# OF UNANI AND INTEGRATIVE MEDICINE



E-ISSN: 2616-4558 P-ISSN: 2616-454X www.unanijournal.com

IJUIM 2025; 9(3): 100-105 Impact Factor (RJIF): 6.59 Peer Reviewed Journal Received: 27-08-2025 Accepted: 28-09-2025

## Rukhsar Aslam

PG Scholar 2<sup>nd</sup> Year, Department of Moalajat Medicine, State Takmeel ut Tib College and Hospital, Lucknow, Uttar Pradesh, India

#### Dr. Mohd Shahid

Professor & HOD, Department of Moalajat (Medicine), State Takmeel-ut-Tib College & Hospital, Lucknow, Uttar Pradesh, India

#### Dr. Mohd Zubair

Lecturer, Department of Moalajat (Medicine), State Takmeel-ut-Tib College & Hospital, Lucknow, Uttar Pradesh, India

### Dr. Gulnaz Fatima

Lecturer, Department of Moalajat (Medicine), State Unani Medical College, Himmatganj, Prayagraj, Uttar Pradesh, India

## Corresponding Author: Rukhsar Aslam

PG Scholar 2<sup>nd</sup> Year, Department of Moalajat Medicine, State Takmeel ut Tib College and Hospital, Lucknow, Uttar Pradesh, India

## A comprehensive review: How ancient unani medicine offers preventive approaches for metabolic diseases through movement and balance in the body

## Rukhsar Aslam, Mohd Shahid, Mohd Zubair and Gulnaz Fatima

**DOI:** https://doi.org/10.33545/2616454X.2025.v9.i3b.386v

#### Abstract

*Metabolic Syndrome* (MetS) is an escalating global health issue characterized by a cluster of risk factors, including obesity, insulin resistance, hypertension, and dyslipidemia. These conditions collectively heighten the risk of developing cardiovascular diseases and type 2 diabetes.

In the Unani system of medicine, the concept of Harkat-e-Badni (bodily movement and rest) holds central importance in maintaining health and preventing disease. This principle advocates for a well-balanced lifestyle where physical activity and rest are harmonized to sustain the equilibrium of humors (*Akhlat*) and temperament (*Mizaj*). According to Unani philosophy, both a sedentary lifestyle and excessive physical exertion can disturb this delicate balance, leading to the accumulation of waste products (*Fuzlat*) and impaired metabolic function concepts that closely mirror modern understandings of MetS.

This review highlights the relevance of Harkat-e-Badni as a preventive and therapeutic concept in Unani medicine for managing *Metabolic Syndrome*. It underscores the potential value of integrating Unani principles, particularly those outlined in *Asbab-e-Sitta Zarooriya* (six essential factors), into lifestyle interventions aimed at improving metabolic health.

**Keywords:** *Metabolic Syndrome*, Harkat-e-Badni, Physical Activity, Unani Medicine, *Asbab-e-Sitta Zarooriya*, Preventive Health, *Mizaj*, *Akhlat* 

#### Introduction

Metabolic Syndrome (MetS) is a comprehensive clinical entity encompassing a constellation of interrelated risk factors, including hypertension, insulin resistance (type 2 diabetes), visceral obesity, non-alcoholic fatty liver disease (NAFLD), and atherogenic cardiovascular diseases. Despite extensive research, the precise etiology of MetS remains incompletely understood. However, central obesity and insulin resistance are widely recognized as pivotal contributors to its pathogenesis. Despite factors such as genetic predisposition, physical inactivity, advancing age, chronic low-grade inflammation, and hormonal imbalances also play significant roles. The influence of these variables may vary across different ethnic populations, suggesting complex interactions between genetic and environmental factors. The clinical diagnosis of Metabolic Syndrome is typically made when an individual presents with three or more of the following metabolic abnormalities:

- Waist circumference >40 inches in men and >35 inches in women
- Serum triglycerides ≥150 mg/dL
- HDL cholesterol <40 mg/dL in men or <50 mg/dL in women
- Fasting blood glucose ≥100 mg/dL
- Blood pressure ≥130/85 mm Hg

*Metabolic Syndrome* is associated with considerable morbidity and mortality due to its strong link with cardiovascular disease, type 2 diabetes, and stroke. Nonetheless, it is largely preventable and manageable through timely lifestyle interventions and behavior modification. [4]

In Unani Medicine, metabolic disorders such as diabetes (*Ziabetus*), dyslipidemia, and obesity (Saman-e-Mufrit) are believed to originate from disturbances in the humoral balance (Ikhtilal-e-*Akhlat*) and disruptions in the *Asbab-e-Sitta Zarooriya* (Six Essential Factors), which are:

- 1. Air (Hawa)
- 2. Food and Drink (Makool wa Mashroob)
- Bodily Movement and Repose (Harkat wa Sukoon-e-Badani)
- 4. Mental Activity and Rest (Harkat wa Sukoon-e-Nafsani)
- 5. Sleep and Wakefulness (Naum wa Yaqza)
- 6. Retention and Evacuation (Ihtibas wa Istifragh)

Unani scholars have emphasized that imbalances in these factors such as the excessive intake of cold and moist foods, poor digestion, irregular eating habits, or prolonged inactivity can lead to metabolic dysfunction. Psychological states are also considered integral in this system, with emotional disturbances or persistent stress affecting the balance of pneuma (Ruh), ultimately contributing to the derangement of bodily functions and development of chronic diseases, including MetS. [5]

#### **Background**

*Metabolic Syndrome* (MetS) initially emerged as a conceptual framework rather than a formally recognized medical diagnosis. <sup>[6]</sup> Its origins can be traced back to the 1920s, when Swedish physician Kylin first reported an association between hypertension, hyperglycemia, and gout highlighting an early link between metabolic abnormalities and cardiovascular risk. <sup>[7]</sup>

In 1947, this understanding was further expanded by Jean Vague, who identified the relationship between visceral obesity and a cluster of metabolic disturbances frequently seen in patients with cardiovascular disease (CVD) and type 2 diabetes mellitus (T2DM). [8] His observations brought greater attention to the role of body fat distribution, particularly central obesity, in the development of metabolic disorders.

The concept continued to evolve in 1965, when Avogaro and Crepaldi presented a clinical syndrome at the European Association for the Study of Diabetes. Their description included the triad of hypertension, hyperglycemia, and obesity, providing further clinical structure to the emerging idea of MetS. [9]

However, the syndrome gained significant recognition and momentum after the influential 1988 Banting Lecture by Gerald Reaven, who introduced the term "Syndrome X." He described it as a cluster of interrelated risk factors that increase the likelihood of developing both diabetes and cardiovascular disease, emphasizing the central role of insulin resistance as a unifying mechanism. [10]

**Unani Perspective on Metabolic Disorders:** Although the term *Metabolic Syndrome* does not appear explicitly in classical Unani texts, its clinical features such as obesity, diabetes (*Ziabetus*), hypertension, and lipid abnormalities are well recognized as manifestations of humoral imbalance and temperament derangement. In the Unani system, these conditions are interpreted as outcomes of disturbances in the body's temperament (*Mizaj*) and humors (*Akhlat*), which ultimately disrupt metabolic processes and physiological harmony.

In Unani medicine,  $Asb\bar{a}b$  (causes or factors) are defined as internal or external agents that initiate or influence changes in the human body, either by maintaining a physiological state or initiating disease. [11] Central to this understanding is the concept of  $Asb\bar{a}b$ -e-Sitta Zarooriyah (Six Essential

Factors of Life), which are considered vital for maintaining health and preventing disease. These include:

- 1. Hawā (Air)
- 2. Makool wa Mashroob (Food and Drink)
- 3. Harkat wa Sukoon-e-Badani (Physical Activity and Rest)
- 4. Harkat wa Sukoon-e-Nafsani (Mental Activity and Rest)
- 5. Nawm wa Yaqza (Sleep and Wakefulness)
- 6. Istifrāgh wa Iḥtibās (Evacuation and Retention) [12]

Unani scholars emphasize that the human body is in a state of constant physiological transformation, influenced by internal dynamics and external environmental conditions. For example, sudden exposure to extreme temperatures, dietary changes, or prolonged physical inactivity can disrupt the homeostasis maintained by these six essential factors. Such imbalances may lead to the accumulation of waste products (*Fuzlāt*), sluggish metabolism, and dysfunction in organ systems conditions that align closely with the pathophysiology of modern *Metabolic Syndrome*. During these disruptions, Unani physicians aim to restore balance by regulating the *Asbāb*-e-Sitta Zarooriyah, applying tailored regimens in lifestyle, diet (*Ilaj bil Ghiza*), physical therapy (*Riyāzat*), detoxification (*Ilaj bil Tadbeer*), and where needed, pharmacotherapy (*Ilaj bil Dawa*). [14]

The Role of Harkat-wa-Sakoon-e-Badani (Physical Activity and Rest) in Metabolic Health: The Third Essential Factor of LifeIn Unani medicine, Harkat-wa-Sakoon-e-Badani (physical activity and bodily rest) is regarded as the third essential factor among the Asbab-e-Sitta Zarooriyah (Six Essential Factors of Life), and is pivotal for maintaining internal balance and promoting health. This principle emphasizes the restorative effects of balanced physical activity on the body's natural defense mechanism, known as Tabiyat (innate resistance). Regular and appropriate physical movement, referred to as Riyāzat, is fundamental to sustaining a healthy lifestyle and preventing disease.

Contemporary medical research strongly supports the health benefits of regular physical activity, which include:

- Improved cardiovascular function
- Reduction in blood pressure
- Enhanced energy metabolism and caloric expenditure
- Strengthening of musculoskeletal structure
- Maintenance of healthy body weight
- Protection against metabolic and chronic diseases

Much like a nutritious diet, physical activity also contributes significantly to immune system efficiency and overall physiological well-being. It facilitates optimal blood circulation, ensuring the efficient transport of nutrients and immune components, thereby allowing cells and defense mechanisms to function effectively. [15]

From the Unani perspective, Riyāzat is not merely a mechanical activity but a therapeutic intervention that stimulates Tabiyat, empowering it to repel morbid matter and maintain equilibrium. Physical activity activates Harakat-e-Ghariyya (innate energy or vital force), which plays a central role in disease prevention and health preservation.

Furthermore, Unani physicians recognized the role of physical movement in expelling waste products (Fuzlāt)

through natural channels of excretion. However, they stressed that exercise must be tailored according to individual temperament (*Mizaj*), strength, occupation, and environment.

Classical Unani scholars have meticulously documented the methods, types, and protocols of Riyāzat:

- Al-Rāzī (865-925 CE), in his treatise Kitāb al-Murshid, classified exercises based on intensity, duration, body region, and occupational needs. He also prescribed precautionary measures to be observed before and after exercise to avoid harm.
- Ibn Sīnā (Avicenna, 980-1030 CE), in his monumental work *Al-Qānūn fī al-Tibb*, elaborated extensively on Riyāzat. He described its mechanisms of action, various types, organ-specific applications, and provided detailed recommendations for the intensity, frequency, and therapeutic duration of physical activity. [16]

These time-tested guidelines align closely with modern principles of preventive and lifestyle medicine, highlighting the enduring value of Unani insights in managing conditions like *Metabolic Syndrome*.

Table 1: Aqsaam-e-Riyazat (Type of Exercises) 17,18-

Fundamental Type		Other types of exercise	
Riyazat-e- Juziya / Incomplete exercise.	B. Riyazat-e- Haqeeqi/Kulli/Complete exercise.	Zatiya	Riyazat-e- A'arziya (Gair Iridi).

**Table 2:** Aqsaam-e-riyazat-e-Zatiya (<u>Classification of Riyazat-e-Zatiya</u>)

According to Strength	2. According to duration	3. According to strength and Sura'at
a. Riyazat-e-Qaviya shaded (strenuous exercise).	a. Riyazat-e-Kaseera (prolonged exercise).	a. Riyazat-e-Hasheeha (fast and strenuous exercise).
b. Riyazat-e-Motadil (Moderate exercise).		b. Riyazat-e-Motadil (Moderate and strenuous exercise).
c. Riyazat-e-Zaeefa (Mild exercise).	c. Riyazat-e-Qaleela (short duration exercise).	c. Riyazat-e- Mutarakhiya (slow and strenuous exercise)

## Effect of Riyāzat (Physical Exercise)

In Unani medicine, Riyāzat (physical exercise) is regarded as a crucial pillar for maintaining health and preventing disease. Its significance is not only emphasized in preventive care but also in therapeutic interventions. The following outlines the multifaceted benefits of Riyāzat on human physiology:

- **a.** Preservation of Health and Disease Prevention: Riyāzat plays a pivotal role in preserving general health and preventing a wide spectrum of illnesses, both acute and chronic.
- **b. Detoxification and Waste Elimination**: It helps prevent the accumulation of harmful substances within the body by enhancing natural detoxification mechanisms and supporting excretory pathways.
- c. Protection Against Physical and Psychological Illnesses: Regular physical activity offers protection against both Maʻādi (physical) and Ghayr Maʻādi (psychological) diseases, aligning with modern evidence on the mental

health benefits of exercise.

- **d. Support for Natural Excretion**: It assists in the efficient expulsion of waste materials ( $Fuzl\bar{a}t$ ) via the body's natural excretory systems, such as perspiration, defecation, and urination.
- e. Stimulation of Harārat-e-Gharīziyya (Innate Vital Heat): Riyāzat stimulates the Harārat-e-Gharīziyya, a central concept in Unani medicine referring to the innate vital heat that governs physiological processes and metabolic balance.
- **f. Strengthening of Digestive and Evacuatory Function**: It enhances Quwwat-e-Hāzima (digestive power) and Quwwat-e-Dāfiya (power of evacuation), both vital for nutrient assimilation and waste removal.
- **g. Reduction in Risk of Chronic Diseases:** Scientific and traditional evidence supports Riyāzat in reducing the risk of:
- Cardiovascular diseases
- Hypertension
- Osteoporosis
- Diabetes Mellitus
- Obesity
- Premature mortality
- Hyperlipidemia (high cholesterol or its development)
- Colon and breast cancers (by up to 60%)
- Endometriosis in women (by up to 50%)
- Mental health disorders such as depression and anxiety Riyāzat also plays a vital role in maintaining healthy body weight and body fat composition. [19]

Physiological Balance Through Movement and Rest: The physiological effects of movement (Harkat) and rest (Sukoon) are well documented within Unani and modern medical frameworks. Historically, Unani physicians have employed exercise and rest as adjuncts to medicinal therapy, recognizing their synergistic effect in enhancing the action of pharmacological agents ( $Daw\bar{a}$ ).

When deleterious substances accumulate in the body particularly with increased viscosity of Maddah (bodily matter or humors) the efficacy of medicine may be compromised, and the vital heat weakened. In such cases, moderate and appropriate physical movement is prescribed to:

- Reduce the viscosity and abnormal accumulation of humors
- Restore optimal conditions for medicinal action
- Reinforce Harārat-e-Gharīziyya, enabling Tabiyat to function effectively in disease resistance and metabolic regulation [20]

Modern Perspective on Metabolic Diseases: From a contemporary biomedical viewpoint, physical activity is broadly defined as any bodily movement produced by skeletal muscles that results in energy expenditure. A more specific classification, termed health-enhancing physical activity, refers to movements that, when incorporated regularly into daily life beyond routine, light-intensity tasks provide measurable health benefits. These activities typically involve large muscle groups and demand significant energy output. In this context, the term *physical activity* will refer primarily to health-enhancing movement. Exercise, a subcategory of physical activity, is defined as structured, planned, and repetitive movement performed with the explicit goal of improving or maintaining physical

fitness. Unlike general physical activity, exercise is intentional and measurable, with specific outcomes targeted such as improved strength, endurance, or flexibility.

Regular participation in physical activity has been shown to improve various dimensions of health-related physical fitness, which collectively influence a person's risk for chronic disease, functional impairment, disability, and premature mortality. These dimensions include:

- Cardiorespiratory endurance (aerobic capacity)
- Muscular strength and endurance
- Muscular power
- Body composition
- Bone integrity
- Neuromotor functions, including balance, flexibility, coordination, and reaction time

The effectiveness of physical activity in promoting health is determined by several key attributes:

- 1. Type (Mode) e.g., walking, swimming, resistance training, flexibility training
- 2. Frequency how often the activity is performed
- 3. Duration length of each activity session
- 4. Intensity level of effort required to perform the activity

Physical activities are classified based on their physiological effects into four major categories:

- Aerobic (Cardiovascular)
- Muscle Strengthening
- Flexibility-enhancing
- Balance-improving

The intensity of aerobic activity is commonly quantified using Metabolic Equivalents (METs), where:

- 1 MET = resting metabolic rate =  $\sim$ 3.5 mL O<sub>2</sub>/kg/min
- Light-intensity = <3 METs
- Moderate-intensity = 3-6 METs
- Vigorous-intensity = >6 METs

These standardized measures provide a framework for designing personalized exercise prescriptions that optimize metabolic health and reduce the risk of conditions such as obesity, insulin resistance, hypertension, and cardiovascular disease the very components of *Metabolic Syndrome*. <sup>[21]</sup>

## **Preventive Health Benefits in Adults**

There is robust and consistent evidence that engaging in regular moderate to vigorous physical activity (see *Table 1*) significantly reduces the risk of premature mortality and a wide range of chronic diseases. These include:

- Coronary artery disease
- Stroke
- Hypertension
- Dyslipidaemia (adverse lipid profile)
- Type 2 diabetes mellitus

- Metabolic Syndrome
- Obesity
- Osteoporosis
- Colon and breast cancers [22]

Even a modest amount of physical activity such as 15 minutes per day or 90 minutes per week of moderate-intensity exercise has been shown to reduce all-cause mortality by approximately 14%. The health benefits of physical activity are not limited to cardiovascular and metabolic outcomes. Physical activity also:

- Reduces the risk of falls, particularly in older adults
- Delays age-related muscle loss and functional decline
- Improves cognitive function and reduces the risk of dementia
- Alleviates symptoms of depression and sleep disorders
- Lowers the risk of hip fractures, lung cancer, and endometrial cancer [23]

Some evidence also supports a protective effect of physical activity against:

- Anxiety disorders
- Osteoarthritis
- Chronic back pain

## **Independence from Other Risk Factors**

The health benefits of physical activity are largely independent of other risk factors. For example, even in individuals who are obese or smoke, regular physical activity can significantly improve health outcomes. A sedentary obese smoker who begins exercising may derive substantial cardiovascular and metabolic benefits, even if smoking and obesity persist.

Increased Mortality Risk from Physical Inactivity Epidemiological studies have shown that low levels of physical activity are associated with:

- Up to a 67% increase in all-cause mortality
- A doubling of cardiovascular mortality
- Increased cancer-related mortality

## **Dose-Response Relationship**

Findings from the Women's Health Initiative Observational Study (see *Table 4*) illustrate a clear dose-response relationship between activity levels and health outcomes. Compared to the least active women:

- Those achieving 600 MET-minutes/week had a 19% lower risk of cardiovascular disease
- Those achieving 1968 MET-minutes/week had a 28% lower risk of cardiovascular disease [24]

These data support the premise that greater levels of physical activity confer proportionally greater health benefits, reinforcing the need for public health strategies to promote physical activity as a cornerstone of disease prevention.

**Table 3:** Examples OF Moderate-Intensity and Vigorous-Intensity Activities.

S.No	Moderate Intensity	
1.	Walking briskly (3 miles per hour or faster, but not race-walking.	
2.	Water aerobics.	
3.	Bicycling slower than 10 miles per hour	
4.	Tennis	
5.	Ballroom dancing	
6.	General Gardening	
Vigorous Intensity		
1.	Race walking, jogging or running	
2.	Swimming laps	
3.	Tennis	
4.	Bicycling 10 miles per hour or faster	
5.	Jumping rope	
6.	Heavy gardening (continuous digging or hoeing, with heart rate increase)	
7.	Hiking uphill or with a heavy backpack	

From U.S Department of Health and Human Services, 2009 PAG for http://www.health.gov/paguidelines

**Table 4:** Relative Risk for Cardiovascular Disease in the Womens Health Initiative Observational Study (N=73,743)

Median Met-Minutes Per Week	Multivariate Adjusted Relative Risk for Cardiovascular Disease
0	1.0
252	0.89
600	0.81
1050	0.78
1968	0.72

Data from Manson JE, Greenland P, LaCrois AZ, *et al.* Walking compared with vigorous exercise for the prevention of cardiovascular events in women. N Engl J Med. 2003,347-716-725

### **Conflict of Interest**

Not available

## **Financial Support**

Not available

## Conclusion

Metabolic Syndrome (MetS) is a growing global health concern, marked by a cluster of modifiable risk factors such as obesity, insulin resistance, hypertension, and dyslipidaemia. Importantly, all components of MetS are amenable to lifestyle interventions, with dietary regulation and physical activity playing central roles in its prevention and management.

A wide variety of physical activity options, encompassing different intensities and forms, are available and adaptable to individuals across all age groups and fitness levels. These interventions offer an effective, non-pharmacological, and cost-efficient strategy to combat the rising burden of MetS. In the Unani system of medicine, Harkat-e-Badni (physical movement) is regarded as one of the *Asbab-e-Sitta Zarooriyah* (Six Essential Factors of Life), fundamental for the preservation of health. Unani scholars have long emphasized that appropriate bodily movement not only facilitates the elimination of morbid matter (*Fuzlāt*) but also helps maintain the equilibrium of humors (Akhlāt) and temperament (Mizāj) thereby ensuring optimal metabolic and physiological balance.

Incorporating Harkat-e-Badni into one's daily routine thus serves as a natural, preventive, and therapeutic approach to managing metabolic disorders. This ancient principle aligns remarkably well with modern evidence-based strategies, reflecting the enduring relevance of Unani wisdom in addressing contemporary health challenges.

Regular physical activity has been shown to positively

influence each component of *Metabolic Syndrome*, offering a practical and sustainable solution to reduce the burden of chronic disease and improve quality of life.

#### References

- Hoffman M. Inherited metabolic disorders. WebMD; 2023.
- 2. Saad MF, Lillioja S, Nyomba BL, *et al.* Racial differences in the relation between blood pressure and insulin resistance. New England Journal of Medicine. 1991;324:733-739.
- 3. Anderson PJ, Critchley JAJH, Chan JCN, *et al.* Factor analysis of the *Metabolic Syndrome*: Obesity vs insulin resistance as the central abnormality. International Journal of Obesity. 2001;25:1782-1788.
- 4. National Center for Biotechnology Information. https://www.ncbi.nlm.nih.gov/books/NBK459248/
- 5. International Journal of Unani and Integrative Medicine. http://www.unanijournal.com
- 6. Shaw JE, Chisholm DJ. Epidemiology and prevention of type 2 diabetes and the *Metabolic Syndrome*. Medical Journal of Australia. 2003;179(7):379-383. https://doi.org/10.5694/j.1326-5377.2003.tb05677.x
- 7. Kylin E. Studien über das Hypertonie-Hyperglykämie-Hyperurikämie-Syndrom. Zentralblatt für Innere Medizin. 1923;44:105-127.
- 8. Vague J. Sexual differentiation: A factor affecting the forms of obesity. Presse Médicale. 1947;30:S39-S40.
- 9. Avogaro P, Crepaldi G. Essential hyperlipidemia, obesity and diabetes. Diabetologia. 1965;1:137-137.
- 10. Reaven GM. Role of insulin resistance in human disease. Diabetes. 1988;37(12):1595-1607. https://doi.org/10.2337/diab.37.12.1595
- 11. Hamdani HSK. Usool-e-Tibb. New Delhi: New Public Press; 1998. p.1-250.
- 12. Ahmad I. Kulliyat-e-Asri. Delhi: New Public Press; 1983. p.1-300.
- 13. Qarshi AA. Ifada-e-Kabeer. New Delhi: Idara Kitab-us-Shifa; 2010. p.1-200.
- 14. Harwi MBY. Ain-al-Hayat (Urdu trans. by Rahman HSZ). Aligarh: Ibn Sina Academy; 2008. p.1-250.
- 15. Nafis BU. Kulliyat-e-Nafisi (Urdu trans. by Hakim Kabiruddin). New Delhi: Idara Kitab-us-Shifa; 1954. p.1-400.
- 16. NeuroPharmac. 2022;7:342-352.
- 17. Khan AA, Ashraf SMS, Zulkifle M. Chronology of

- Dalak (Massage) and Riyazat (Exercise). ISHIM. 2013-2014;13(1):1-6.
- 18. Ibn Sina AAHA. Kulliyat Qanoon. New Delhi: Ejaz Publishing House; 2006. p.1-600.
- 19. Jurjani I. Zakhira Khawarzam Shahi. New Delhi: Idara Kitab-us-Shifa; 2010. p.1-500.
- 20. Hasan I. Basic principles of regimental therapy. New Delhi: Idara Kitab-us-Shifa; 2011. p.107.
- 21. International Journal of Physiology, Nutrition and Physical Education. 2019;4(1):570-573.
- 22. U.S. Department of Health and Human Services. Physical activity guidelines. 2009. http://www.health.gov/paguidelines
- 23. Pahor M, Guralnik JM, Ambrosius WT, *et al*. Effect of structured physical activity on prevention of major mobility disability in older adults: The LIFE Study randomized clinical trial. JAMA. 2014;311:2387-2396.
- 24. Manson JE, Greenland P, LaCroix AZ, *et al.* Walking compared with vigorous exercise for the prevention of cardiovascular events in women. New England Journal of Medicine. 2003;347:716-725.

#### **How to Cite This Article**

Aslam R. A comprehensive review: How ancient unani medicine offers preventive approaches for metabolic diseases through movement and balance in the body. International Journal of Unani and Integrative Medicine. 2025;09(03):100-105.

#### Creative Commons (CC) License

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work noncommercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.