

# Overview of ancient pharmaceutical practices



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Pills are universally described as a small circular solid of medicine that can be taken orally. Pills are primarily used to treat temporary conditions, control illnesses, and contribute to long-term well-being. In today's society the pharmaceutical field is booming continuously. With that in mind, there are numerous of pharmacy stores that dispense drugs to the community. Through such accessibility many people are capable of having the possession of pills whether if it's through over the counter or doctor's prescription. Before they were synthetically manufactured, pills were made from fresh organic resources from the environment. Along the way many ancient philosophers involved with the creation of medicine. To obtain medicine there was usually one specific area to get it from. Since the first medications were made from natural environment there was little consideration regarding if it can be swallowed easily. To resolve such issue, a special lubrication was invented.

In the early civilizations all of the materials could be obtained from nearby surroundings to make medicine. One prime example of it would be ancient China - there is a famous legend in which emperor Shen Nung, individually, discovered the medical usage of herbs through self- experimentation. In addition, the very first Pen T-Sao or native herbal record of 365 drugs was created (Rajesh and Sriprasad). Emperor Shen Nung examined herbs, barks, and roots from different areas such as fields, swamps, and woods. Medical herbs like podophyllum, rhubarb, ginseng, and cinnamon bark are still recognized by today's pharmacy. This contribution made a long lasting impression of the first medicine formation for the Eastern World. While, there

was the Eastern World discovery, there was also the contribution of the Middle East World as well.

The very first appearance of pills date back as far as 1500 B. C. E. The main task was to deliver an adequate amount of medicine to a patient. Originally, pills contained liquid instead of the more sophisticated and modern round, small shapes. Pills were first referenced in ancient Egyptian records. The most important pharmaceutical record was the “ Papyrus Ebers”, a collection of 800 prescriptions - over 600 drugs were mentioned (Francis). The ingredients of the early pills included bread dough, honey, grease, and other botanicals. Many of the medicinal herbs were often grinded into fine powders, along with other ingredients mixed together. These mixtures were then molded by hand into small spheres. The pills would be taken with either water or wine, or sometimes it was used as a soothing application by smudging onto the skin to reduce inflammation and treat cuts. In that time, pharmacy was conducted by two or more echelons: gatherers and preparers of drugs, and the head of pharmacists, the “ chiefs of fabrication”. The “ House of Life” was the area where they resident to work on medicine (Francis). In the Middle East world, the creation of medicine was significantly more organized than the solidarity of self-experimentation in the Eastern world. Plus, their organization means that the ancient Egyptians were capable to fully understand the usage of pills. For that reason, they were able manufacture into large quantity to serve for the community. This is significant because it is a gradual shift into what everyone recognizes today - CVS. Before it was officially transferring into the most famous CVS that

everyone is familiar with, there were a couple of ancient philosophers who contributed their knowledge to the medicine field.

Among all other men in Ancient Greek, Galen, for example, was best known for his works in both the professions of Pharmacy and Medicine. From 129-199 A. D. Galen practiced and lectured both Pharmacy and Medicine in Rome (Mattern). Through the exposure of human corpses autopsy and experiments of living animals, he was able to record an intricate information regarding anatomy, physiology, and medicine. His contributions to the making and preparing of medicine were prominent in the Western world, and were a strong influence on the physicians in the Renaissance period. A class of pharmaceuticals - galenical - was still associated with him. He was the creator of the cold cream formula that is similar to the ones used in modern day. Without his contributions to the medical field, the Renaissance physicians could not have continued to expand their knowledge of medicine to future generations. Another example of ancient philosophers would be Theophrastus, also known as the "father of botany", was one the greatest ancient Greek philosophers and natural scientists in 300 B. C.

( Fortenbaugh ). He was famously known for his outstanding accuracy regarding the observations and writing of medical qualities and distinct characteristics of herbs. With his contributions he was able to provide the younger generation with the in depth knowledge of herbs to further expand the pharmaceutical field. Then the third famously known philosopher was Hippocrates.

The most famous ancient physician and the widely recognized was Hippocrates, the "father of medicine". During this time, many people along <https://assignbuster.com/overview-of-ancient-pharmaceutical-practices/>

with the physicians believed that evil spirits and gods were behind their illness. Under the impression of superstition, they believed that their illness can never be treated. Hippocrates, unlike the rest, held a belief that there were scientific explanations to many ailments which can be cured eventually by the right treatments. Plus, Hippocrates knew an adequate amount of medical knowledge treatment from India, Middle East, and from other part of the world. Hippocrates formulated the theory of the four humors that equivalent to the four elements: air-blood, water-phlegm, earth-black bile, and fire-yellow bile. He believed that disease was the result of imbalance of the bad humors. Hippocrates, himself, strongly believed that self-healing of the body, favoring a light diet with honey and water, vinegar, or gruel (Jouanna and Allies). Rather than the normal food intake, the dietary will balance out the humors. Ironically, Hippocrates rejected the excessive distribution of drugs, but he made a variety of herbs and some of animals' products to restore that humoral imbalances. Today, Hippocrates' Oath was the number one pledge that many medical students vowed to before becoming doctors. In addition to his theory, this provided an idea of which area to attack when it comes to the creation of drugs rather than blindly intake irrelevant resources. Finally, another great philosopher who had an impact to the ancient medicine was Pedanios Dioscorides.

The last example of ancient philosophers who had a great impact to ancient medicine would be Pedanios Dioscorides was a Greek physician, pharmacologist, botanist, and the author of *De Materia Medica* in the first century A. D. Dioscorides accompanied the Roman armies throughout the world to study *Materia Medica* (Janick and Stolarczyk). During his journey, he

recorded his observation, and publicized his rules for collection drugs, storage, and use of drugs. For his contribution, he successfully made a transition from observations of trade and journey to science. Then in the late sixteenth century, his texts were considered science and pharmaceutical literature. After the medicine was discovered, the trademarks were established as well.

Pharmacy in Ancient Babylonia, the jewel of ancient Mesopotamia, or often called the cradle of civilization provides the earliest record of practice of apothecary. In this era, about 2600 B. C. the practitioners were a combination of priests, pharmacists, and physicians. Many of the medical texts documented first the symptoms of illness, then the prescription and directions for compounding, and lastly an invocation to the gods. Ancient Babylonian methods find counterpart in today's modern pharmaceutical, medical, and spiritual care of the sick (Van De Mieroop). For the trademarks to be prosperous, sources and customers' trust and confidence were a must.

One of the advantages of trademarks in the early days was to know sources and gain customers' confidence. Terra Sigillata, or Sealed Earth, was one of the first therapeutic agent. This agent was a clay tablet from the Mediterranean island of Lemnos before 500 B. C. One day of each year, clay was dug up from a pit on a Lemnian hillside under the presence of governmental and religious dignitaries. Before the tablets were widely distributed commercially. The clay would be washed, refined, and rolled into a mass of appropriate thickness, then mixed with goat's blood and the clay would be shaped into pills and impressed with a seal by priestesses, then sun-dried (Luley). Terra Sigillata was believed to be good for practically

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every ailment, such as dysentery, ulcers and gonorrhoea. Even though, the manufacture of pills was the first step toward of today's pharmacy field. The oral intake of pills can be problematic regarding to the fact that there was little to none consideration to the consequence.

Although, pills were made in various shapes and sizes, there were many trials to make them be swallowed effortlessly. The first attempt to resolve this dilemma was during " the medieval times, pills were coated with slippery plant substances...". Then once again " in the 19<sup>th</sup> century pills were covered in gold and silver to allow passage through the digestive tract with little to no effect." Luckily " in the 1800s a sugar-coating and gelatin-coating was invented - gelatin capsules" (Becker, p. 25). Lubricants also have two more advantages. They can prevent mixtures from clustering to each another and from sticking to the machines. Lubricants confirmed to have a lower friction when being swallowed (Becker, p. 30). The invention of lubricant had made people less concerned when it comes to consuming any kind of pills. After the invention of lubrication, patients have no issue when it comes to swallowing them. For example, if a patient wants to take his or her pills without the presence of water, the patient could do so easily.

Modern pills have their roots in ancient philosophical contributions to medicine. In the early days, all of the natural resources can be gathered from nearby environment. Emperor Shen Nung was the first person to demonstrate and to record his observations in the Eastern World. While, there was the Eastern world contribution, the Middle East World had the first appearance of pills. The ancient Egyptians had an over 600 drugs mentioned in their record. There were evidences as to how pills were molded and where

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the pills were made. During the evolution of medicine, many ancient philosophers made contribution to the creation of medicine. Ancient philosophers like Galen's principles of compounding and preparing of medicine was famous in the Western world. He was also the creator of the cold cream formula. Furthermore, the world famous philosopher - Hippocrates. He believed that there are scientific explanations to each ailments as opposed to superstitious beliefs. He even surmised a theory of the four humors equal to the four elements. One might eat a light diet to maintain the correct balance of the four humors. After the medicine was discovered, the trademarks were also coexisted. Ancient Babylonia was one of the earliest civilization to practice apothecary. To have successful trademarks customers' trust and sources were a must. Terra Sigillata was an example of that. There was a very little care when it comes to pills consummation, but luckily lubrication was invented to resolve the dilemma. In conclusion, the similarity between pills and other inventions is that it takes many centuries to perfect the product into what it is today.

#### Work Citations

- Becker, Douglas C. " Gelatin Coated Tablets and Method for Producing Same". 1992. PDF file.
- Fortenbaugh, William W. *Theophrastus of Eresus: Sources for His Life, Writings, Thought, and Influence* . Leiden ; New York: E. J. Brill, 1992.
- Francis, John F. *Ancient Egyptian Medicine* . British Museum Press, 1996, pp. 150-240.



- Janick, Jules, and John Stolarczyk. "Ancient Greek Illustrated Dioscoridean Herbals: Origins and Impact of the Juliana Anicia Codex and the Codex Neopolitanus." *Notulae Botanicae Horti Agrobotanici Cluj-Napoca*, vol. 40, no. 1, June 2012, pp. 09-17. *EBSCOhost*, search. [ebscohost.com/login.aspx?direct=true&db=a9h&AN=77466797&site=ehost-live&scope=site](https://www.ebscohost.com/login.aspx?direct=true&db=a9h&AN=77466797&site=ehost-live&scope=site).
- Jouanna, Jacques, and Neil Allies. *Greek Medicine from Hippocrates to Galen: Selected Papers*. Edited by Philip Van der Eijk, Brill, 2012. *JSTOR*, [www.jstor.org/stable/10.1163/j.ctt1w76vvr](http://www.jstor.org/stable/10.1163/j.ctt1w76vvr).
- Luley, Benjamin P. "A Terra Sigillata Revolution? Terra Sigillate Consumption in first-century AD Roman Mediterranean Gaul." *Altmetric*. 2018. <https://summon.altmetric.com/details/42299176>.
- Nair, Rajesh, and Seshardi Sriprasad. *1045 EMPEROR SHEN-NUNG'S ROOT: GINSENG IN THE MANAGEMENT OF ERECTILE DYSFUNCTION IN ANCIENT CHINA (3500-2600 BCE)*. Vol. 185, Elsevier Inc, 2011. [https://www.jurology.com/article/S0022-5347\(11\)01329-2/fulltext](https://www.jurology.com/article/S0022-5347(11)01329-2/fulltext).
- Mattern, Susan. "The art of medicine: Galen and his patients." Vol. 378, Elsevier Science INC, August, 2011.
- <https://www-clinicalkey-com.gate.lib.buffalo.edu/#!/content/playContent/1-s2.0-S0140673611612403>
- Van De Mieroop, Marc. *Philosophy before the Greeks: The Pursuit of Truth in Ancient Babylonia*.
- Princeton University Press, 2016. *JSTOR*, [www.jstor.org/stable/j.ctt1h4mhtb](http://www.jstor.org/stable/j.ctt1h4mhtb).