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ENLIGHTENMENT ON UNANI CONCEPT OF GHIZA (DIET) IN MODERN PERSPECTIVE

Nazeem Fahamiya*, Mohamed Shiffa and Farzana Muzn

Institute of Indigenous Medicine, University of Colombo, Rajagiriya, Sri Lanka.

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***Corresponding Author**
Dr. Nazeem Fahamiya
Institute of Indigenous Medicine, University of Colombo, Rajagiriya, Sri Lanka.

ABSTRACT

Unani healing system employs a holistic approach in prevention and treatment of diseases. This system of medicine emphasizes six essentials pre-requisites (*Asbab-e- Sitta-e- Zarooriya*) that have been laid down for the promotion of health and prevention of disease. Among them food is one of the pre-requisites. Ancient Unani physicians gave much importance to diet in both health and disease. In recent years, public awareness of health benefits of functional food and nutraceuticals has been expanded in prevention of risk of developing diseases and improvement in overall health. Therefore, there is a need for solid information on functional food and nutraceuticals to better inform health professionals and the public about these foods. This literary research is aimed to give enlightenment on Unani concept of Ghiza (Diet) with special reference to its nutraceuticals and functional perspective. Data was gathered from Unani classical texts, scientific journals and internet. The gathered data was analyzed and the results showed that the terminology and definitions for nutraceuticals/functional foods are inconsistent worldwide, and there are no international standards for regulation of nutraceuticals/functional foods to serve as baselines. However, the Unani medicine has given a clear idea on classification and role of food which could be enlighten the modern terms nutraceuticals and functional foods for the better utilization in both health and disease.

KEYWORDS: Functional food, nutraceuticals, *Ghiza*, *Asbab-e-Sitta-e-Zaroriayah.*

INTRODUCTION

The Unani System of Medicine was originated in Greece. Further, it was adopted and developed by the Arabs. Unani system employs a holistic approach in the prevention and

treatment of disease. This system of medicine have been laid down and emphasized on six essentials pre-requisites (*Asbab-e-Sitta-e-Zaroriayah*) for the promotion of health and prevention of disease.[1] Among them food is one of the pre-requisites. The Unani system of medicine believes that the *Tabiyat* (physique) of the body is the true healer and physician is only assisting to it. It has been very successful in identifying the appropriate food for different individuals according to their temperament, seasons, climate, age, etc. When a disease occur *Ilaj-bil-Ghiza* (Dieto-therapy) is one of the key principles of treatment used in Unani medicine to treat the patient. The first step of the management of each and every disease is either by administration of specific diets or by regulating its quality and/or quantity of food. In recent years, public awareness of health benefits of functional food and nutraceuticals has been expanded in prevention of risk of developing diseases and improvement in overall health. However, the definitions for nutraceuticals and functional foods are inconsistent all over the world whereas in Unani medicine, clear classification and role of food has been given according to their nutritional and medicinal value. The aim of this review is to enlighten the Unani concept of *Ghiza* (Diet) with special reference to its nutraceuticals and functional perspective for the better understanding of dieto-therapy and its application in various disorders.

FUNCTIONAL FOOD AND NUTRACEUTICAL

When food is being cooked or prepared using "scientific intelligence" with or without knowledge of how or why it is being used, the food is called "functional food". Thus, functional food is as part of the normal diet provides the body with the required amount of vitamins, fats, proteins, carbohydrates, etc., needed for its healthy survival.[2] Functional foods and conventional foods are similar in appearance but the difference is functional foods have physiological benefits apart from its basic nutritional functions and reduce the risk of chronic disease conditions.[2] The Food and Nutrition Board of the Institute of Medicine (1994) defined functional foods as "any food or food ingredient that may provide a health benefit beyond the traditional nutrients it contains."[3]

The word "nutraceutical" derived from "nutrition" and "pharmaceutical". Stephen De Felice, MD, (founder and chairman of the Foundation for Inno-vation in Medicine (FIM), Cranford, NJ.) defined nutraceutical as, "a food (or part of a food) that provides medical or health benefits, including the prevention and/or treatment of a disease." When functional food aids in the prevention and/or treatment of disease(s) and/or disorder(s) other than anemia, it is

called a nutraceutical. Thus, a functional food for one consumer can act as a nutraceutical for another consumer like fortified dairy products (milk) and citrus fruits (orange juice).[2]

The Bureau of Nutritional Sciences, of the Food Directorate of Health Canada, defined nutraceutical as a product isolated or purified from foods that is generally sold in medicinal forms not usually associated with food. A nutraceutical is demonstrated to have a physiological benefit or provide protection against chronic disease.[4]

Although the word "nutraceutical" and "functional food" are used commonly worldwide, there is no clear distinction in their meaning. Indeed, some regard as the two words to be synonymous whereas others categorized nutraceutical under functional food and vice versa. Hence, a clear difference between nutraceuticals and functional foods is still under discussion.

CONCEPT OF *GHIZA* (DIET) IN UNANI MEDICINE

The word diet is originated from the Greek word *diaita* via *diaitan* means way of living. Generally diet means the food and the drink that we usually consume. Unani system of medicine lays great stress on treating certain ailments by administration of specific diets or by regulating its quality and quantity. Besides the nutritional properties, various foods have therapeutic actions too. Therefore, a clear difference has been given in Unani classical text between drug and diet. Diet means, when the substances administrated into the body are affected by body (metabolism) and breaks into constituents. Their constituents are able to give replacement of different part of body such as carbohydrates, protein, fat, etc. On the other hand, drug is the substance which acts due to its quality (*Kaifiyat*) and establishes its effect, finally it will be eliminated by the body and it does not become a part of body, such as Mako (*Solanum nigrum*), Kasni (*Cichorium intybus*), Aftimoon (*Cuscuta reflexa*), Afsanteen (*Artemesia absynthium*) etc. due to its anti-inflammatory property reduce inflammation and then eliminated by the body.[1, 5, 6] Whereas diet such as wheat, rice, egg and other protein, fat etc. provide routine nutrition and energy, becomes part of body and only unabsorbed part is eliminated from body. There are various methods of classification of diet according to Unani principle of treatment. The following classification is based on the nutritional and medicinal value of diet (a) *Ghiza Dawai* (diet cum drug) (b) *Dawa Ghizai* (drug cum diet).

Ghiza Dawai* and *Dawa Ghizai: “Let food be your medicine” said by Hippocrates, known as the father of medicine is the concept focus on prevention of diseases. All substances, which

are mainly used as diet but contains some pharmacological properties is known as *Ghiza Dawai*. They are due to their medicinal properties contributing towards the maintenance of person's general health, such as wheat, gram, egg, fish, certain vegetables and fruits etc. *Dawa Ghizai* is the substances, which are mainly used as drug but they contain dietary constituents, such as Amla (*Phyllanthus emblica*), honey, Pudina (*Mentha arvensis*), Hulba (*Trigonella foenum-graecum*), Lettuce (*Lactuca sativa*) etc. In short, in *Ghiza Dawai* nutritional value is more than the therapeutic value where as in *Dawa Ghizai* therapeutic value is more.

Unani healing system employs a holistic approach in prevention and treatment of disease. Prevention of disease is as much as concern of the system as curing of diseases. Hence, in Unani system six essentials factors (*Asbab-e-Sitta Zaroriayah*) and where applicable, some non-essential factors (*Asbab-e-Gair Zarooriya*) have been laid down for the promotion of health and prevention of disease. Six essentials factors (*Asbab-e-Sitta Zaroriayah*) are air (*Hawa-e-Muheet*), food and drinks (*Makoolat wa Mashroobat*), bodily movement and repose (*Harkat wa Sukoon-e-Badni*), psychic movement and repose (*Harkat wa Sukoon-e-Nafsani*), sleep and wakefulness (*Noam wa Yaqza*) and, evacuation and retention (*Ehtibas wa Istafragh*).[1, 7-9] It has been mentioned that, these six factors are essentially influence each and every one. A balanced relationship between these six essential factors keeps the humors and the temperament on the right track and due to their imbalance all mental and somatic diseases occur. Hence food is one the essential factors for the preservation of health. When considering the *Ghiza Dawai* foods, they have therapeutic effects apart from its basic nutritional effects contribute towards improving a person's general health. For example fruits and vegetables those are rich in nutritional value, posses certain therapeutic properties like diuretic, laxative, demulcent, etc. Functional foods fall into this category.

Identifying the appropriate food has been very successful in Unani medicine with Unani principle of diet. Specific dietary regimens are recommended for the individuals according to their temperament. Proper diets are assumed to produce good humours while improper ones produce bad humours. According to Unani physicians, in old age there is dominancy of *Baroodat* (cold) and *Yaboosat* (dry). Therefore, *Musakhkhin* (Calorific) and *Murattib* (Humectant) diet should be advised to improve the lifestyle of elderly people. Such as wheat, gram, Anjeer (*Ficus carica*), Narjeel (*Cocos nucifera*), honey, etc. These diets are having beneficial effects apart from their high nutritional value. For example Anjeer is very good

Mulayyin (laxative) and honey has effects as immunomodulator and improve immunity which are having beneficial role in elderly people.[10]

Nutraceuticals must not only supplement the diet but should also aid in the prevention and/or treatment of disease and/or disorder.[2] *Ilaj-bil-Ghiza* (Dieto therapy) is used in Unani as an important principle of treatment. Unani Medicine lays great emphasis on treating certain ailments by administering a specific diet or by regulating the quality and quantity of food. Food as part of the diet is included, for both its nutritional value and its pharmacological actions. *Dawa Ghizai* substances are used for therapeutic purpose, but which have nutritive content.[5, 6] For example, barley water, lemon juice, decoction of peppermint, spices, sikanjabeen (honey and vinegar) etc. Nutriceuticals fall into this type. It refers to the bioactive components that may be found in the diet are helping to prevent and/or treat the disease and/or disorder. Several research studies have been carried out with naturally derived food substance due to phytochemicals present in them posses potential effects as antioxidants, antihypertensive, anti-diabetic, anti-inflammatory, antimicrobial, anti-carcinogenics, immunomodulatory, etc.[3, 11] Table 1 to 7 will provide some nutriceuticals aid in certain diseases prevention and/or treat along with their functional component.[3, 11-13]

Table 1: Prevent of risk of cancer

Sr. No	Food items	Functional component
1.	Cabbage, turnips, broccoli, cauliflower	Glucosinolates
2.	Cheese, meat, milk	Conjugated linoleic acid
3.	Flax, rye, vegetables	Lignans
4.	Garlic, onions	Allylic sulfides
5.	Grains, palm oil	Toco-trienols
6.	Green tea, *Camellia sinensis*	Catechins
7.	Legumes, grains, leafy greens	Folate
8.	Oranges, lemons, limes, and grapefruits	Vitamin C, folate, fiber, limonoids
9.	Parsley, spinach and red palm oil	Carotenoids
10.	Soybeans	Phytosterols, saponins, phenolic acids, phytic acid, isoflavones
11.	Strawberries, broccoli, red peppers, potatoes	Vitamin C
12.	Tomato	Lycopene
13.	Vegetable oils, almonds, sunflower seeds, peanut butter	Vitamin E
14.	Wheat Bran	Insoluble Fibre

Table 2: Antioxidant

Sr. No	Food items	Functional component
1.	Apples, pears, citrus fruits, some vegetables	Caffeic acid, ferulic acid
2.	Cauliflower, broccoli, Brussels sprouts, cabbage, kale, horseradish	Sulforaphane
3.	Onions, apples, tea, broccoli	Flavonols
4.	Citrus foods	Flavanones
5.	Berries, cherries, red grapes	Anthocyanidins
6.	Carrots, various fruits	Beta-carotene
7.	Tea	Catechins
8.	Green foods, soy products, grains, tomatoes, parsley, oranges, pink grapefruit, spinach, red palm oil	Carotenoids

Table 3: Reduced blood cholesterol level

Sr. No	Food items	Functional component
1.	Corn, soy, wheat, wood oils	Stanol ester
2.	Oats, barley	Beta-Glucan
3.	Psyllium, Flaxseed	Soluble fibre
4.	Seeds of pumpkins, yams, soy, rice, herbs	Phytosterols
5.	Garlic and onions	Allylic sulfides

Table 4: for healthy urinary tract and prostate

Sr. No	Food items	Functional component
1.	Cranberries, cocoa, apples, strawberries, grapes, wine, peanuts, cinnamon	Proanthocyanidins
2.	Flax, rye, vegetables	Lignans
3.	Cranberry and blueberry juices	Benzoic acid, fructose and a nondialyzable polymeric compound
4.	Tomatoes and processed tomato products	Lycopene

Table 5: Reduced risk of CVD

Sr. No	Food items	Functional component
1.	Bananas	Vitamin B6
2.	Cereal grains	Folate
3.	Cranberries, cocoa, strawberries, grapes, peanuts, cinnamon	Proanthocyanidins
4.	Fish oil, walnut, linseed, rapeseed	Omega-3 Fatty Acids-DHA/EPA
5.	Garlic, onions, leeks, scallions	Diallyl sulfide, Allyl methyl trisulfide
6.	Legumes	Vitamin B6, Folate
7.	Meat, fish, poultry, eggs, dairy products	Vitamin B12, Vitamin B6
8.	Oats, barley	Beta-Glucan
9.	Apples, pears, citrus fruits, some vegetables	Caffeic acid, Ferulic acid
10.	Vegetable oils, almonds, sunflower seeds, peanut butter	Vitamin E
11.	Tea	Flavanols
12.	Soybeans and soy-based foods	Soy Phytoestrogens
13.	Psyllium	Soluble fibre

Table 6: Improve vision

Sr. No	Food items	Functional component
1.	Apples, pears, citrus fruits, some vegetables	Caffeic acid, Ferulic acid
2.	Citrus fruit, strawberries, broccoli, red peppers, potatoes	Vitamin C
3.	Fish oil, walnut, linseed, rapeseed	omega-3 Fatty Acids-DHA/ EPA
4.	Kale, collards, spinach, corn, eggs, citrus	Lutein, Zeaxanthi

Table 7: Miscellaneous

Sr. No	Function	Food items and functional component
1.	Improve mental function	Berries, cherries, red grapes (Anthocyanidins), fish oil, walnut, linseed, rapeseed (omega-3 fatty acids DHA, EPA)
2.	Reduced risk of diabetes	Cereal grains – Folate
3.	Healthy immune function	Cruciferous vegetables—broccoli, cabbage (Dithiolthiones), garlic, onions, leeks, scallions (Diallyl sulfide, Allyl methyl trisulfide), tomatoes, parsley, oranges, pink grapefruit, spinach and red palm oil (Carotenoids)
4.	Menopause symptoms	Soybeans and soy-based foods (Soy Phytoestrogens)
5.	Improve quality of intestinal microflora	Jerusalem artichokes, shallots, onion powder, yogurt, other dairy (Fructo-oligosaccharides, Lactobacillus)
6.	Improve body composition	Cheese, meat products (Conjugated Linoleic Acid)
7.	Neural tube defects	Legumes, grains, leafy greens, oranges (Folate)
8.	Bone health	Fluid milk, margarine, fatty fish and fish Oils (Vitamin D), leafy greens, soy and canola oils (Vitamin K), fish oil (Omega-3 fatty acids)
9.	Health of elderly people	Grain products, legumes (Thiamin), dairy products, meat, fish, legumes (Riboflavin, Niacin), milk, liver, eggs, peanuts, processed foods with added lecithin (Choline)

CONCLUSION

Diet plays an important role in human's life. Diet is an important component of six essential factors mentioned in Unani medicine for the balanced lifestyle. Imbalance of these principles leads to lifestyle disorders which in turn cause disease. Dietotherapy will help to overcome the imbalance in the body due to lifestyles disorder. The potential health benefits of nutraceuticals and functional foods are now widely understood in prevention of risk of developing chronic diseases and an improvement in overall health. Hence, there is a need for solid information to enlighten the health professionals and the public in this regard. However, the definitions for nutraceuticals and functional foods are inconsistent worldwide, whereas in Unani medicine clear-cut definition has been given on the basis of nutritional value and therapeutic action of the foods in the prevention and treatment of diseases. In addition to that certain diseases are treated with specific diet by regulating the quality and quantity of food. The criteria for the classification are very simple and clear which could be utilized to explain

the modern terms nutraceuticals and functional foods to make use their benefits in an appropriate manner.

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