



## Preventive strategies of breast cancer in unani medicine: An overview

Shamim Akhtar<sup>1\*</sup>, Khalid Eqbal<sup>2</sup>, Shafat Karim<sup>1</sup>, Mahfoozur Rahman<sup>3</sup>, Anzar Alam<sup>4</sup>

<sup>1</sup> Department of Preventive and Social Medicine, Govt. Tibbi College and Hospital, Patna, India

<sup>2</sup> Department of Moalajat (Medicine), Sufia Unani Medical College, Hospital & Research Centre, Motihari, Bihar, India

<sup>3</sup> Department of Ilmu Advia (Pharmacology), Principal, Government Tibbi College & Hospital, Patna, Bihar, India

<sup>4</sup> Department of Moalajat, School of Unani Medical Education and Research (SUMER), Jamia Hamdard, New Delhi, India

### Abstract

Breast cancer remains a significant health concern worldwide, emphasizing the crucial need for effective preventive strategies. Unani Medicine, an ancient system of medicine, offers a holistic approach to healthcare that encompasses preventive measures along with therapeutic interventions. Unani Medicine emphasizes the balance of bodily humors (blood, phlegm, yellow bile, and black bile) and considers breast cancer as a result of imbalances in these humors. Prevention in Unani Medicine begins with lifestyle modifications, including dietary habits, physical activity, and emotional well-being. Dietary recommendations focus on incorporating foods with cooling properties to counteract heat-related imbalances, such as fresh fruits, vegetables, and whole grains. Regular physical activity is encouraged to maintain optimal circulation and lymphatic drainage. Additionally, Unani Medicine emphasizes the importance of maintaining emotional equilibrium to prevent the accumulation of harmful humors. Stress management techniques, such as herbal remedies, meditation, and aromatherapy, play a vital role in maintaining mental health and preventing the onset of breast cancer. Additionally, Unani formulations like *Majoon Suranjan*, *Majoon Najah*, and *Itriphal Shahtara* etc., have demonstrated potential in alleviating symptoms associated with breast cancer, including pain, inflammation, and fatigue. *Nigella Sativa*, *Withania somnifera*, *Curcuma longa* and *Catharanthus roseus* etc., exhibiting anti-cancer properties and aiding in hormone regulation. These herbs are often prescribed in specific combinations tailored to individual constitutions to restore humoral balance and strengthen the body's natural defenses against cancerous growth. Furthermore, Unani Medicine advocates for regular detoxification to eliminate accumulated toxins and maintain the purity of bodily fluids. Techniques such as bloodletting (*Fasd*), *Munzj wa Mushil Therapy*, and detoxifying massages (*Dalk*) are employed to remove excess humors and toxins from the body, thereby reducing the risk of cancer development. Unani Medicine offers a multifaceted approach to breast cancer prevention, addressing both physical and emotional aspects of health. By promoting balance within the body and strengthening its natural defenses, Unani preventive strategies hold promise in mitigating the risk of breast cancer and improving overall well-being. Further research and integration of Unani principles into mainstream healthcare could provide valuable insights into comprehensive breast cancer prevention.

**Keywords:** Breast cancer, unani medicine, herbal medicine, complementary medicine

### Introduction

Breast cancer stands as one of the most prevalent malignancies affecting women worldwide, accounting for a significant portion of cancer-related morbidity and mortality [1]. Despite advancements in conventional treatment modalities such as surgery, chemotherapy, radiation therapy, and targeted therapies, the quest for alternative or adjunctive therapeutic approaches persists [2]. In this pursuit, traditional systems of medicine, with their holistic philosophies and diverse therapeutic modalities, have garnered increasing attention [3]. Among these traditional systems, Unani medicine emerges as a prominent contender in the management of breast cancer. Rooted in ancient Greco-Arabic traditions and heavily influenced by the teachings of luminaries like Hippocrates, Galen, and Avicenna (*Ibn Sina*), Unani medicine offers a comprehensive approach to healthcare that encompasses physical, mental, and spiritual aspects of well-being [4]. The fundamental principle of Unani medicine revolves around the balance of bodily humors (*Akhlaat*), with diseases perceived as imbalances in these humors [5]. Unani physicians approach patient care with a focus on individualized treatment strategies, considering the unique constitution (*Mizaj*) of each patient [6]. This personalized approach extends to dietary modifications, lifestyle interventions, herbal remedies, and

therapeutic techniques aimed at restoring harmony within the body [7]. Unani pharmacopeia boasts a rich array of medicinal plants, many of which have demonstrated promising anti-cancer properties through modern pharmacological investigations [8].

While conventional treatments often target cancer cells directly, Unani medicine emphasizes strengthening the body's inherent healing mechanisms and bolstering overall health to better withstand the disease process [9]. Unani formulations like *Majoon Suranjan*, *Majoon Najah*, and *Itriphal Shahtara* etc along with therapeutic interventions such as cupping therapy (*Hijama*) and regimental therapies like massage (*Dalk*), constitute integral components of Unani cancer care. Moreover, Unani medicine places a strong emphasis on mental and emotional well-being, recognizing the intricate connection between psychological states and physical health [10]. By incorporating interventions aimed at promoting emotional resilience and psychological balance, Unani medicine seeks to address the psychosocial aspects of breast cancer and enhance the overall quality of life for patients [11].

This introduction sets the stage for exploring the intersection of breast cancer management and Unani medicine, highlighting the potential of this ancient healing system to offer complementary and integrative approaches

to conventional cancer care<sup>[12]</sup>. Through a multidimensional lens that encompasses biological, psychological, and spiritual dimensions of health, Unani medicine presents a holistic paradigm that resonates with the complex nature of breast cancer and the multifaceted needs of affected individuals<sup>[13]</sup>.

### Materials and methods

A comprehensive literature search was conducted to identify relevant studies on Preventive Strategies of Breast Cancer in Unani Medicine. The search encompassed multiple databases, including PubMed, Web of Science, Scopus, and Google Scholar. Keywords used in the search included Breast cancer, Sartan, Unani Medicine, Herbal Medicine, Complementary Medicine, and combinations thereof.

### Etiologies of Breast Cancer with respect to Humoral Concept

In Unani medicine, the etiology of breast cancer is understood through the prism of the humoral concept, which posits that health and disease result from the balance or imbalance of bodily humors (*Akhlaat*); blood (*Dam*), phlegm (*Balgham*), yellow bile (*Safra*), and black bile (*Sauda*)<sup>[8]</sup>. Breast cancer, like other diseases, is believed to stem from disturbances in this humoral equilibrium, influenced by various internal and external factors. The etiologies of breast cancer, viewed through the lens of Unani medicine, encompass both physiological and environmental factors that disrupt the balance of bodily humors and predispose individuals to the development of malignancy<sup>[14, 15]</sup>.

**Imbalanced Diet (*Ghiza*):** Dietary habits play a crucial role in Unani etiology, with imbalanced or inappropriate dietary practices believed to disturb the humoral equilibrium and predispose individuals to diseases like breast cancer. Consumption of foods that are hot and dry (*Haar*) or cold and moist (*Barid*) in nature, or indulgence in excessive intake of fatty, spicy, or processed foods, may lead to disturbances in the humoral balance, fostering conditions conducive to the development of cancerous growths<sup>[4, 8, 10]</sup>.

**Physical Inactivity (*Johar*):** Sedentary lifestyles and lack of physical activity are considered predisposing factors for various diseases, including breast cancer, in Unani medicine. Physical inactivity is believed to impede the circulation of vital fluids (*Akhlaat*) within the body, leading to stagnation and accumulation of morbid matter (*Mawad-e-Fasida*). This stagnation may create an environment conducive to the formation of tumors and malignancies in the breast tissue<sup>[4, 8, 10, 12, 13, 14]</sup>.

**Environmental Toxins (*Adwiyat-e-Madiyyah*):** Exposure to environmental toxins, pollutants, and harmful substances is recognized as a significant etiological factor for breast cancer in Unani medicine. Prolonged exposure to pollutants, industrial chemicals, radiation, and other environmental toxins is believed to disturb the natural balance of bodily humors, weaken the body's defenses, and promote the growth of cancerous cells in breast tissue<sup>[4, 8, 10, 12, 13, 14]</sup>.

**Emotional Disturbances (*Su-e-Nafsani*):** Unani physicians emphasize the impact of emotional and psychological factors on health and disease. Chronic stress, emotional disturbances, and negative mental states are believed to

disrupt the equilibrium of humors and weaken the body's resistance to diseases like breast cancer. Emotional stressors may contribute to hormonal imbalances, immune system dysfunction, and oxidative stress, all of which play roles in the development and progression of breast cancer<sup>[4, 8, 10, 12, 13, 14]</sup>.

**Genetic Predisposition (*Taqleed*):** While Unani medicine primarily focuses on the balance of humors and environmental factors in disease etiology, it also acknowledges the role of genetic predisposition (*Taqleed*) in certain cases<sup>[4, 8, 10, 12, 13, 14]</sup>. Familial tendencies and inherited factors may influence an individual's susceptibility to breast cancer by predisposing them to specific humoral imbalances or physiological dysfunctions that increase the likelihood of malignancy. In addressing the etiologies of breast cancer from a Unani perspective, treatment strategies aim to restore the balance of bodily humors, strengthen the body's natural defenses, and eliminate causative factors contributing to the disease process. Interventions may include dietary modifications, lifestyle adjustments, herbal remedies, therapeutic interventions, and measures to promote mental and emotional well-being. By addressing the underlying imbalances and risk factors associated with breast cancer, Unani medicine offers a holistic approach to disease management that complements conventional treatment modalities<sup>[4, 8, 10, 12, 13, 14]</sup>.

### Risk factors of Breast Cancer

Risk factors play a pivotal role in understanding the development and progression of breast cancer. While conventional medicine delineates several well-established risk factors such as age, genetic predisposition (BRCA mutations), hormonal factors (early menarche, late menopause, hormone replacement therapy), family history, and lifestyle factors (diet, physical inactivity, alcohol consumption, obesity), the perspective of Unani medicine offers additional insights into the interplay of physiological, environmental, and lifestyle factors in disease etiology<sup>[12, 13, 14, 15]</sup>.

Unani medicine views health and disease through the lens of the balance of bodily humors (*Akhlaat*) and the harmony between the body, mind, and spirit. According to Unani principles, certain predisposing factors or imbalances in the humoral constitution (*Mizaj*) of an individual can contribute to the development of diseases, including breast cancer. These imbalances may arise from dietary indiscretions, lifestyle habits, environmental factors, and emotional disturbances, disrupting the equilibrium within the body and predisposing it to pathological changes. From a Unani perspective, specific risk factors for breast cancer may include<sup>[4, 8, 10, 12, 13, 14]</sup>.

**Dietary factors:** Unani medicine emphasizes the significance of dietary habits in maintaining health and preventing disease. Consumption of imbalanced or incompatible foods (*Makoolat*) that disrupt the humoral equilibrium, such as excessive intake of hot and dry (*Haar*) or cold and moist (*Barid*) foods, may contribute to the development of diseases like breast cancer<sup>[4, 8, 10, 12, 13, 14]</sup>.

**Lifestyle factors:** Sedentary lifestyles, lack of physical activity, and irregular daily routines (*Niswaan*) are considered predisposing factors for various diseases, including breast cancer, according to Unani principles.

Engaging in regular exercise, adopting a balanced daily regimen, and incorporating physical activities like walking (*Saier*) are advocated to promote overall health and mitigate disease risks [4, 8, 10, 12, 13, 14].

**Environmental factors:** Unani medicine recognizes the influence of environmental factors such as exposure to toxins, pollutants, and environmental stressors in disease causation. Prolonged exposure to environmental toxins, including pollutants, pesticides, and industrial chemicals, may disrupt the physiological balance within the body and contribute to the development of breast cancer [4, 8, 10, 12, 13, 14].

**Emotional disturbances:** Unani physicians acknowledge the profound impact of emotional and psychological factors on health and disease. Chronic stress, emotional disturbances, and negative mental states (*Su-e-Nafsani*) are believed to disturb the humoral equilibrium and weaken the body's natural defenses against diseases like breast cancer [4, 8, 10, 12, 13, 14]. In addressing these risk factors, Unani medicine emphasizes a holistic approach aimed at restoring balance within the body, strengthening the immune system, and promoting overall well-being. Interventions may include dietary modifications (*Ilaj Bil-Ghiza*), lifestyle adjustments (*Ilaj Bil-Tadbeer*), herbal remedies, therapeutic interventions, and measures to promote mental and emotional resilience. By addressing the root causes of imbalances and supporting the body's innate healing mechanisms, Unani medicine offers a comprehensive approach to reducing the risk of breast cancer and promoting optimal health and wellness [4, 8, 10, 12, 13, 14, 15, 16].

### Clinical Features of Breast Cancer

Clinical features of breast cancer encompass a spectrum of signs and symptoms that may manifest in affected individuals [17]. These features can vary widely depending on factors such as the stage of the disease, the subtype of breast cancer, and individual patient characteristics. Understanding the clinical presentation of breast cancer is crucial for early detection, accurate diagnosis, and appropriate management [18]. The clinical features of breast cancer include

**Breast Lump or Mass:** One of the most common signs of breast cancer is the presence of a palpable lump or mass in the breast tissue. This lump may feel firm, irregular in shape, and may or may not be painful. Not all breast lumps are cancerous, but any new lump should be evaluated by a healthcare professional [19].

**Changes in Breast Size or Shape:** Breast cancer can cause changes in the size, shape, or contour of the breast. This may manifest as asymmetry between the two breasts or noticeable changes in the appearance of the affected breast [20].

**Skin Changes:** Breast cancer may present with various skin changes on the breast or nipple. These changes can include redness, warmth, swelling, dimpling (retraction), thickening, or puckering of the skin. Inflammatory breast cancer, a rare and aggressive subtype, often presents with pronounced skin changes resembling an infection or inflammation [21].

**Nipple Abnormalities:** Changes in the appearance or behavior of the nipple may indicate breast cancer. These

changes may include nipple retraction (turning inward), inversion, flattening, or discharge, especially if the discharge is bloody or clear [22].

**Breast Pain or Discomfort:** While breast pain is a common complaint and is often not indicative of cancer, persistent or unexplained breast pain, discomfort, or tenderness warrants further evaluation by a healthcare provider [23].

**Axillary Lymphadenopathy:** Enlargement or swelling of the lymph nodes in the axilla (armpit) may occur as breast cancer progresses. Palpable lymph nodes may indicate metastatic spread of cancerous cells from the breast to the regional lymph nodes [24].

**Changes in Breast Texture:** Breast cancer can cause changes in the texture of the breast tissue, which may feel thicker, denser, or more nodular than usual. These changes may be detected during breast self-examination or clinical breast examination [25].

**Nipple Retraction or Inversion:** In some cases of breast cancer, the nipple may become inverted or retracted, appearing sunken into the breast instead of protruding outward. This change in nipple position can be indicative of underlying breast pathology [26].

**Skin Ulceration or Erosion:** Advanced breast cancer may lead to the development of skin ulceration or erosion over the breast or nipple. These ulcerations may be painful, tender, and prone to infection [27].

**Systemic Symptoms:** In some cases, advanced breast cancer may present with systemic symptoms such as unintentional weight loss, fatigue, malaise, bone pain, or symptoms related to metastatic spread to distant organs. It is important to note that not all individuals with breast cancer will experience all of these clinical features, and the presentation can vary widely between patients [28]. Additionally, many of these signs and symptoms can be caused by non-cancerous conditions. Therefore, any concerns regarding breast health should be promptly evaluated by a healthcare professional for proper diagnosis and management [29]. Early detection through regular breast self-examination, clinical breast examination, mammography, and other screening modalities remains paramount in improving outcomes for individuals with breast cancer [30].

### Complications of Breast Cancer

Breast cancer, like many other types of cancer, can give rise to a range of complications that may affect various aspects of a person's health and quality of life [11]. These complications can arise from the primary tumor itself, its metastatic spread to distant organs, or as a result of cancer treatments. Understanding and managing these complications are crucial components of comprehensive cancer care [12]. Here are some of the complications associated with breast cancer

**Metastasis:** One of the most significant complications of breast cancer is the spread (metastasis) of cancerous cells from the primary tumor to distant organs such as the bones, lungs, liver, or brain. Metastatic breast cancer, also known as stage IV breast cancer, can lead to symptoms and

complications specific to the affected organs, including bone pain, shortness of breath, jaundice, neurological symptoms, and others [13].

**Lymphedema:** Lymphedema is a chronic condition characterized by swelling and fluid retention, usually in the arms or chest, resulting from damage to or removal of lymph nodes during breast cancer surgery or radiation therapy. Lymphedema can cause discomfort, limited range of motion, and an increased risk of infections in the affected limb [14].

**Pain:** Breast cancer can cause pain at various stages of the disease. This may include localized breast pain or discomfort related to the primary tumor, bone pain from metastasis to the bones, or post-surgical pain following breast surgery [15].

**Fatigue:** Fatigue is a common complication experienced by individuals with breast cancer, often attributed to the disease itself, as well as cancer treatments such as chemotherapy, radiation therapy, and hormonal therapy. Cancer-related fatigue can significantly impact daily functioning and quality of life [16].

**Psychosocial Effects:** Breast cancer diagnosis and treatment can have profound psychosocial effects on individuals and their families. Anxiety, depression, fear of recurrence, body image issues, relationship strain, and financial concerns are common psychological and social challenges faced by breast cancer patients [17].

**Cardiovascular Complications:** Certain breast cancer treatments, particularly certain chemotherapy drugs and radiation therapy targeting the left breast, can increase the risk of cardiovascular complications such as cardiomyopathy, heart failure, arrhythmias, and ischemic heart disease [18].

**Cognitive Impairment:** Some breast cancer patients may experience cognitive changes commonly referred to as “chemo brain” or “cancer-related cognitive impairment.” Symptoms may include difficulties with memory, concentration, attention, and processing speed, which can persist even after completion of cancer treatment [19].

**Osteoporosis and Bone Health:** Breast cancer treatments, particularly hormonal therapies that induce estrogen depletion, can increase the risk of osteoporosis and bone fractures. Reduced bone density and increased fracture risk are significant concerns for breast cancer survivors, particularly postmenopausal women [20].

**Secondary Cancers:** Certain breast cancer treatments, such as radiation therapy and certain chemotherapy drugs, may increase the risk of developing secondary cancers, including leukemia, lymphoma, and solid tumors in other organs [21].

**Sexual Dysfunction:** Breast cancer and its treatments can lead to sexual dysfunction, including decreased libido, vaginal dryness, pain during intercourse, and changes in body image and self-esteem, which may affect intimate relationships and quality of life [22]. Addressing and managing these complications often require a

multidisciplinary approach involving oncologists, surgeons, radiation oncologists, rehabilitation specialists, mental health professionals, and other healthcare providers [23]. Supportive care interventions, including symptom management, rehabilitation, psychosocial support, and survivorship care planning, are essential components of comprehensive breast cancer care aimed at optimizing outcomes and quality of life for affected individuals [24].

### Management of Breast Cancer

The management of breast cancer is multifaceted and typically involves a combination of treatments tailored to the individual characteristics of the tumor, the stage of the disease, and the patient's overall health and preferences [25]. The primary goals of breast cancer management are to eradicate the cancer, prevent recurrence, preserve quality of life, and prolong survival [26]. The main modalities of breast cancer treatment include

#### Surgery

**Lumpectomy (Breast-Conserving Surgery):** Removal of the tumor and a small margin of surrounding normal breast tissue. This approach is often recommended for early-stage breast cancer [27].

**Mastectomy:** Surgical removal of the entire breast. Mastectomy may be indicated for larger tumors, tumors in certain locations, or cases where lumpectomy is not feasible [28].

**Sentinel Lymph Node Biopsy:** Surgical removal and examination of the sentinel lymph node(s) to assess for the presence of cancer spread to the axillary lymph nodes [29].

**Axillary Lymph Node Dissection:** Removal of multiple axillary lymph nodes if cancer spread is suspected or confirmed [30].

#### Radiation Therapy

**External Beam Radiation:** High-energy beams targeted at the breast or chest wall to destroy cancer cells and reduce the risk of local recurrence after surgery [31].

**Brachytherapy:** Internal radiation therapy involving the placement of radioactive seeds or pellets directly into the breast tissue near the tumor site [31].

#### Systemic Therapy

**Chemotherapy:** Administration of cytotoxic drugs either before (neoadjuvant) or after (adjuvant) surgery to shrink tumors, destroy cancer cells, and reduce the risk of recurrence or metastasis [32].

**Hormonal Therapy (Endocrine Therapy):** For hormone receptor-positive breast cancers, hormonal therapies such as selective estrogen receptor modulators (e.g., tamoxifen), aromatase inhibitors (e.g., anastrozole, letrozole), or ovarian suppression may be used to block the effects of estrogen on cancer cells [33].

**Targeted Therapy:** Targeted drugs that specifically interfere with certain molecular pathways involved in cancer growth and progression may be used for HER2-positive

breast cancers (e.g., trastuzumab, pertuzumab) or other molecularly targeted subtypes [34].

**Immunotherapy:** Immunotherapy drugs, such as checkpoint inhibitors (e.g., pembrolizumab), may be used in certain cases of triple-negative breast cancer that express high levels of immune checkpoint proteins [35].

### Supportive Therapies

**Pain Management:** Pharmacological and non-pharmacological interventions to manage cancer-related pain and improve quality of life [36].

**Nutritional Support:** Nutritional counseling and dietary interventions to address nutritional needs and optimize overall health during treatment [37].

**Psychosocial Support:** Counseling, support groups, and mental health services to address emotional and psychological challenges associated with breast cancer diagnosis and treatment [38].

**Rehabilitation Services:** Physical therapy, occupational therapy, and lymphedema management to address functional impairments and improve physical well-being [39].

**Clinical Trials:** Participation in clinical trials evaluating novel therapies, treatment strategies, and diagnostic approaches may be considered for eligible patients to access cutting-edge treatments and contribute to the advancement of breast cancer care [40]. The selection and sequencing of treatments are guided by factors such as tumor characteristics (e.g., histology, hormone receptor status, HER2 status), disease stage, patient age, comorbidities, and treatment goals [41]. Multidisciplinary collaboration among oncologists, surgeons, radiation oncologists, pathologists, radiologists, nurses, and other healthcare professionals is essential to ensure comprehensive and coordinated care for individuals with breast cancer [42]. Additionally, patient education, shared decision-making, and ongoing monitoring are integral components of breast cancer management to optimize outcomes and support the physical, emotional, and psychosocial well-being of patients and their families throughout the cancer journey [43].

### Unani Management of Breast Cancer

Unani medicine offers a holistic approach to the management of breast cancer, focusing on restoring the balance of bodily humors (*Akhlaat*), strengthening the body's inherent healing mechanisms, and promoting overall well-being [4, 8, 10, 12, 15]. The management of breast cancer in Unani medicine involves a combination of dietary modifications, lifestyle interventions, herbal remedies, and therapeutic techniques aimed at addressing the underlying imbalances and supporting the body's natural defenses. Here are some key components of Unani management of breast cancer

**Dietary Modifications (*Ilaj Bil-Ghiza*):** Unani physicians emphasize the importance of a balanced and nourishing diet in supporting overall health and vitality. Dietary modifications may include consuming foods that are considered cooling (*Mubarrid*) and moistening (*Mutrafiq*) to counteract any excess heat or dryness in the body. Emphasis is placed on incorporating fresh fruits, vegetables, whole

grains, legumes, and lean proteins into the diet while limiting the consumption of processed foods, red meat, and saturated fats. Certain foods and spices with potential anti-cancer properties, such as garlic, ginger, turmeric, and green tea, may be recommended as part of the therapeutic diet [4, 8, 10, 12, 15].

**Herbal Remedies (*Ilaj bil-Dawa*):** Unani pharmacopeia includes a variety of medicinal plants and herbal formulations with potential anti-cancer properties. Herbal remedies may be prescribed based on individual constitution (*Mizaj*) and presenting symptoms. Commonly used herbs in the management of breast cancer may include *Nigella sativa* (black seed), *Withania somnifera* (ashwagandha), *Commiphora wightii* (guggul), *Curcuma longa* (turmeric), and *Trigonella foenum-graecum* (fenugreek), among others. Herbal formulations such as *Majoon Suranjan*, *Majoon Najah*, and *Itriphala Shahtara* etc may be prescribed to alleviate symptoms associated with breast cancer, including pain, inflammation, and fatigue [4, 8, 10, 12, 15].

**Regimenal Therapy (*Ilaj bil-Tadbeer*):** Unani regimenal therapies aim to restore balance and harmony within the body through various therapeutic interventions. *Hijama* (cupping therapy) may be utilized to improve blood circulation, lymphatic drainage, and detoxification, thereby supporting the body's natural healing processes [4, 8, 10, 12, 15]. Massage therapy and hydrotherapy may also be employed to promote relaxation, relieve muscular tension, and enhance overall well-being [4, 8, 10, 12, 15].

### Emotional and Psychological Support

Unani medicine recognizes the interconnectedness of the body, mind, and spirit in health and disease. Emotional and psychological well-being are considered integral components of holistic health. Counseling, stress management techniques, and lifestyle counseling may be provided to address emotional distress, promote resilience, and enhance coping mechanisms [4, 8, 10, 12, 15].

### Follow-up Care and Monitoring

Regular follow-up visits with a Unani physician are recommended to monitor the progress of treatment, assess any changes in symptoms or disease status, and make adjustments to the treatment plan as needed [4, 8, 10, 12, 15]. Patient education and empowerment are emphasized to promote active participation in self-care and decision-making regarding treatment options. It's important to note that while Unani medicine offers a holistic approach to the management of breast cancer, it is typically used as a complementary therapy alongside conventional cancer treatments such as surgery, radiation therapy, chemotherapy, and hormonal therapy [4, 8, 10, 12, 15]. Patients considering Unani management of breast cancer should consult with a qualified Unani physician and work collaboratively with their oncology team to develop an integrated treatment plan that addresses their individual needs and preferences. Additionally, further research and clinical studies are needed to validate the efficacy and safety of Unani interventions in the management of breast cancer [4, 8, 10, 12].

### Preventive Approach of Breast Cancer

Breast cancer prevention encompasses a multifaceted approach aimed at reducing the risk of developing the

disease. Overall, a proactive approach to breast cancer prevention involves a combination of lifestyle modifications, regular screening, and tailored interventions based on individual risk factors. By empowering women with knowledge about risk reduction strategies and promoting healthy behaviors, it is possible to make significant strides in reducing the incidence and impact of breast cancer <sup>[44]</sup>.

### Lifestyle Modifications

- Maintaining a healthy weight through balanced diet and regular exercise.
- Limiting alcohol consumption and avoiding smoking.
- Adopting a diet rich in fruits, vegetables, whole grains, and lean proteins, while minimizing processed and red meats.
- Engaging in regular physical activity, aiming for at least 150 minutes of moderate-intensity exercise per week <sup>[45]</sup>.

### Breastfeeding

- Breastfeeding can reduce the risk of breast cancer, especially if continued for a longer duration <sup>[46]</sup>.

### Screening and Early Detection

- Regular screening mammograms can help detect breast cancer at an early stage when treatment is most effective.
- Women should discuss their individual risk factors and screening recommendations with their healthcare providers to develop a personalized screening plan <sup>[47]</sup>.

### Genetic Counseling and Testing

- Women with a family history of breast cancer or specific genetic mutations (e.g., BRCA1, BRCA2) may benefit from genetic counseling and testing to assess their risk and explore preventive options, such as increased surveillance or risk-reducing surgeries <sup>[48]</sup>.

### Medications

- Selective estrogen receptor modulators (SERMs) and aromatase inhibitors (AIs) may be recommended for women at high risk of breast cancer to reduce their risk of developing the disease. These medications work by blocking the effects of estrogen, which can fuel the growth of some breast cancers <sup>[49]</sup>.

### Risk Reduction Surgery

- Risk-reducing mastectomy (prophylactic mastectomy) may be considered for women with a significantly increased risk of breast cancer, such as those with BRCA mutations or a strong family history of the disease.
- Risk-reducing oophorectomy (removal of the ovaries) may also be recommended for women with BRCA mutations, as it can reduce the risk of both breast and ovarian cancer <sup>[50]</sup>.

### Conclusion

The integration of Unani medicine into the management of breast cancer offers a promising avenue for enhancing holistic care and addressing the multifaceted needs of affected individuals. Unani medicine, with its ancient roots and holistic principles, provides a comprehensive approach

to health and healing that complements conventional cancer treatments. Through dietary modifications, herbal remedies, regimenal therapies, and psychosocial support, Unani medicine seeks to restore balance within the body, strengthen the body's natural defenses, and promote overall well-being in individuals with breast cancer. The holistic framework of Unani medicine recognizes the interconnectedness of the body, mind, and spirit in health and disease, emphasizing the importance of addressing physical, emotional, and psychological aspects of well-being. By incorporating interventions aimed at promoting harmony and resilience, Unani medicine empowers individuals to actively participate in their healing journey and optimize their quality of life. However, it's essential to approach the integration of Unani medicine into breast cancer management with caution and in collaboration with conventional healthcare providers. Further research and clinical trials are needed to validate the efficacy, safety, and mechanisms of action of Unani interventions in the context of breast cancer. Additionally, efforts to enhance interdisciplinary collaboration, promote patient education, and facilitate shared decision-making will be instrumental in advancing integrative approaches to breast cancer care that incorporate the best of both conventional and traditional healing modalities. Overall, the integration of Unani medicine holds promise for expanding the therapeutic armamentarium available to individuals with breast cancer, offering personalized, holistic, and patient-centered care that addresses the complex and diverse needs of each individual on their journey towards healing and recovery.

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