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## MIZĀJ (TEMPERAMENT) IN UNANI MEDICINE: SCOPING REVIEW ELABORATING THE HISTORICAL CONTEXT AND CONTEMPORARY RELEVANCE

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### Abstract

Unani Tibb is all about achieving perfect physical, mental, and spiritual health. The main goals of Unani Medicine are to keep people healthy and to cure diseases. According to Unani medicine, there are seven important factors essential for human life on earth, known as *Al-Umūr- al-Tabī'iyya*. *Mizāj* is one of these factors and is the second most important after *Arkān*. It greatly affects whether someone is healthy or sick. Good health means having a normal *Mizāj*, so any change in *Mizāj* can affect a person's health. Unani physicians have provided detailed and valuable descriptions of *Mizāj* explaining this concept thoroughly based on their knowledge and efforts. This review explored the concept and types of *Mizāj*. Additionally, this review explored diseases associated with *Mizāj* and the assessment chart of *Mizāj*. This review aimed to better understand the concept of *Mizāj* and how it can be used in healthcare to cure and treat diseases.



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### Introduction

The Unani system of medicine is a holistic medical approach that considers a person's health and disease in relation to their environment. It focuses on promoting the well-being of the body, mind, and soul as interconnected aspects of overall health [1]. In nature, two things are not exactly alike, even if they come from the same origin or structure. This is true for living and non-living things, but it is especially noticeable in humans. Each person is unique, and this uniqueness is called

'*Mizāj*'. *Mizāj* refers to the physical and moral differences in individuals. Every person has their own *Mizāj*, which includes their physical traits, physiological makeup, psychological profile, and emotional state. (**Buqrāt**) **Hippocrates (460-370 BC)** introduced the basic principles of the Greco-Arab System of Medicine. He believed that the human body is made up of four basic elements: earth, water, air, and fire. These elements, called *Anāśir Arba'a* or '*Arkān Arba'a*', have four qualities: *Hārr* (hot), *Bārid* (cold), *Raṭb* (dry) and *Yābis* (wet). When these elements mix, they form four body fluids, also known as humours: *Dam* (Blood), *Balgham* (Phlegm), *Ṣafrā'* (Bile) and *Sawdā'* (Black bile). Good health is achieved when these humours are in the right balance, both in quality and quantity. If they are not balanced, it leads to disease [2]. When the different qualities of the elements interact, their original qualities change, creating a new balanced quality called *Mizāj*. The theory of *Mizāj* is based on the ancient four humours theory. The Greek physician Hippocrates (460-370 BC)

Systematized and developed this into a medical theory. He believed that human moods, emotions, and behaviors were influenced by four body fluids, known as "humours": blood, yellow bile, black bile, and phlegm. Later, Galen (AD 131-200) created the first classification of *Mizāj* in his work "De temperamentis" and looked for physiological reasons for different human behaviour [3]. Hippocrates and Galen made significant contributions to the theory of *Mizāj*, but the Arab scholars took it further. They studied the theory of *Mizāj* more deeply and were the first to identify the relationship between diseases, the different humours, and the disturbance of *Mizāj* [4]. The literal meaning of '*Mizāj*,' according to *Nafis*, is "intermixture." The word '*Mizāj*' originates from the Arabic word '*imtizaj*,' which means intermixture. *Mizāj* is derived from the Arabic word "*mzj*," which means the mixing of *humours* [5]. It refers to the intermixture of the four *humours* within the human body, forming the basis of the body. In "*Lisan-ul-Arab*," *Azmi* describes *Mizāj* as an admixture. He explains that *Mizāj* denotes admixture, functioning as a verb but also used metaphorically to mean tempered (*Mamzuj*). *Azmi* explains that the Greeks referred to the mixture of *humours* as "krasis," derived from the Greek word "kerannyni," meaning "to mix." The term "kerasis" is typically translated as temperament. The word "temperament" originates from the Latin word "tempero," which means "to mix." In English, "temperament" is used synonymously with the Arabic word "*Mizāj*." Both terms describe the unique blend or mixture of qualities that define an individual's physical, psychological, and emotional characteristics. *Azmi* further explains that another word used as an equivalent of '*Mizāj*' is "constitution." This term refers to the natural condition of both the body and mind. In chemistry, 'constitution' denotes not only the types and quantity of atoms but also how they are connected or linked together. This broader meaning aligns well with the elemental concept of temperament, as *Azmi* argues [6]. But *Shah* presents a contrasting viewpoint, stating that in modern medicine, the terms "constitution" and "temperament" are often considered synonymous. However, he clarifies that in *Avicenna's canon*, there is a distinction. According to *Shah*, "constitution" refers to "*tabiyat*," which comprises seven physical factors known as "*Al-Umūr- al-Tabī'iyya*." Among these factors, temperament represents only one aspect [3].

The Arab physicians universally described the concept of *Mizāj* compared to the modern concept of temperament, which focuses more narrowly on psychosomatic behaviour. As a result, the term "temperament" does not carry the same expansive meaning as *Mizāj* does in Greco-Arab medicine. *Mizāj* encompasses a broader scope, including physical, psychological, and emotional aspects, whereas temperament in modern usage often refers primarily to behavioural traits. In this context, Grunner expresses that the word "temperament" is not fully adequate to convey the richness of meaning found in the Arabic word "*Mizāj*," which inherently includes the concept of mixture. He notes that medieval translators opted for terms like "commixtio" or "complexio," which emphasize mixing, blending, and weaving. However, Grunner observes that these terms do not align perfectly with modern usage patterns [7].

The Physicians of Unani medicine have extensively explored and defined *Mizāj* based on their knowledge and concepts. Arab medical authors dedicated considerable effort to developing this theory, which is detailed in Arab medical literature under the heading "*Mizāj*."

**'Alī ibn 'Abbās Majūsī, (930-994 AD) defined *Mizāj* as follows:** All sorts of bodies, whether light or heavy, found in this ever-changing world are formed by four elements (*Ustuqussāt*). These elements mix in varying or uniform quantities as needed by the body. Through this mixing, one or two qualities become dominant in the body, and this state is called *Mizāj*. The word comes from the Arabic term *Imtizāj*, which means to mix with each other [8].

**Abū Sahl Masihi, describes *Mizāj* as follows:** Due to the multitude of primary components (*Ustuqussāt*) in the body, which are mixed together but not closely located, it is essential that the qualities of these primary components are also mixed. This intermixing gives rise to entirely new qualities that lie between the original qualities, and this state is called *Mizāj* [9].

**Ibn Sīnā, (980-1037 AD) explains *Mizāj* as follows:** *Mizāj* is a quality that results from the interaction of opposite qualities found in elements composed of minute particles. These particles of each element come into contact with most of the particles of the others. When these particles interact and react with each other's properties, a uniform quality emerges from their combined properties. This uniform quality is present throughout all of them, and this is what we refer to as temperament (*Mizāj*). "Ibn Sina" further elaborates: "Since the primary properties in the aforementioned elements are four, namely hotness, coldness, moistness, and dryness, it is evident that the temperaments of the composite bodies result from these very properties [10].

**Ismā'il Jurjānī writes about *Mizāj*:** When different qualities of elements act and react due to their powers, the previous qualities diminish, and a new moderate quality emerges. This new quality is known as *Mizāj* [11].

**Galen (130-200 AD) explains *Mizāj* as follows:** *Mizāj* is a quality that arises from the interaction and reaction of opposite qualities found in body fluids (*Akhlat*). When these components interact through their respective qualities and powers, they create a condition that is uniformly present in all components of that mixture. This condition is termed *Mizāj* [12].

**Ibn Huba Baghdādī states:** When elements are mixed, most of them intermingle and their various qualities interact. Heat counteracts cold, cold counteracts heat, dryness counteracts wetness, and wetness counteracts dryness. Lower-grade qualities mix with higher-grade qualities, and light-weight particles mix with heavy-weight particles until a new quality emerges. This new and moderate quality is equally present in all components of the elements and is known as *Mizāj* [13].

**Allama Nafees describes *Mizāj* as follows:** When elements mix with each other, they interact and react, leading to the formation of a new moderate quality that lies between the qualities of the four elements. This new quality is known as *Mizāj* [14].

Gruner explains that the Arabic word "*Mizāj*" inherently embodies the concept of mixture. Medieval medical translators, therefore, utilized terms such as "commixtio" or "complexion," which convey the notion of mixing, blending, or weaving, to

translate and convey the concept accurately into other languages [15].

**Mehdi Hasan** describes *Mizāj* in relation to the four elements as follows: The four elements result from four qualities: cold, heat, moisture, and dryness. Each element is formed by a combination of two of these qualities. For example, cold + moisture combine to form water.

The ultimate units of qualities are defined as follows:

Heat = Oxidation

Moisture = Hydration

Cold = Reduction

Dryness = Dehydration

These qualities represent fundamental aspects that contribute to understanding *Mizāj* or temperament in various individuals. So, *Mizāj* can be understood through examples such as *Sawdāwī* or Melancholic *Mizāj*. Rather than simply being characterized as cold and dry, these terms indicate a predominance of qualities like reduction and dehydration. This nuanced understanding helps in grasping the specific temperament or *Mizāj* of individuals in Unani medicine [16].

**Taiyyab suggests in Greco-Arab Medicine that:** The temperament is a synthetic concept that expresses the various physical and psychological tendencies of the individual in terms of matter and energy. It relates to activity as well as reactivity, where heat and cold correspond to dryness and moisture. This view emphasizes how temperament or *Mizāj* encompasses both physical characteristics and psychological tendencies in terms of their energetic and reactive qualities [17].

**Zaidi and Zulkifle write that:** The temperament is an intrinsic state that enables an individual to survive and to procreate comfortably. It is responsible for the distinctive morpho-bio-physio-immuno-psychological identity of an individual. This perspective underscores the vital role of temperament in shaping not just physical and physiological traits, but also immune responses and psychological characteristics that contribute to an individual's overall identity and well-being [18].

#### **Types of *Mizāj***

*Ibn Nafīs* identifies nine kinds of *Mizāj*: one is *Mu'tadil* (equable or balanced), and the remaining eight are *Ghayr Mu'tadil* (inequable or imbalanced). Unani physicians generally divide *Mizāj* into two parts, which are as follows:

#### **A) *Mizāj-e-Mu'tadil* (Equable Temperament)**

#### **B) *Mizāj-e-Ghayr Mu'tadil* (Immoderate Temperament)**

**A. *Mizāj-e-Mu'tadil* (Equable Temperament):** It is further subdivided into two types:

i. *Mizāj Mu'tadil Ḥaqīqī* (Real equable temperament)

ii. *Mizāj Mu'tadil Tibbī* (Equable temperament)

This classification highlights the division of temperaments into those that are balanced (equable) and those that are imbalanced (*Ghayr Mu'tadil*), with further distinctions based on their specific characteristics [9].

#### **i. *Mizāj Mu'tadil Ḥaqīqī* (Real equable temperament)**

This temperament is described as one where the contrary qualities of all the participating elements in a compound are equal however, this type of temperament is impossible and does not exist at all [16].

#### **ii. *Mizāj Mu'tadil Tibbī* (Equable temperament)**

This temperament is one where the contrary qualities and quantities of the participating elements in a compound are not equal but are balanced perfectly according to the properties and functions of that compound. This type of temperament is commonly discussed in Unani Tibb [6]. In Unani medicine, *Mizāj Mu'tadil Tibbī* represents a practical balance that aligns with the natural properties and functions of the body, even if it doesn't achieve the theoretical perfect balance of *Mizāj Mu'tadil Ḥaqīqī*.

***Mizāj Mu'tadil Tibbī* is divided into the following eight types:**

#### **1. *Mizāj Mu'tadil Nawī bi'l Qiyās ila'l Khārij* (Equable temperament of one species as compared to other species)**

This refers to a specific temperament suited to a particular species of animal. This temperament is normal and most beneficial for that species but would be abnormal for other species. For example, the human temperament is most suitable and normal for human beings for the performance of their normal functions, but it would not be normal and equable for other species of animals [2].

#### **2. *Mizāj Mu'tadil Nawī bi'l Qiyās ila'l Dākhil* (Equable temperament of a member of one species as compared to other members of the same species)**

This is an equable temperament given to a specific member of a species, making it the most appropriate and best among all members of that species. This particular temperament allows the individual to fully perform the functions required of that species more effectively than other members. According to *Ibn Sina*, this type of temperament is in the middle of the maximum and minimum limits of the first kind. It is found in an individual of the most equable race who has reached their full growth and development. While this is not the true equable temperament (*Mu'tadil Ḥaqīqī*) discussed earlier, which is impossible to achieve, it is very rare and difficult to find [2, 10].

#### **3. *Mizāj Mu'tadil Ḳinfi bi'l Qiyās ila'l Khārij* (Equable temperament of one race as compared to other races)**

This temperament is specific to each race within the human species, allowing each race to perform their unique functions almost completely. There are maximum and minimum limits for this type of temperament, within which the temperament of individual members of that race fluctuates. However, this range is narrower compared to the equable temperament of one species as compared to other species. This temperament is most suitable for one race but not for other races to perform their unique functions [2].

#### **4. *Mizāj Mu'tadil Ḳinfi bi'l Qiyās ila'l Dākhil* (Equable temperament of a person of one race as compared to other persons of the same race)**

This type of temperament is given to one member of a race, making it better than all other members of that race. It is a very rare and almost non-existent temperament, considered to be superior within its specific racial context.

#### **5. *Mizāj Mu'tadil Shakhṣī bi'l Qiyās ila'l Khārij* (Equable temperament of one man as compared to other men)**

This temperament is specific to an individual, allowing him to perform his normal functions optimally. It is not suitable for any other person. *Ibn Sina* says this type of temperament has a very narrow range compared to the first and second types. Each person has a unique temperament that ensures their survival and health, and it fluctuates within certain normal

limits. This uniqueness in temperament explains why no two **6. Mizāj Mu'tadil Shakhṣī bi'l Qiyās ila'l Dākhil** (Equable temperament of a person as compared to his own temperament in different states)

This type of *Mizāj* refers to the most suitable temperament for a person at a specific period or state in their life. For instance, the temperament during youth is better suited for that person compared to old age, or the temperament in spring (*rabi'*) is more appropriate than in other seasons. The temperament of a person fluctuates under different conditions. Therefore, the best *Mizāj* for an individual is the one they have during their peak health, optimal age, and the most favourable season [19].

### 7. Mizāj Mu'tadil 'Udwī bi'l Qiyās ila'l Khārij (Equable temperament of an organ as compared to other organs of the body)

*Ibn Sina* explains that this type of *Mizāj* is specific to each organ of the body. Each organ has a unique temperament that is necessary for its proper function. For example, bones, muscles, fats, and nerves each have distinct *Mizāj*. The temperament suitable for muscles is not appropriate for bones and vice versa. This distinct *Mizāj* of each organ or tissue helps them perform their specific functions effectively.

### 8. Mizāj Mu'tadil 'Udwī bi'l Qiyās ila'l Dākhil (Equable temperament of an organ as compared to its own temperament in different states)

According to *Ibn Sina*, this type of *Mizāj* refers to the ideal state of an organ's temperament, which lies midway between the limits described in the seventh pattern. This specific pattern is most suitable for the organ under its unique circumstances, allowing it to function optimally [10,20].

### B) Mizāj Ghayr Mu'tadilor Sū'-i-Mizāj (Immoderate temperament)

*Azmi* explains that this type of temperament deviates from the balanced or natural state (*E'tidal*). When a person's temperament is not in the ideal range, it is considered immoderate or *Mizāj Ghayr Mu'tadil*.

When a quality (*Kayfiyāt*) deviates from balance (*E'tidal*), this condition is known as "*Mizāj Ghayr Mu'tadil*" or *Sū'-i-Mizāj* [6].

#### Sū'-i-Mizāj is of 2 types

A) *Sū'-i-Mizāj Sāda* (simple imbalance *Mizāj* without matter)

B) *Sū'-i-Mizāj Māddī* (imbalance *Mizāj* due to any matter)

#### A) Sū'-i-Mizāj Sāda is of 2 types

##### a) Sū'-i-Mizāj Mufrad Sāda

When one *Kayfiyāt* (quality) out of the four *Kayfiyāt-e- Arba* (qualities of elements) is increased in any compound, it is known as *Sū'-i-Mizāj Mufrad Sāda*. This type of imbalance is further classified into four types.

##### b) Sū'-i-Mizāj Murakkab Sāda

When *Mizāj* is deviated in two *Kayfiyāt* out of *Kayfiyāt-e-Arba*, then it is known as *Sū'-i-Mizāj Murakkab Sāda*. This type of imbalance is also classified into four types.

##### B) Sū'-i-Mizāj Māddī is of 2 types

##### a) Sū'-i-Mizāj Mufrad Māddī (single-imbalance *Mizāj* due to any matter)

*Sū'-i-Mizāj Mufrad Māddī* is the type of imbalance where one *Kayfiyāt*-dominated substance(s) is increased. This category is further divided into four types.

##### b) Sū'-i-Mizāj Murakkab Māddī (compound imbalance *Mizāj* due to any matter)

individuals are exactly alike. *Sū'-i-Mizāj Murakkab Māddī* refers to the imbalance where two *Kayfiyāt*-dominated substances are increased. This category is also divided into four types.

Like this, there are 16 types of *Sū'-i-Mizāj* as:

**A. a)** *Sū'-i-Mizāj Mufrad Sāda*: *Ḩārr, Bārid, Raṭb and Yābis*

**A. b)** *Sū'-i-Mizāj Murakkab Sāda*: *Ḩārr Raṭb, Ḥārr Yābis, Bārid Raṭb, Bārid Yābis*.

**B. a)** *Sū'-i-Mizāj Mufrad Māddī*: *ḨārrMaddī, Bārid Maddī, Raṭb Maddī, Yābis Maddī*.

**B. b)** *Sū'-i-Mizāj Murakkab Māddī*: *Ḩārr Raṭb Maddī, Ḥārr Yābis Maddī, Bārid Raṭb Maddī, Bārid Yābis Maddī*.

#### Causes of Sū'-i-Mizāj

The factors which are responsible for changing the *Mizāj* of human being:

#### 1. Internal Factors (Internal environmental factors)

These factors affect how a person's temperament (*Mizāj*) develops while they are forming and growing in the mother's womb. The development of the baby is the result of the interaction between the sperm and egg from the parents. These gametes carry traits from the parents to the child. According to *Unani* medicine, there are active forces in the uterus, like *Quwwat Mughayyira* *Ūlā* and *Quwwat Muṣawwira*, that help shape the baby's physical and biochemical makeup based on the temperament carried by the gametes. Any abnormal change in the gametes (sperm and egg) can affect the temperament (*Mizāj*) of the fetus, leading to various congenital deformities. For instance, if there's too little or too much semen or gametes, the fetus may not develop properly. If there's too little semen, an organ might be smaller, causing conditions like "Microcephaly." Conversely, if there's too much semen, an organ might become enlarged, resulting in conditions like "Macrocephaly." Many types of congenital diseases can develop in a child due to disturbances in the genetic material (chromosomes and genes) during pregnancy. Some examples include Congenital Rubella Syndrome, Down Syndrome, Thalassemia, and Phenylketonuria (PKU) [2].

#### 2. Acquired factors External Environmental Factors (Iktisabi Awamil)

These factors depend upon the environmental conditions in which the man is living. These are of two types i.e. A. the *Asbāb Sitta Ḍarūriyya* (six essential factors) and B. the *Asbāb Ghayr Darūriyya* (non-essential factors) [20].

##### A) Asbāb Sitta Ḍarūriyya

The six essential causes are: *Hawā'-e-Muheet* (Atmospheric air); *Ma'kūlāt-o-Mashrūbāt* (Food and drinks); *Al-Ḥaraka wa'l Sukūn al-Badānī* (Physical activity and repose); *Al-Ḥaraka wa'l Sukūn al-Nafsānī* (Mental activity and repose); *Al-Nawm wa'l Yaqṣa* (Sleep and wakefulness); *Al-Iḥtibās wa'l-Istifrāgh* (Retention and elimination) [21,22,23,24].

##### B) Asbāb-e- Ghayr Darūriyya

The non-essential causes are: Age (*Umr*); Sex (*Jins*); Habitat (*Masākin wa Balad*); Habits (*Adaat*); Occupation (*Sana't*) Other remote causes (*Umoor-e-baaeda*)

*Rāzī*, when talking about what influences temperament, mentions that age, where you live, and what you eat are very important in how your temperament changes over time [25]. *Ibn Rushd* also agreed that environmental factors affect human temperament. He mentioned that factors like occupation and dietary habits can cause variations in temperament [26].

*Bhika* and *Haq* explain that at birth, functional factors affecting specific qualities can lead to partial or total changes, which may initially. However, environmental factors can influence temperament over time, impacting the ultimate physiological and anatomical setup of an individual alongside genetic influences [27].

#### **The classification of temperament according to age**

Unani medicine is based on the concept of *Ruṭūbat Gharīziyya*, which refers to a kind of fluid or protoplasm that maintains the internal environment of cells. This fluid is crucial for the cohesion of cellular components. As per Unani physicians, life is divided into four phases based on the amount of *Ruṭūbat Gharīziyya* present in the body, known as *asnan arba* (four periods).

##### **a) *Sinn-i-Numū* [Growing age]**

This phase extends from birth to the age of twenty-five. During this period, the temperament is characterized by *HārrRaṭb*.

##### **b) *Sinn-i-Shabāb* or *Wuqūf* [Adulthood]**

This phase lasts from about thirty-five to forty years. During this time, the *Mizāj* is *Mu'tadil*.

##### **c) *Sinn-i-Kuhūlat* (Age of decline)**

This phase spans from forty to sixty years. The *Mizāj* during this period tends to become *Bārid Yābis*.

##### **d) *Sinn-i-Shaykhūkhāt* (age of elderly/geriatric age)**

During this phase, the vital canters become progressively weak until death, and their *Mizāj* tends to become extremely *Bārid Yābis*.

Certainly, an organism can survive by adapting to changes in its environment. Every animal or organism is a complex system that adjusts internally to maintain balance with its surroundings throughout its life. This ongoing adjustment to external conditions is what keeps the organism in equilibrium with its environment over time. These numerous equilibrations in organisms are evident in their varied responses to the influences of the surrounding environment. From this study's findings, it can be concluded that temperamental changes occur from birth to the end of life as they are necessary for the existence of life itself. Physiological conditions and requirements are not static throughout the entire lifespan; they vary, and so does temperament [28].

#### **Determining human *Mizāj***

Each species has a specific *Mizāj* that lies within a range of maximum and minimum limits. Maintaining this equilibrium, known as homeostasis, ensures normal body functions and a healthy body. Any deviation from this equilibrium or imbalance in the normal *Mizāj* results in *Sū'-i-Mizāj*, leading to disrupted body functions and diseases. Determining *Mizāj* in both healthy and diseased states is crucial in Unani medicine. To achieve this, Unani physicians rely on specific parameters known as the "Determinants of *Mizāj*." In Unani literature, it was found that some physicians have a limited number of determinants of temperament i.e. four to five, while others have described ten parameters called *Ajnās 'Ashara* [2,10].

*Galen* in 'Kitab-ul-Insaan' has described about the parameters for the determination of temperament [29].

**According to Azmi**, *Galen* explains that to understand temperament, we should list the symptoms starting from observations related to the brain. We have to consider five original classes concerning our knowledge of patient [6].

1-The configuration of his head

be temporary or permanent. They emphasize that hereditary factors play a crucial role in forming a person's temperament

2-The merits and demerits of his sense of perception

3-Actions of a person

4-Power of reasoning

5-Function of the body

**Rabban Tabri** has mentioned five parameters which are given below

1. Color of the body.

2. Hairs of the body.

3. Muscles and Fat.

4. Touch

5. Functions [30].

**Ali Ibn-e-Abbas Majoosi** has described the following five parameters for the assessment of temperament

1. Touch

2. Complexion

3. Hairs

4. Physique

5. Body function [31].

**Discussing about the determination of temperament Razi asserts the following five parameters**

1. Complexion

2. Physique

3. Touch

4. Functions

5. Excreta

**Razi** described the hairs of the body as excreta [25].

**Jurjani** has described following five determinants

1. Touch (*Malmas*)

2. Flesh and fat (*Leham waShahm*)

3. State of flesh (*Aaza ki Salabat wa Laiynat*)

4. Hair texture, color shape, and distribution (*Sha'r*)

5. Complexion (*Laun-ul-Badan*) [11]

**Arzani** [32] holds the view that parameters for the determination of temperaments are

1. *Malmas*

2. *Laham waShahm*

3. Hairs

4. Body complexion

**Abu-Sehal Masihi** in *Kitab-ul-Mea'h* has discussed the (1) texture of hair (2) complexion (3) flesh and fat (4) physique and at another place dream, wakefulness and habits for the assessment of temperament [29].

**Ibn-e-Rushd** under the heading of compound organs (*Aaza-e-Murakkabah*) has described the following parameters

1. Functions of organs

2. Body complexion

3. Physique [33].

These parameters, described by various scholars, are most notably detailed by *Ibn Sina* in his renowned work "Al-Qanoon fil-Tib" (The Canon of Medicine). *Ibn Sina*'s ten determinants are universally accepted and widely used for assessing *Mizāj*. They are known as *Ajnās 'Ashara* shown in Table No. 1:

**Table No. 1: Characteristics of Different Temperaments Classification of *Mizāj* according to humours**

Parameters	<i>Damawī</i>	<i>Safrāwī</i>	<i>Balghamī</i>	<i>Sawdāwī</i>
<b>(1) <i>Malmas</i> (Touch)</b>				
i) Touch	Moderately Soft	Dry	Soft	Dry
ii) Temperature	Warm	Warm	Cold	Cold
<b>(2) <i>Laḥm-wa- Shahm</i> (Muscle and Fat)</b>				
Body Built	Muscular Muscles are fully developed & strong	Moderately muscular & less Fatty, Muscles are moderately developed/ large joint	Fatty & less muscular Joint well covered	Lack of fat & muscle Muscles are under developed
<b>(3) <i>Sh'ār</i> (Hair)</b>				
i) Texture	Thick & lusty	Thick & curly	Thin & straight	Straight & coarse
ii) Growth & Distribution	Rapid average	Rapids profuse	Slow Scanty	Rapid Excessive
iii) Colour	Blackish	Black	Brownish	Black & White
<b>(4) <i>Lawn al-Badan</i> (Body Complexion)</b>				
Complexion	Reddish	Yellowish	Whitish	Blackish
<b>(5) <i>Hai'yat-e-A'dā'</i> (Physique)</b>				
i) Built	Muscular & firm	Slim & firm	Fatty & flabby	Lean & thin
ii) Chest	Broad	Wide	Flat	Narrow
iii) Height	Tall	Medium	Short	Short
iv) Blood vessels	Mild prominent	More prominent	Not Prominent	Narrow
<b>(6) <i>Kayfyat-e- Infi'āl</i> ( Quality of Responsiveness of the Organs to various stimuli )</b>				
i) Tolerate well	Dryness	Cold	Heat	Dampness
ii) Remains well in	Spring	Winter	Summer	Autumn
<b>(7) <i>Af'āl e-A'dā'</i> (Functions of the Body Organs)</b>				
i) Digestion	Average	Strong	Poor	Irregular
ii) Appetite	Normal	Increased	Less	False
iii) Taste	Sweet	Bitter	Normal	Sour/normal
iv) Thirst	Normal	Increased	Decreased	Low
v) Salivation	Moderate	Decreased	Increased	Low
vi) Voice	High	Medium	Slow	Slow
vii) Respiratory rate	Easily/ Rapid	Rapid/Increased & Regular	Slow	Slow

viii) Physical Activity	Average	Hyperactive	Not active	Decreased
ix) Speech	Average	Quick	Slow	Slow
x) Pulse	<i>Azeem wa Qawi</i>	<i>Sari wa Matwatir</i>	<i>Saghir wa Bati</i>	<i>Bati wa Sulb</i>
xii) Nausea	Sometimes	Very rare	Frequent	Frequent
xiii) Favorable Diet	Cold & Dry	Cold & moist	Hot & Dry	Hot & moist
xiv) Dislikes	Hot & moist	Hot & dry	Cold & moist	Cold & dry

**(8) *Fudlāt -e-Badan* (Excreta of the Body)**

i) Urine Colour	Normal/Reddish	Yellowish	Whitish	Darkish/Blackish
ii) Urine Concent	Concentrated	Dilute	Turbid	Turbid
iii) Urine Quantity	Moderate	Less	More	Less
iv) Stool Consistency	Semi Solid	Loose	Loose	Constipated
v) Stool Quantity	Voluminous	Less amount	Voluminous	Less amount
vi) Stool Colour	Brownish	Yellowish	Whitish	Blackish
vii) Stool Odoure	Odoured	Odoured more	Odourless/Avg	Bad odoured/less
viii) Sweat	Odoured More	Odoured More	Odourless/Avg	Bad odoured/ less

**(9) *Nawm wa'l Yaqza* (Sleep and Wakefulness)**

Sleep	Average	Less	Excessive	Less & disrupted
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**(10) *Infi'ālāt Nafsāniyya* (Psychic Reactions)**

i) Response	Aggressive	Brave	Weak	Coward
ii) Angers /Joy	Easily come easily lost	Frequent, severe & Persist for long time	Comes hardly easily lost	Infrequent but persists
iii) Mental Alertness	Enthusiastic prepared	Reactive provoked	Dull sluggish	Deep thinking
iv) Memory	Excellent, Long-term Retention	Good, Short-term Retention	Not good, cannot retention for long time	Not good but excellent retention
v) Behaviour	Cheerful	Angry/Loose temper easily Calm	Quick Depressed	Nervous
vi) Decision Taking Power	Bold	Quick	Hesitate	Afraid
vii) Dream	Blood, red object	Five red or yellow object	White cold object	Fearful black object

In the Greco-Arab system of Medicine, the human body is said to contain four primary fluids: blood (*Dam*), phlegm (*Balgham*), yellow bile (*Safrā*), and black bile (*Sawdā*). These fluids are formed in varying proportions of the four basic elements. Blood is characterized as hot and wet, phlegm as cold and wet, yellow bile as hot and dry, and black bile as cold and dry.

A person's temperament, or *Mizāj*, is determined by the predominant fluid and its physiological effects. This results in classifications such as sanguine (*Damawī*), phlegmatic (*Balghamī*), choleric (*Safrāwī*), or melancholic (*Sawdāwī*), based on whether blood, phlegm, yellow bile, or black bile predominates in their body.

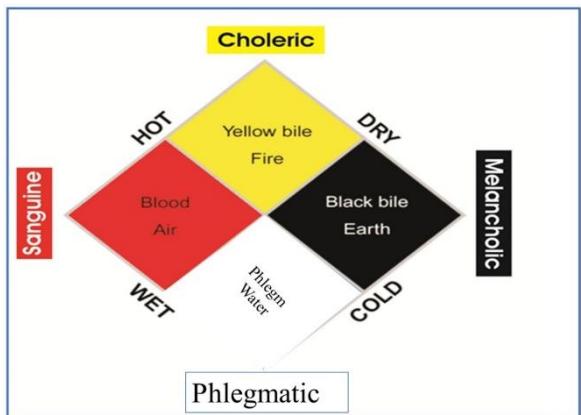


Figure 1: Classification of *Mizāj* according to humours

The characteristic features of four types of *Mizājs* are as follows:

#### 1. *Damawī Mizāj* (Sanguine Temperament)

People with this temperament have a warm and moist nature. They are often tall, strong, and muscular, with a broad chest, large and sturdy bones, and well-formed joints. Their complexion tends to be reddish, and they have thick, straight black hair that grows quickly. Their veins are mildly prominent, and they usually have a full and strong pulse. According to *Ibn Sina*, individuals with a sanguine temperament experience a slight feeling of heaviness in their body, especially around the base of the eyes, head, and temple. They are often bothered by hot environments and hot foods. They feel more comfortable with cold and dry items and tend to prefer cold weather [10, 34]. Individuals with a sanguine temperament typically exhibit excellent digestive power, a keen appetite, sound sleep, concentrated urine in moderate quantity, average physical activity and speech, and easily fluctuating psychological aggressiveness and psychic conditions. Their mental condition is generally good, and they frequently dream of red objects. Overall, their health is notably robust. Sanguine individuals tend to view everything optimistically, always expecting success. They are extroverted and enjoy making acquaintances with others [18].

#### 2. *Şafrāwī Mizāj* (Choleric temperament)

It is characterized by a hot and dry disposition. People with this temperament typically have a medium stature, a thin and

hairy body with moderate musculature, and deficient fat. Their joints are well-formed and prominent, and they have a yellowish complexion. Their hair is thick, curly, black, rough, and abundant. Veins are prominent, and their pulse is strong and rapid. They often pass fiery and yellow urine and may sometimes feel sensations of pain and pricks throughout their body [2, 10]. Choleric individuals feel comfortable in cold environments but are troubled by heat. They find winter weather most suitable. Their temperament shows a short response delay to stimuli but the response is sustained for a relatively longer time. Individuals with a choleric temperament typically have active digestive organs, a good appetite, and light, often disturbed sleep. According to Ahmad, these people are characterized as proud, revengeful, shrewd, and zealous. They tend to get angry quickly and are known for their energy and intelligence. Additionally, they have a strong inclination towards indulging in sexual pleasure.

#### 3. *Balghamī Mizāj* (Phlegmatic Temperament)

Individuals with a phlegmatic temperament have a cold and moist nature. They typically have a soft and flabby body with excess weight, soft muscles, a flat chest, and large but poorly defined joints. Their complexion is usually whitish, and their hair, which is thin, straight, and either brownish or whitish, grows slowly. Their blood vessels are not prominent, and their pulse is soft, slow, and infrequent. People with a phlegmatic temperament produce colour less urine in large amounts and often feel excessively heavy in their bodies. They move and act slowly, and their bodily functions like digestion, appetite, and thirst are not strong. They tend to sleep a lot, have a poor and forgetful memory, and their ability to imagine and understand things is slow and weak. Phlegmatic individuals prefer hot and dry conditions and items, and they feel comfortable in hot weather. They are not easily aroused sexually and generally do not get angry easily [20, 26]. The phlegmatic temperament involves a longer delay in response but the response itself is short-lived.

#### 4. *Sawdāwī Mizāj* (Melancholic Temperament)

The melancholic temperament is characterized by a cold and dry nature. Individuals with this temperament are typically lean and thin, with a narrow chest and coarse, rough skin. They have abundant body hair and a dark complexion. Their hair is black, thin, and grows slowly. Their blood vessels are narrow, and they have a slow pulse. People with a melancholic temperament often have weak digestion and irregular appetite. They may suffer from interrupted sleep and insomnia. Their senses are acute, and they have an excellent memory. Melancholic individuals are described as irresolute, reserved, and despondent, lacking courage and appearing slow and awkward. They tend to miss opportunities in life and have a sluggish inclination towards sexual activity. They often experience excessive evil thoughts and anxieties. The melancholic temperament exhibits a long delay in response, and once they respond, their reaction can be sustained for a long time or even appear permanent [10, 18].

#### Relationship between Diseases and *Mizāj*

The relationship between *Mizāj* and diseases is closely linked. Individuals with a particular *Mizāj* are more likely to develop certain groups of diseases at different stages of life and in varying climates. For instance, those with a cold *Mizāj* are often prone to obesity. On the other hand, individuals with a hot *Mizāj* may be susceptible to conditions such as acute fever, heat stroke, dehydration, and hypertension. **Diseases Associated with Sū'-i-Mizāj** (Table no. 2 & 3) [8,10,11,22,35,36,37]

**Table no.2: Diseases Associated with *Sū'-i-Mizāj Mufrad Sāda***

<i>Sū'-i-Mizāj Ḥārr</i>	<i>Sū'-i-Mizā Bārid</i>	<i>Sū'-i-Mizāj Raṭb</i>	<i>Sū'-i-Mizāj Yābis</i>
<i>Sāda</i>	<i>Sāda</i>	<i>Sāda</i>	<i>Sāda</i>
<i>Hummā al-Yawm</i>	<i>Istisqae tabli</i> (Asicritis)	<i>Hummā Balghamiyya</i>	<i>Hummā al-Rib'</i>
<i>Hummā al-Shamsiyya</i>	<i>Siman Mufrit</i>	<i>Hummae Mukhtalifah</i>	<i>Laghri</i>
<i>Hummā Muṭbiqa</i>	<i>Buhtusb Soat</i> (hoarseness of voice)	Frequent infections	Asthma
Diabetes ( <i>Ziabitus Shakrij</i> )	<i>Hummā Balghamiyya</i> and <i>Hummā Mukhtalīta</i> are more common in the person having sue <i>Mizāj barid</i>	Laziness	Anosmia
Headache	Body ache	<i>Buhtus Soat</i> (Hoarseness of voice)	Bodyache
Heat stroke	<i>Waja' al- Mukassir</i>	Increased sleep	<i>Zo'fe Aaza</i>
Body ache	<i>Waja 'al- Khadri</i>	Chest pain	Male and female infertility
Chest Pain	Weakness of the body more common	<i>Zo'fe hazm</i> (Dyspepsia)	<i>Ikhtilate Aql</i> fear
Male and Female infertility	Anosmia	General weakness	Chest Pain
Weakness in the Organs or body	Cough and Common cold	Prolonged fevers	<i>Fasaade Zikr</i>
Increased thirst	Asthma	Diarrhoea	<i>Suda'eyabis</i>
Insomnia	Chest pain	Piles	
Onset of senility occurs rapidly due to increased dispersion of fluid	<i>Jooul Qalb</i>	Dysmenorrhoea	<i>Suda'e Jimaee</i> (headache due to Coitus)
Complexion of Skin & hair becomes black	<i>Naffākhor</i> flatulence	Ulcers	<i>Faasadus saut</i>
Weak digestion	Infertility (male and female)	Fistulae	Thin and cracked skin
<i>Sudae Shirki Medi Har</i>	<i>Sudae Barid Sada (Khībtah)</i>	Epilepsy	
	Symptoms due to Sue <i>Mizāj Barid Kabid</i>	Stomatitis	
	Loose motion		
	Looseness in the body <i>Tahabuj</i> (Swelling on the face)		

<i>Hārr Ratb</i>	<i>Hārr Yābis</i>	<i>Bārid Ratb</i>	<i>Bārid Yābis</i>
Hummyat	<i>Hummā al-Ghibb</i>	Common cold	Malancholia
Epilepsy	<i>Hummā Muṭbiqa</i>	Pneumonia	Common cold
Bloody diarrhoea	<i>Hummā Diq (TB)</i>	Pleuritis	Asthma
Epistaxis	Haemoptysis	Hoarseness of voice	Piles
Inflammatory diseases and boils	Ulcers in lung	Throat pain	Ulcer in lungs
Paralysis	Epilepsy	Chest pain	Frequent cough
Diphtheria	Loose motion	Back ache	Irritation in the eyes
Deafness	Looseness of bowl	Nervine diseases like	Constipation
Diseases in the eyes as			
false membrane is formed in eye	Conjunctivitis	Paralysis	Increased urination
Headache develops Frequently	General weakness	Bell's palsy	Female infertility
Digestion becomes weak (indigestion)	Earache	<i>Isterkha</i>	Severe labour pains
Gout	Erysipelas	<i>Ikhtilaje</i>	Frequent vomiting
Itching	Inflammatory conditions	<i>Tashannuj</i>	<i>Dawar</i>
Epilepsy	<i>Sudae Safravi</i> (Bilious headache)	Dribbling of urine	<i>Jumood</i>
	<i>Usrul Bala'q</i>		
Insomnia	(Dysphagia) due to	Secretion from eyes, nose	<i>Fasade Fikr</i>
	Safra		
Piles	<i>Dawar</i> (Vertigo)	<i>Sudae Balghamī</i>	<i>Qutrub</i> (Type of mania)
Decreased appetite	<i>Darde Meda</i> (Safravi)	<i>Sarsām Balghamī</i> ( <i>Līthārghus</i> )	Epilepsy
Asthma with cough		<i>Dawar</i> (Vertigo)	<i>Sakta</i>
Falghamūnī ( <i>Sarsām Damawī</i> )		Coma	<i>Darde me'da</i>
<i>Dawar</i> (Vertigo)		<i>Fasade Zikr</i>	<i>Usrulbala</i>

*Usrul Bala* (Difficulty in swallowing)

*Saktah*

Cancer

*Sudae Damvi*

*Tamaddud*

*Qooba*

*Dagħi al-Dam Qawwī*(HT)

*Kuzaz (Tetanus)*

Dry eczema

*Siqlul Lisan*

Irregular fever

*Usrunl Bala'q* (Difficulty in

*Hummae ruba* (Quartern

Swallowing)

fever)

Asthma

Dysurea

*Fasaadus Saut*

Spleenomegaly

## Conclusion

The Unani system of medicine emphasizes the unique, holistic nature of each individual, considering physical, psychological, and environmental factors. Central to this approach is the concept of 'Mizāj,' derived from the ancient theory of humours, which balances the body's elements and fluids. Good health arises from a balanced *Mizāj*, while imbalance leads to disease. Arab scholars expanded on Greek foundations, integrating *Mizāj* deeply into their medical practices. Understanding and maintaining one's *Mizāj* through environmental and lifestyle adjustments is vital for health. This approach underscores the interconnectedness of body, mind, and environment in overall well-being.

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