

Spring 2014

## The Four Humours Theory

Hope Javier  
*College of DuPage*

Follow this and additional works at: <http://dc.cod.edu/essai>

---

### Recommended Citation

Javier, Hope (2014) "The Four Humours Theory," *ESSAI*: Vol. 12, Article 21.  
Available at: <http://dc.cod.edu/essai/vol12/iss1/21>

This Selection is brought to you for free and open access by the College Publications at DigitalCommons@COD. It has been accepted for inclusion in ESSAI by an authorized administrator of DigitalCommons@COD. For more information, please contact [koteles@cod.edu](mailto:koteles@cod.edu).

## The Four Humours Theory

by Hope Javier

(Honors Chemistry 1552)

**A**t the time when disease was believed to have been the doing of the devil, ancient Greek philosophers provided an observable, yet primitive, approach. Led by Hippocrates in 400 B.C.E, this theory remained uncontested for nearly two thousand years influencing both Western and Eastern medicine, proposing that the human body consisted of four major fluids or humours that must be maintained in equilibrium in order to promote a good well-being. Known as the Four Humours Theory, it sought to explain the cause of diseases. Although the theory remained dominant throughout much of the medieval era, the conception of the 16th century, followed by the development of modern medicine, marked its end.

One must ask, how did such theory come about? The Four Humours Theory was a compilation of work based upon the ideas of many philosophers, including of ancient Egypt and Mesopotamia, even before the birth of Hippocrates. However, the structural foundations for the theory were comprised of the extended work of the pre-Socratic Greek philosophers such as Anaximander, Pythagoras, and Alcmaron. From these philosophers, Hippocrates assembled their ideas, such as the four underlying elements of nature, the importance of hot, cold, wet, and dry to one's health, and the significance of maintaining balance in the body, which established the foundation for the Four Humours Theory. Such ideas were well accepted during the period when mythologies, religion, and superstition guided much of the people's understanding regards to disease and medicine. However, it was not until a Roman physician, Claudius Galen, started to spread and popularize the idea that the theory generated much influence. Derived from the work of Hippocrates, the Four Humours Theory finally came into formal existence in an effort to provide explanation for the cause of diseases. Through written works, Galen influenced much of the entire Western and Eastern world, in which Islamic medical practitioners grasped strongly during the 11th century.

The fundamental concept of the Four Humours Theory relied heavily on the four fluids or humours that were thought to comprise the human body. These humours were: phlegm, blood, yellow bile, and black bile. According to a publication of the Harvard University Press, *The Classical Tradition*, the four humours were believed to exist in cycles according to the seasons and constellations, revealing the strong influence of astrology on the theory. For instance, an illness during the winter was considered to be affected by an imbalance in phlegm, which caused respiratory and chest problems. On the contrary, an illness that occurred during the summer was associated with yellow bile, which resulted in fever, bad temper, liver disorder, and so forth. The other two humours, black bile and blood were associated with autumn and spring, respectively. As a result, in order to balance the humours, the constituent treatments were based on opposites. For example, to counter the over saturation of phlegm, which was associated the coldness of winter, it must be treated with hot substances. Likewise, warm illness that occurs during the summer was thought to affect the yellow bile humour, in this case cold treatments were used. Furthermore, in an article by N.S Gill, "The Hippocratic Method and The Four Humours of Medicine", it states that the four humours were associated with the supposed natural elements: water, earth, fire, and air. The humour phlegm was attributed with water, blood with air, yellow bile with fire, and black bile with earth. Ultimately, the relationship of the humours with the seasons and the natural elements provided an understanding that

imbalance within the body was the underlying cause of diseases.

Moreover, observation played a vital role in providing support for the Four Humours Theory. According to Chris Rohmann's, *A World of Ideas: A Dictionary of Important Theories, Concepts, Beliefs, and Thinkers*, the Four Humours Theory followed the idea that an individual's well-being was defined by their characteristic complexion or temperament, which correlated with the qualities of the four elements and their relationships with the four humours. For example, one who had too much phlegm, blood, yellow bile, and black bile, were identified to have the personality traits that were phlegmatic, sanguine, choleric, and melancholic, respectively. The physicians that followed the Four Humours Theory diagnosed their patients based on the personality observations. Furthermore, the physicians that followed the Four Humours Theory observed the patient's physical properties that correlate with the associated nature elements and seasons of the humour. For example, people that were hot to the sense of touch were believed to have imbalanced yellow bile, the humour that was associated with the summer season. Evidently, the Four Humours Theory included scientific premise of observation and was a major advancement compared to the preceding ideas that relied heavily on mere superstitions and mystical powers to explain the cause of diseases.

However, the treatments that were formulated based on the Hippocratic idea revealed the blunders of the Four Humours Theory. According to David C. Linberg's, *The Beginnings of Western Science*, bloodletting was a common treatment in maintaining the humours of the body. Linberg writes that prior to bloodletting, the physician would observe the patient for days. Although the Four Humours Theory established a scientific approach in diagnosis, the positive outcomes of the bloodletting treatment were mere the result of the placebo effect. For example, the hierarchy of society placed the physicians in a respected, higher degree. As a result, patients often believed that physicians had immense knowledge on the treatment, which in turn caused them to feel better, even though bloodletting was far from beneficial. The blunders of such treatment outweighed the benefits. For example, the 17th century king of England, Charles II, was treated with bloodletting in order to combat a seizure. Unsurprisingly, this implicated the king's death. In addition, losing blood reduces the oxygen level dramatically, causing severe complications. Unfortunately, many more treatments based on the Four Humours Theory were practiced without much great success, including forced puking, blood leeching, and even breathing in the odor of pig manure to treat nose bleed were, unsurprisingly, ineffective. Clearly, the Four Humours Theory formulated treatments that would otherwise be deemed absurd today.

Interestingly, the Four Humours Theory remained unchallenged in Europe for many centuries primarily due to the primitive established scientific knowledge, or lack thereof, during the years of its existence. Especially with the digression of human civilization following the bubonic plague, much of the understanding of human disease leaned toward spiritual and superstition venue, which made the Four Humours Theory highly attractive. According to the *Encyclopedia of Britannica*, it was not until a 16th century German-Swiss physician named Philippus von Hohenheim, commonly known as Paracelsus, introduced the foundation for modern medicine. Unlike Hippocrates, Paracelsus emphasized that diseases were caused by the body being harmed by outside forces and chemicals found in nature provided cures for the diseases. Furthermore, Paracelsus rejected the four humours of the body. Rather, Paracelsus believed that outside forces, not humours, were the culprit of diseases. The further rejection of the Four Humours Theory was accompanied by the advancements through the scientific revolution during the Renaissance. Ultimately, the changes in both the principles of the people as well as the development of modern science ended the long rule of the Four Humours Theory.

Undoubtedly, the Four Humours Theory has widely been rejected to this day. The idea of having fluids that govern the whole well-being of an individual, both controlled by the elements of nature and the seasons, surely seem highly absurd in modern essence with the establishment of modern medicine. In retrospect, the principles and treatments that were formulated as a result of the Four Humours Theory prove highly inaccurate in describing the cause of diseases. Unfortunately, the strong effects of mythologies, religion, and superstition in the ancient societies allowed domination of the Four Humours Theory for nearly two thousand years.

---

#### Works Cited

- The Classical Tradition*. Eds. Anthony Grafton, Glen W. Most, and Salvatore Settis. Cambridge: Harvard University Press, 2010. Print.
- Gill, N.S. "Four Humors." *About.com Ancient / Classical History*. N.p., 2013. Web. 04 Nov. 2013.
- Lindberg, David C. *The Beginnings of Western Science*. Chicago: The University of Chicago Press, 1992. Print.
- Parker, Richard G. "The Hippocratic Humoural Theory: A Proper Philosophical and Historical Context." *The Rational Argumentator* 14 (2003). Web. 04 Nov. 2013.
- "Paracelsus." *Encyclopaedia Britannica Online Academic Edition*. Encyclopædia Britannica Inc., 2013. Web. 04 Nov. 2013.
- Rohmann, Chris. *A World of Ideas: A Dictionary of Important Theories, Concepts, Beliefs, and Thinkers*. New York: The Ballantine Publishing Group. 1999. Print.