

## Naturopathic Theory: Humoral Theory

Humoral Theory was an integral part in the origin of naturopathy. It explains the transmission of the elemental theory on human body. Humoral Theory is a concept that spans all aspect of the naturopathic therapeutic encounter – including assessment, diagnosis and treatment.<sup>(100)</sup>

### Origin

Humoral theory was identified and created by early philosophers. Empedocles (495-435 BC), a Greek philosopher was the first to define all natural phenomena according to four (4) elements – Air, Fire, Earth and Water.<sup>(101)</sup>

In the Corpus Hippocraticum,<sup>(36)</sup> a group of students and writers around Hippocrates (460-377 BC), linked the elements in the macrocosm to the body fluids within the microcosm with each element corresponding to a body fluid and every fluid relating to a specific organ.

In 130-200 AD, Galen of Pergamon, known as Galen, a Greek physician and follower of Socrates, Plato and Hippocrates linked the 4 elements of humoralism with the 4 temperaments of individuals. Galen also introduced the element Ether, which integrated the *Vital Force* into the understanding the human body.<sup>(38)</sup>

In the late 1700's Christoph Wilhelm Hufeland (1762-1836), a German physician and humoral therapist, developed further the theory of the 4 elements, 4 temperaments and 4 humors from Hippokrates, Galen and Hildegard von Bingen and completed with the theory of sensibility / irritability and qualities in application to human health.<sup>(53)</sup>

### Description

Empedocles (490-430), was a Greek philosopher. He explained that nature, universe and firmament were composed by the 4 elements Air, Fire, Water and Earth. When all 4 elements are in balance, we see nature, men and universe in health. He described theories on causation, perception, thought, as well as explanations of global phenomena and biological processes – first approaches of naturopathic thinking.<sup>(101)</sup>

Corpus Hippocraticum<sup>(36)</sup> linked the four-element philosophy to the four body liquids referred to as humors: the air element was associated with blood; fire was considered yellow bile; earth was considered black bile and water the element of phlegm. They further explained that each of the 4 humors has its origins in a certain organ: blood belongs to the heart; yellow bile to the liver; black bile to the spleen and phlegm to the brain. Everybody's liquid is then related to other organic systems and concepts of health and disease:

1. *Blood*: heart, blood circulation, venous disorders, anaemia, cardiovascular diseases, respiratory tract
2. *Yellow bile*: liver, gall bladder, muscle and skeletal system, inflammations, hyperacidity, irritations of skin and mucous membranes.
3. *Black bile*: spleen, nerve system, spleen, degenerations, diathesis of dryness and hardness, stones, intoxications.
4. *Phlegm*: brain, digestive system, lymph system, immune system, kidneys, water retention, lymph stagnation.

They explained that the treatment of a certain body liquids or fluids related to its origin, organic systems, diathesis and has to include the treatment of the organic system and concepts related to it.

Philosophers went onto explain that each of the 4 humors has certain qualities:

- *blood* is wet and warm
- *yellow bile* is warm and dry
- *black bile* is dry and cold
- *phlegm* is cold and wet.

Each of the 4 humors is also related to a certain season. During a season, the corresponding humor is more active:

- *blood* is active in the spring
- *yellow bile* in the summer
- *black bile* in the autumn, and
- *phlegm* in the winter.

According to Galen<sup>(38)</sup> individuals can be characterized into four main groups – the 4 temperaments: sanguine, choleric, melancholic and phlegmatic. Galen linked the physical functions with emotional characteristics. Galen also described a fifth element as the “Pneuma” (ether), which is integrating the spirit, vital force and soul of the person. With implanting the soul into the whole and describing the temperaments of a person, this concept became a holistic system of body and mind.

Each of the 4 humors is related to a certain temperament:

- *blood* – sanguine
- *yellow bile* – choleric
- *black bile* – melancholic, and
- *phlegm* – phlegmatic.

These correlations (see below “Galen’s chart”) help to understand interrelational functions and characteristics of each person, they provide a guide to the relationship between symptoms and the cause to the disease and help to determine the adequate remedy or treatment approach.

Blood is also known as the seat of *vital force* as it includes all four humors in a certain mixture. The humoral theory describes body functions, conditions, and pathological mechanisms and was the dominant concept in the understanding of health and treatment of diseases until the era of the cellular pathology in the 19<sup>th</sup> century.

Balanced composition of these humors is called “eucrasia” or homeostasis. In the moment when one humoral aspect is in excess or deficiency, it’s called dyscrasia or heterostasis. Depending on the eucrasia or dyscrasia state, health or disease results. According to this theory, condition of health and natural causes of diseases is based on balance or imbalance of these nature forces in humans: the 4 elements, the 4 body liquids (humors), strength or deficiency of *vital force*. Health is restored by balancing the body’s natural tendencies, that is by activating the *vis medicatrix naturae*. The task of the physician is to support the natural healing ability of the body. One of the main statements at that time was: “*Medicus curat, natura sanat*”.<sup>(102)</sup>

Hippocrates was a master of observing the ill person in all its details to get a clear picture of the cause and especially the prognosis of the whole process. Today we would call that “naturopathic assessment”. He included the way of life (modus vivendi), the environment, climate, domicile, water, age, diet of the ill person to influence the quality and mixture of the four body liquids and to bring body to “eucrasia”. He gave recommendations to restore health by respecting all these components. In the descriptions of the “Corpus Hippocraticum”, herbal medicine and hydrotherapy were also mentioned to achieve these objectives.<sup>(102)</sup>

In its central piece "Metodi medendi", Galen states that all phenomena in nature and in man have a particular purpose. In antiquity and the Middle Ages this doctrine was an integral part in the treatment of ill persons. Even Albrecht Dürer in 1526 showed "the four apostles" in his painting, as the four temperaments. At that time medicine is an integral art, philosophy, science and technology. Applying natural methods by respecting individual conditions and natural laws to restore health was a common thinking model in health care.

Galen introduced the first systematic inspection using diagnostics techniques and he was the first to describe specific qualities of the pulse. The pulse is a direct reflection of *vital force* which reflects a mixture of the 4 body liquids, and the balance of human functions and energies.<sup>(103)</sup>

Galen mentioned also 4 qualities, warm, wet, cold and dry. These qualities play an important role in characterizing the condition of the person. Any imbalance relates to the cause(s). The same qualities can be used to describe plants, foods, herbs and other naturopathic remedies or treatments. Qualities are reflected throughout the body and are mirrored in the pulse, face, bodily functions, symptoms and diseases. By assessing the qualities in a patient, a practitioner is able to choose the correct remedy and treatment.<sup>(38)</sup>

The chart below depicts the correlation between the elements and the qualities and how they relate to different aspects of health and life.

## Antique – 4 humors theory – Humorism and it's assignments

- ✧ 4 organs as the source of the 4 body liquids
- ✧ 4 main qualities which describe the liquids
- ✧ 4 seasons

Galen`s chart of assignments										
Element	Fluid	Qualities	Temperaments	Colour	Taste	Organ	Season	Age	Fever	Gender
Air	Blood	warm & wet	Sanguine	Red	Sweet	Heart	Spring	Youth	Continuous fever	(none)
Fire	Yellow bile	warm & dry	Choleric	Yellow	Bitter	Liver	Summer	Young man	Tertiana - every 3 <sup>rd</sup> day	male
Earth	Black bile	cold & dry	Melancholic	Black	Spicy & sour	Spleen	Fall	Old man	Quartana - every 4 <sup>th</sup> day	(none)
Water	Phlegm	cold & wet	Phlegmatic	White	Salty	Brain	Winter	Very old man	Quotidiana - every day	female

Fig 5: Galen´s chart of assignments (courtesy of Tina Hausser)

Qualities in humorism, as described under Galen, are useful in naturopathic diagnostic and treatments in many world regions. There are 4 principal qualities: warm, wet, dry, cold in 4 different degrees 1 - 4:



Fig 6: 4 degrees of the 4 principal qualities (courtesy of Tina Hausser)

If an aliment or an herb has a quality effect in degree 4, the effect is strong and the contrary quality is not present. If it is in degree 1, the effect is moderated by still presence of the contrary. The qualities have different actions on body functions, tissues, organs and liquids:

- *Warm*: dissolving, warming up until heating (in degree 4), accelerating, activating, dynamiting, consuming, in degree 1-2 moistening, in degree 3-4 drying out.
- *Cold*: compacting, cooling down, slowing down, reducing, accumulating, hardening, solidifying, drying out.
- *Dry*: drying out, activates liquid movements, canalizes, hardening,

dividing, structuring.

- *Wet*: moistening, softening, nourishing, tranquilizing, relaxation, reducing active energy.

When using humoral theory the goal of naturopathic treatment is to choose a treatment approach which will bring an individual back to a eucratic or homeostatic state.<sup>(102)</sup>

### Contributions to Humoral Theory

Humoral Theory was and still is used as a central theory by naturopathic practitioners, especially in Europe. Key contributors to this theory include:

- **Hildegard von Bingen** (1098-1179). She took over the humoral theory in her treatments of nutrition and herbalism, especially to detox body and mind. She describes these concepts in her book “*Causae et Curae*”.<sup>(39)</sup>
- **Christoph Wilhelm Hufeland** (1762-1836) added to the humoral theory the theory of “*Sensibility*” and “*Irritability*”. He believed that understanding the nerve system was fundamental to determining the cause of diseases and to choosing the right stimulus to treat the person. The term “sensibility” was used to describe the reception and the capacity of the nerve system to receive stimuli from outside. “Irritability” related to the reactions to stimuli inside the body and the capacity of the muscle system to react to the stimulus. Both forces, reception and reaction, are fundamental for normal functions and health and are part of the *vital force*.<sup>(54)</sup>
- **Sebastian Kneipp** (1821-1897), a German hydrotherapist, health promoter, herbalist, and nutritionist, applied naturopathic methods according to humoral theory. He stated that “disease sits in the blood and therefore in all body liquids, because in the blood are all four cardinal liquids.” He also stated: “Health depends on a normal and regular circulation of blood which is achieved by hydrotherapy, nutrition and herbalism.”<sup>(104)</sup>
- **Ingo Wilhelm Müller**, a German university professor and physician, wrote a textbook about humoral theory in 1993 with the title “*Humoralmedizin, Physiologische, pathologische und therapeutische Grundlagen der galenistischen Heilkunst*” (Humoralism, physiological, pathological and therapeutical basics of the galenistic cures). He describes the theory of

humoralism, pulse diagnosis, traditional herbalism using the associated quality of herbs, blood letting and other naturopathic cures related to humoralism.<sup>(105)</sup>

Up until the 19<sup>th</sup> century the methods used in humoral theory to restore the balance and eucrasia were<sup>(105)</sup> blood-letting, sweating, promoting urination, promoting defecation, promoting vomiting, and the use of herbs and nutrition.

Herbal medicines and foods were the main instruments, but surgical methods also started to be popular. Other than blood-letting, naturopathic practice continues to include the methods originally associated with humoral theory.<sup>(106)</sup> Many naturopathic practitioners continue to prescribe herbal remedies and food according to their humoral properties. That is, whether they are hot, cold, dry or wet and whether they are sweet, bitter, spicy and sour or salty. Herbs and foods are described with the aim of establishing balance and eucrasia. For example, if a person's condition is marked with signs of excess heat and dryness then herbs and foods that are cooling and wet would be prescribed.

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