled with poppy seed, or stuffed and baked in the oven (Petron. 31, 10).	Varro *Rust.* 3, 2, 14; 3, 15, 1-2. Plin. *HN* 8, 82. Mart. 3, 58, 36. *Ed. Diocl.* 4, 38.
Garden dormouse	*Nitela*	*Elyomis quercinus*	Eaten above all in Lucania and other regions in Italy.		Gal. VI, 666.
Beaver	*Castor*	*Castor fiber*	Pope Zacharias prohibited the consumption to Christians.		Zach. *Epist.* 13, Migne, P.L. LXXXIX, c. 951 A.

Rat	*Rattus*	*Rattus* spp.	Above all during famines.		Liv. 23, 19, 13. Plin. *HN* 8, 82. Val. Max. 7, 6, 3.

Tab. 23. Bred mammalians.

English name	Latin name	Scientific name	Use/ notes	Recipes	Source
Pork	*Sus*	*Sus scrofa domestica*	The Romans distinguished a race with hard, black bristles, suitable for cold regions, and one with less or white bristles, more suitable for warm regions. They were fattened above all in mountain regions. It was known that different food could give different properties to the meat. All cuts were eaten. The lard was used above all with pulses. Different sausages were prepared: of Lucania (*lucanicae*), *tomacula*, *funduli*, *longaones*, *farcimina*, *farcicula*, *hillae*, *apexabones*. The sow was sometimes fattened with figs, and was sold as *ficatum*. The teats and the vulva were very appreciated, above all the vulva of virgin sows, called *vulva sterilis* or *sterilicula*. Also appreciated the milk piglets (*porcellus lactans*, *porcellus lacte pastus*).	Apicius *RC* 2, 4; 4, 3, 12; 7, 1, 5; 7, 2, 1-4; 7, 3, 1-2; 7, 8; 8, 7, 1-17.	Plaut. *Aul*. 375; *Capt*. 849; 904; 915; *Men*. 211; *Pseud*. 166; 198. Varro *Rust*. 2, 4, 10. Varro *Ling*. 5, 111. Columella *Rust*. 7, 9, 2; 7, 9, 4. Plin. *HN* 16, 8; 8, 77. *Ed. Diocl*. 4, 4; 4, 5; 4, 46.
Beef	*Bos*	*Bos taurus*	At the beginning of Roman history killing a beef could be punished with dead or exile. Since it was indispensable for field work, it was forbidden to sacrifice them to Ceres. The breeds were differentiated for their attitude to work, not for their meat production, and the agronomists never mention breeding for meat. Still, beef and veal meat was mentioned already in Plaut. as meal component. The Ed. Diocl. does not discriminate between beef and veal.	Apicius gives only one recipe for beef and 4 for veal (*RC* 8, 5, 2; 8, 5, 1-4).	Varro *Rust*. 2, 5, 4. Columella *Rust*. 6, 1, 1-3. Ov. *Fast*. 4, 413-416.
Sheep	*Ovis*	*Ovis aries*	Not much cited in literature. Juvenal calls a boiled mutton head 'the treat of a cobbler'. The lamb was preferred to mutton, and therefore more expensive (in the 4th c. CE 12 *denarii*/ pound vs. 8).	Apicius gives 11 recipes for lamb, but none for mutton (*RC* 8, 6, 1-10)	Columella *Rust*. 7, 3, 13. Juv. 3, 294. *Ed. Diocl*. 4, 3.
Goat	*Capra*	*Capra aegagrus hircus*	Doctors advised against its consumption because goats were prone to several diseases. Still, even ill animals were eaten. Preferred also in this case the meat of young animals, sold at the same price as lambs.	Apicius *RC* 4, 1, 2; 7, 12, 1; 8, 6, 1-10.	Varro *Rust*. 2, 3, 9-10. Columella *Rust*. 7, 6, 7-8; 7, 7, 2.
Donkey	*Asinus*	*Equus africanus asinus*	We do not have much sources on the consumption of this type of meat. We know that donkeys were sacrificed to Priapus and to the winds. Maecenas made the consumption of young donkeys fashionable, but this was forgotten after his time.		Ov. *Fast*. 1, 391. Plin. *HN* 8, 68.

Dog	*Canis*	*Canis lupus familiaris*	Puppies were sometimes eaten before weaning. In Plin. time they were served only in meal dedicated to the gods. Also in Carthago this kind of meat was consumed.		Columella *Rust.* 2, 21, 4. Ov. *Fast.* 4, 408. Plin. *HN* 29, 32. Marcus Junianus Justinus 19, 1, 1.

Tab. 24. Animal products.

English name	Latin name	Use/ notes	Recipes	Source
Eggs	*Ova*	Mainly hen's eggs were consumed, but also those of goose, duck, pigeon, pheasant, partridge and also wild birds. Plin. says that if a pregnant women would eat crow eggs she would have problems. They were part of the *gustatio* (*ab ovo ad mala*). Used in many dishes, also as functional ingredient.	Boiled (*ova hapala*) with a special spoon called *hapalare*, fried in *oenogarum*,...as omelette with milk (*ova spongia*) (Apicius *RC* 2, 1, 6; 4, 2, 6; 4, 2, 18; 4, 4, 28; 5, 3, 5; 7, 13, 8; 7, 19, 1-3; 9, 4, 2-4; 9, 6;9, 8, 3)	Cato *Agr.* 143, 3. Varro *Rust.* 3, 9, 12. Columella *Rust.* 8, 6. Plin. *HN* 10, 74-79; 29, 11. Petronius, 65, 2.
Milk	*Lac*	The agronomists described the properties of different milk types. That of sheep was considered the best by Varro and is the only one cited in Ed. Diocl. That of goat was considered the most nourishing and good for the stomach. That of cow was seen as the least nutritious. In the summer the herds left for the pastures. So, milk was not available and cheese had to be consumed instead. Milk was consumed full fat, and colostrum was a treat.	Different recipes of Apicius mention milk as one of the main ingredients, e.g., *granea triticia*, *puls*, *patinae*, *dulcia* (*RC* 4, 2, 1-2; 4, 2, 13; 4, 2, 16; 5, 1, 3; 6, 9, 11; 7, 13, 2-3; 7, 13, 6-8).	Varro *Rust.* 2, 3, 10; 2, 11, 1. Columella *Rust.* 6, 1, 1-2; 6, 24, 4-5; 7, 3, 13; 7, 6, 4-5. Plin. *HN* 28, 33.
Cheese	*Caseus*	Different coagulants were used (fig lattice, flower of cardoon, clotted milk extracted from the stomach of young animals,...). Columella gives a recipe of a cheese which seems similar to pasta filata cheeses, *caseus manu pressus*. Cow milk cheeses were the most appreciated, followed by those of sheep and goat. Smoked cheese was very appreciated. Several local cheese were renowned (of Vestini, Trebula, Sabina, Sarsina, Umbria, Luna, Liguria,...) and cheeses were also imported from abroad,	In boiled barley (*polenta caseata*), *sala cattabia*, *tyrotarichum*, *moretum* (Apicius *RC* 4, 1, 1-2; 4, 2, 17. *Moretum*, 87-118)	Varro *Rust.* 2, 11, 3-4. Columella *Rust.* 7, 8, 1; 7, 8, 4; 7, 8, 4-7; 12, 43. Plin. *HN* 11, 96-97; 16, 72; 28, 34. *Ed. Diocl.* 6, 96
Fermented milks	*Oxygala* and *melca*	They were both products obtained by allowing milk to naturally ferment, in the case of *oxygala* in presence of herbs.	*Melca* was abundantly seasoned with pepper, *garum*, oil and coriander (Apicius *RC* 7, 13, 9).	Columella *Rust.* 12, 8, 1-2. Plin. *HN* 28, 35-36.