Before the harvest deity, Ceres, brought the gift of domesticated food to humans, man existed mostly on wild food sources. Through nomadic expansion, our ancestors discovered a wide variety of foods, including seed supplying grasses that grew wild across the continents. As we began to urbanize and find a need to cultivate food products, man’s quest for a varying and nutritious diet brought about the domestication of these wild grasses as well as other plants and animals. One of these grasses was known as *emmer*, a type of wheat. This was one of the first cultivated crops to provide sustenance in the form of porridges and fermented beverages, such as beer. We know from the writings of Herodotus, 484-430 B.C.E., that the Egyptians grew, harvested, and consumed wheat very early in history. This agricultural technology was quickly adopted by other cultures and spread rapidly through out the civilized world, especially in the Mediterranean region, which gave rise to the great Roman Empire.

The Romans were quick to take note of what types of grains were favored and which ones worked best for certain dishes such as breads and pottages (*pulses*). They preferred baked goods made of spelt (*farina*), wheat (*triticum*), or rye (*secale*). Millet (*millium*) was sometimes used in the southern region of Italy. This area is known as the Campania region and was then, as now, noted for its remarkable wines. In the very early days of the colonies of Roman Britain, rye was grown as the primary grain source used for baked goods. Its tolerance of cooler, wetter weather made it an ideal crop for the area. Wheat was soon imported from all around the Republic into Rome and her outlying provinces. It was stored in granaries and processed into milled goods in port cities such as Ostia, as archaeological evidence has indicated. The cultivation and use of barley (*hordeum*) was learned from the Greeks, and it was preferred ground into a product known as *polenta*. This was generally used for pulses or coarser less desirable breads. These loaves were commonly referred to as *panis plebeius* or *panis rusticus*. Oats (*avena*) were generally considered a weed even though they had been cultivated for many thousands of years. Although favored by the Celts, oats were commonly grown as a fodder crop for livestock, especially in the British Isles by the time of Roman occupation. Early on in the evolution of bread making, milled wheat was often sieved and re-milled several times to create a fine white flour known as *siligo*. This siligo flour was generally preferred for bread and it was thought to be the finest most expensive flour available.

We owe a great deal of our knowledge concerning the art of bread making to the ancient Romans. As cooking techniques of the early classical cultures developed and began to be refined, the Romans began to mix wheat and other grains with water for the purpose of baking. From this mixture, they made stiff dough that they kneaded, shaped, and baked into crusty, unleavened loaves. In the days of the early Republic, bread was rather bland and nondescript. Cato refers to this particular baked good as *panis strepticius*, or kneaded bread. From his writings, the following recipe is derived.
Kneaded bread is made as follows: the flour is placed in a baking trough, and some water is poured over it. Knead. When the dough has been kneaded, roll it out and bake it under a cover.

(Cato, R. R. LXXIV)

These hard baked loaves, prepared under a dome-shaped cover known as a testa, soon became the primary staple of the Roman’s diet. This common staple changed what Plautus of Sarsina referred to as a nation of ‘porridge eaters’ into a nation dependant on bread as a mainstay. Bread quickly became one of the popular foods of ancient Rome, and the government was quick to turn a profit on its importance as a daily consumable. They taxed grains, and baked goods, and placed a firm hand on the control of importation of goods throughout Italy and all of the provinces. The importance of bread in daily existence is also evident by the number of public shops, mills, and bakeries that have been found through archaeological digs, especially in areas of Pompeii. These public facilities sprang up throughout the time of the ancient Republic and grew in popularity and number up until the fall of the Empire.

The majority of grains consumed by the Romans were milled into flours for baking. However there are several products mentioned that were commonly used in daily cooking. These products were made from unmilled grains. They are known as tractum and amulum and were generally used as thickeners for sauces and soups and as base ingredients in recipes requiring breads. These two products became an essential part of Roman cuisine throughout the ages. Recipes are available today in most extant transcripts and books on Roman culture and dining.

**Tractum**

“Take 4 pounds of flour and 2 pounds of alica. Soak the alica in water. When it has become soft, pour off the water and place the alica in a clean mortar. Then knead it with the hands. When it has been well kneaded, add the flour bit by bit. The tracta are shaped from this dough. Put them on a basket to dry. When they have dried they can be placed side by side. Treat each tractum as follows. After they have been kneaded, brush with a cloth that has been soaked in olive oil. Brush both sides like this. These are tracta. Heat the oven in which, and the lid beneath which, the tracta are to be baked to a high temperature”.

(Cato, R.R. LXXVI)

Spelt grains were most often polished into pearls known as alica. They could be either left whole or broken into pieces. Broken spelt, rolled spelt, or ground kernels were all available as different kinds of alica. To produce this product, the spelt kernels were rubbed with sand or chalk.
until they turned white. The abrasives were then sieved and washed away. An acceptable modern
day substitution for alica would be bulgur, which is made from whole-wheat kernels.

**Amulum**

This is a thickener and bread product that was essential for sauces. Pliny writes:

“*Amulum is made from all qualities of grain, but the best is made from grain that is three months old. We owe its invention to the island of Chios. The most highly regarded kind still comes from there. The name derives from the fact that it is unmilled. After the amulum of three-month-old grain, that made from lightest grains is the best.

The grain is first placed in water in wooden barrels so that it is just immersed. The water is replaced five times a day. It is better that this be done at night, so that it is evenly distributed. Before the soaked grain turns sour, it is filtered in linen or wicker sieves. It is spread out on a tiled floor, with leaven. It is left like this to thicken in the sun.” (Pliny, N.H. XVIII-7, 17)

Yeast, as a leavener for bread, made its way into Rome at the height of the Republic
during the outbreak of the third Macedonian War (171-168. BCE.). Many of the more
conservative citizens resisted the temptation to indulge in the light or raised loaves, thinking them unhealthy. Pliny describes six different ways to make and maintain yeast cultures:

I: “Millet kneaded with wine must*. It should keep for a year”.

II: “Wheat bran soaked for three days in the must of white wine, then kneaded into rolls, soaked in water, heated and kneaded again with flour.” (This sort of yeast was thought to make high quality bread but did not keep well. It was made in autumn when fresh wine must was plentiful.)

III: “Dough balls of barley and water baked brown in the ashes then kept until they fermented. They were dissolved in water before use.”

IV: “Barley bread required a yeast culture made from chickpea, flour, or from vetch.”

V: “The commonest yeast was a sourdough variety prepared by boiling unsalted flour with water to a porridge consistency and leaving it to ferment. This was used a yeast.”

VI: “Another common form of leavening was to simply keep part of the previous day’s dough and mix with fresh ingredients.” (Pliny, N.H. XVIII-xxvi.)

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*Wine must is the product from the second stage of wine making where the majority of the raw pulp has been filtered off. It contains sediment, active yeast for fermentation, and grape juice.
It was not long before bread production was begun on a large and public scale. The introduction of a yeast product into Roman culture is in almost direct correlation to the formation of bread baking as a specialty profession. In the year 168 B.C.E., the Roman citizens legislated and formed the first baker’s guild. It was known as the Collegium Pistorum. The word pistorum translates into the phrase, to grind, which is associated with the grinding of grains into flour. The bakers not only cooked but also milled grains professionally as well. Soon after the formation of the Pistorum, the government took control of the guild and bread became a regulated public commodity. Although controlled by the governing body and the Emperor of Rome, after the time of Julius Caesar, these professional bakers were freemen and they and their families enjoyed the benefits that all free Roman citizens were entitled to. Not all bakers were Roman freemen. In many of the larger, privately owned villas and bakeries, Athenaeus tells us that many of the Cappadocians were taken as slaves and employed privately due to their superior skills as bakers.

As was the case with many other cultures, Roman bread was made with all types of cereals. Sometimes loaves were made from ground pulses like chickpeas and other less common grains such as rice. Many times, bread dough was mixed with oils or fat from bacon to improve flavor. Other common flavor enhancers included grape and other fruit juices, wine, eggs, milk, and dried fruits or honey. Spices such as cumin, pepper, sesame, and poppy seed were often added. In fact, the Romans favored a type of bread known in the first century as Alexandrian bread. Apicius and the other popular scholars tell us very little of this delicacy except that the main spice used in its flavoring was cumin. Apicius recommends its use in several of his recipes, including Sala Cattabia. This is a bread-based salad that was generally served covered with snow so that it would be cold. Considered a rarity, Sala Cattabia was usually served at very special occasions or high-ranking state dinners.

In the days of the late Republic, Romans generally preferred their bread white and one of the tests of the quality of bread was the color. This white bread was usually made with the finest siligo wheat flour and it was quite pricey. As with most purchased goods, the price of flour was regulated by the amount of processing it needed as well as the size of the stones and sieves used to refine it. It was baked into loaves commonly known as panis siligineus. Dioscorides describes this bread as a fine and light with a dry and springy texture. With the growth of the population in Rome and its provinces and the state support of baking as a trade, time and money were both allotted so that the baker could experiment with different ingredients and perfect specialty recipes. Many of these bakers opened shops in the Saeva urbs or Subra district of Rome. Street vending and dining in public cafes and bakeries became a widely accepted and a much “participated in” cultural acceptance for all classes during the height of the Empire.

The classical poet, Martial, give us great visualization into the bustling activities of the vendors and cafes that lined the narrow streets. The noise and aroma began way before sunrise — ‘Get up! The baker is selling the boys their breakfast, and the crested birds of dawn are singing all around’ (Martial 14.223) He also tells us of a man selling aromatic chickpea soup, and of the fine aroma of smoking sausages, whose scent was hanging in the air. (14.222)

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*Cappadocia was an inland region of Roman Asia, around the area of Turkey. It was an independent kingdom that was annexed by Tiberius in 18 CE.*
Written menus from private dinner parties are fairly common. However, they rarely contain a reference to bread. We do have a menu from an unknown inn that lists a permanent menu and gives us some reference to bread. This menu was found etched into a wall on a public tavern in the outskirts of Pompeii.

While there are no written words on the menu pertaining directly to bread, we can deduce from similar archaeological finds that the center drawing most likely represents a loaf of bread. The upper sketch correlates to wheat kernel or the heart of the grain, and the bottom one is to let the patrons know that the wheat is fresh and grown locally. In other words, all purchased locally, freshly ground and baked fresh, as was the case with most rural establishments.xx

Given the sheer amount of bread baked in Rome and the varying styles brought into Rome through the diverse cultures of the people that made up the Republic and the Empire, it would be virtually impossible for us to list all of the baked goods and types of bread with which the Roman’s were familiar. But from the writings of Apicius, Cato, and Pliny, we can glean enough information to put together a substantial list that gives us some insight into the scope of the Roman’s baking abilities and some of their common recipes through description and ingredients.

**Common Breads of Rome**

*Panis mustaceus*— Bread commonly baked in a ring with a laurel wreath on top. Cato gives us a list of ingredients: 660g. fat, 330g. fresh cheese, 8.7 liters farina, anis, cumin, and must, which gives the bread its name. (CAT. R.R. CXXI) this bread was commonly eaten at wedding feasts, hence the larger quantities of ingredients.xxi

*Panis farreus*— Bread made of coarse spelt flour to be broken and shared by a bride and groom on their wedding night.

*Panis adipatus*— A flat bread resembling pizza that contained a good quantity of bacon and bacon fat.

*Panis militaris*— Soldier’s bread. It commonly came in two varieties.

  *Casternsis*: camp bread
  *Mundus*: marching bread

Both were a type of hard dry biscuit that had to be soaked before eaten. (Pliny. N.H. XVIII-68)
Panis nauticus-- Much like soldier’s bread. Known as ship’s biscuits. (Pliny. N.H. XXII-138)

Panis picentino— Another hard bread that required soaking, generally in milk or mulsum* before eating. Picentino was luxury bread made from alica, which was soaked for nine days and then kneaded with uvae passae suco (the sweet juice of dried grapes or raisin juice). It was shaped into a long roll, placed in a clay pot and baked in the oven until the pot burst. (Pliny. N.H. XVIII-106)

Panis quadratus— Despite its name this bread is not square but circular. It owes its name to the slashes on the top of the loaf that divides it into quarters.

Panis boletus — Bread that has risen in the shape of a mushroom. It was covered with poppy seeds and placed in a glass mold. The poppy seeds ensured that the bread did not stick. It was the color of smoked cheese.

Panis alexandrinus — popular bread that is frequently mentioned in recipes and texts. We do not know the exact ingredients or recipe for this bread, other than the fact that it contained Egyptian cumin and was imported from Alexandria, hence the name.

Panis cappadocius-- A ‘Turkish’ style bread that was produced by making very wet dough out of flour and milk. To it was added large quantities of salt. It was baked in a very hot oven for a short period of time and had a soft crust.

Panis secundarius—A common type of white bread. During the days of the Republic, eating white bread was considered very much a luxury and a costly venture. By the time the Empire was in its heyday, white bread was considered a commonality and thus known as a second choice or secundus. With the Emperor Augustus, came the popularity of brown bread or less refined products, thus reintroducing recipes that had long been forgotten; heavier breads were back in vogue once again.

Orindes—Bread made from rice flour

Cybus—Cube shaped bread with anis, fresh sheep’s cheese and olive oil.

Mazas—Barley biscuits

Cribana- Bread made with curd cheese. Shaped to resemble a woman’s breast.

While the government of ancient Rome controlled the import and export of wheat and the common trade of baking, it is noted from the list above that the baker still controlled the artistic avenue in which the recipes were developed. From the evolution of Cato’s unleavened loaves to untold varieties of the artisan bakers of Rome and her provinces, the freemen of the Republic and the Empire enjoyed a multitude of fresh baked goods and unlimited flavors. It is the whole of these products, and the conglomerate of so many different cultures that helped entitle Rome as the ‘melting pot’ and urban center of the ancient world. Her citizens’ passion for a gourmet and diversified diet still influences the eating habits and cooking customs of many modern cultures today.

*Mulsum was an aperitif beverage common in Republic and Imperial Rome. It was basically dry wine to which honey was added. It was consumed either during the blending process or thirty-one days later. (Pliny. N.H. XXII-24, 53)
Endnotes

i  http://classics.mit.edu/Virgil/georgics.1.i.html
ii  http://www2.cddc.vt.edu/gutenberg/etext00/agypt10.txt
iii  http://www.ostia-antica.org/
iv  Fass, p.188
v  Alcock: p.18
vi  Dalby, 108,110,174
vii  http://www.botham.co.uk/bread/history1.htm
viii  Dalby, p.128
ix  Alcock: p.29
x  Dalby: p.210
xi  Alcock: p.141
xii  Fass: p.182
xiii  Fass: p.180-181
xiv  Fass: p.189
xv  http://www.botham.co.uk/bread/history1.htm
xvi  Dalby, p.128
xvii  Alcock: p.141
xviii  Fass: p.180-181

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