

Review Article

Received on: 18/08/2015

Accepted on: 30/09/2015

Published on: 12/10/2015



QR Code for Mobile users

Conflict of Interest: None Declared !

Concept of *Saman-E-Mufrat* (Obesity) and Role of *Asbab-E-Sitta Zarooriya* in Its Management

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Abstract:

Obesity is regarded today as a major public health problem in developed as well as developing countries. Obesity may be defined as abnormal growth of adipose tissue due to an enlargement of fat cell size (hypertrophic obesity) or increase in fat cell number (hyperplastic obesity) or a combination of both. It is generally associated with CHD, Diabetes, HTN, Arthritis, Infertility, physical inactivity etc and it leads to higher mortality rate. According to Hippocratic doctrine, “sudden death is more common in those who are naturally fat than in the lean.” International obesity task force (IOTF) analysis estimates that approx one billion adults are currently overweight and a future 475 millions are obese. The WHO now describes global obesity, or “globesity” as one of the top ten risks to human health. Unani system of medicine provides a holistic approach to combat against this global monster. USM gives the concept of *asbab-e sitta zarooriya*, without which life of human being is unimaginable. By alteration in these *asbab-e sitta zarooriya*, we can achieve a goal of healthy life. Because these factor are directly related to human health. These are *Hawa-e-muheet*, *Makool wa mashroob*, *Harkat wa sukoon-e badani*, *Harkat wa sukoon-e nafsani*, *Naum wa yaqzah*, *Ehtibas wa istafragh*. In this paper our aim to provide holistic approach of Unani medicine towards obesity and its management.

Keywords: *Saman-e-mufrat*, *Asbab-e-sitta zarooriya*, globesity.

Introduction:

In the present era despite of remarkable development in the medical sciences several diseases or disorders are still challenging to human being and efforts are being made to conquer them. Obesity is one of them. When we are gaining weight within normal limit or range then it is a good sign for our health. But if it exceeds from normal limit, it become dangerous for us. *Saman-e-Mufrat* is a worldwide problem. Obesity is the most common disorder of nutrition in affluent societies.¹ It is associated with a number of complication including cardiovascular disease cases, diabetes, arthritis, depression, respiratory and gastrointestinal problems. Obesity is not a recent phenomenon. Obesity is a well known disease since antiquity. Its origin can be based back to our pre historic ancestors. The first description of obesity was clearly depicted is Paleolithic stone age artifacts within a 2,000 kilometer band spread across Europe from south western France to south Russia north of black sea. Old stone Age statues, the most famous of these being the “Venus of willendorf”^{2,4} an 11cm figurine found in Austria the venous shows marked abdominal obesity and pendulous breast. The serve not only as proof of the presence of

obesity but perhaps as a symbol of projected ideal of health and fertility, a state that so sparingly existed in that era. The Neolithic period (spanning the interval between 8,000 B.C to 5,500 B.C) and in to the charcolithic age (3,000 BC), several more artifacts coined “MOTHER OF GODDESSES” depicting woman exhibiting exaggerated breast, bellies and hips were uncovered.³ Elsewhere in the world, corpulent figures are depicted in artifacts from the ancient Mesopotamian civilization in the River Tigris and Euphrates, and from Meso-American cultures of Incas, Mayans and Aztecs.⁴ Continuing into the era of Egyptian medicine it is evident from the Ebrus papyrus and the Edwin Smith papyrus. Obesity is a state of excess adipose tissue mass^{5,6} or characterized by excessive accumulation of fat in the subcutaneous and deep tissue of the body, usually 20% or more of an individual’s body weight.^{6,7} The current clinical definition of obesity, as define by expert committees, is based on body mass index (BMI). Individuals whose BMI lies between 25 and 30kg/m² are defined as obese and more than 40 is considered as morbid obesity.⁸ Obesity and overweight occur due to imbalance between calories consumed and calories utilized. Unani system of medicine provides a holistic

approach to combat against this global monster. USM gives the concept of *asbab-e-sitta zarooriya*, without which life of human being is unimaginable. By alteration in these *asbab-e-sitta zarooriya*, we can achieve a goal of healthy life. Because these factor are directly related to human health. These are *Hawa-e-muheet*, *Makool wa mashroob*, *Harkat wa sukoon-e-badani*, *Harkat wa sukoon-e-nafsani*, *Naum wa yaqzah*, *Ehtibas wa istafragh*. In this paper our aim to provide holistic approach of Unani medicine towards obesity and its management.

Concept of Saman-e-Mufrat (Obesity) in Unani medicine:

Obesity comes from a Latin word 'obedere', to devour and in English means very fat. In Unani medicine obesity is termed as *Saman-e-Mufrat* means excessive fat and *farbahi* (Persian word) means *Motapa* (obese).⁹ *Saman-e-Mufrat* is a *Balghami* disease. *Khilte balgham* predominates in the body of obese patients and hence is considered the predisposing factor in the causation of obesity because *shahem* and *sameen* (fats) are having *Barid ratab mizaj*.¹⁰ The people having *barid mizaj* have a slower metabolic rate and finally suffer from obesity.¹¹ This causes more input of energy than that of expenditure and finally the extra energy stored in the form of extra fat. It is described in *Aksarai* and *Nafeesi* that congenitally corpulent are endowed with *barid mizaj*.^{12,13} *Buroodat* and *rutoobat* indicates obesity.¹⁴ In normal physiology, vessels are dilated and their dilatation is essential fat, the supply of *ghiza* (nutrition) and *rooh* (oxygen supply) to organs. In obesity excessive accumulation of *shahem* (fat) in the body and *balgham* in blood causes continuous " *imtalai kaifiyat*" (increase in vasopressure) which causes vasoconstriction of vessels and finally decreases the *hararate gharizia*, may lead to rupture of blood vessels, and *adme tarveeh* (tissue anoxia) and due to this *fasade mizaj* take place and ultimately sudden death may occur.^{11,15,20,21} *Buqrat* (420 BC) was the first person who gave detailed description of obesity in his writing , who stated that " sudden death is more common in those who are naturally fat than in the lean" including its complications, prevention and management in his famous book "*Fasoole Buqratia*". Rufus (98-171AD) described that obese people are intolerant to hunger, hard work and indigestion. They are more susceptible to severe diseases like epilepsy, paralysis, dyspnoea, cholera, syncope and hyperpyrexia as they have less blood and more phlegm.¹⁶ *Jalinoos* (119-200AD), was the first person, who establishes scientific methods to describe morbid obesity. He characterized obesity as "moderate" and "immoderate" the former being somewhat of a variation of a normal condition, and latter carrying with it considerable morbidity and mortality.^{23,4} . *Ali Bin Rabban Tabri* (700-

780 AD) has described etiology and patho-physiology of *Saman Mufrat* in his famous book *Firdousul Hikmat*. He has emphasized that excess eating and sedentary life style are most important factors for the obesity.¹⁷ *Zakariya Razi* (860-925 AD) described that *Tar Ghiza* (oily food) is responsible for the obesity.¹⁹ *Ibn-e- sina* (980-1037AD) emphasized on the *taqleel-e-ghiza* as the important tool for the obesity treatment in his treatises *Al-qanoon-fit-tib*.¹⁸ *Ibn Hubal Al Baghdadi* (1121–1213 AD) suggested that obese persons should avoid taking fatty diets, he has stressed on the gradual decrease in diet, otherwise, adverse effects will be observed in the patient.¹⁴ *Ismail Jurjani* (12th cent.AD) has described the complications of obesity and their treatment. He has focused on the diet therapy as well as drug therapy for the treatment of obesity.²⁰ *Ibne Nafis* (1207–1288 AD), in his book, has given the correlation between the excessive obesity and cardiovascular, cerebro-vascular diseases and respiratory disorders.²¹ *Daud Antaki* (1541-1599AD) mentioned complication and treatment of obesity in his book *Tazkiratu Uolil Albab*. Another well known Unani physician *Akbar Arzani* states that excessive accumulation of fat is harmful to human body; it invites certain types of disease.²³

Obesity in modern perspective:

Obesity is a state of abnormal growth of adipose tissue, due to enlargement of fat cell size or an increase in fat cell number or in combination. It is expressed in terms of BMI. A person is said to be obese if his BMI is > 30kg/m². It is perhaps the most prevalent form of malnutrition. As a chronic disease, it is prevalent in both developed and developing countries. W.H.O. projects that by 2015, approximately, 2.5 billion adults will be overweight and more than 700 million will be obese.²² In 2000, a historical moment occurred when the estimate of the number of overweight people in the world exceeded the number of those who were underweight (Gardner and Halweil 2000).³⁵ . The world health organization(WHO) now describes global obesity, or "globesity," as one of the top ten risks to human health. The health consequences of obesity range from a number of nonfatal complaints that impact the quality of life, such as respiratory difficulties, musculoskeletal disorders like osteoarthritis, skin problems, infertility, and increased risk of high levels of disability, to complaints that lead to an increased risk of premature death including NIDDM, gallbladder disease, cardiovascular problems (hypertension, stroke, and CHD), and certain cancers (endometrial, breast, and colon). As a result of obesity at least 2.8 million adults die each year. Additionally 44% of the diabetes, 23% of ischemic heart disease and between 7 to 41% of certain cancer burdens are attributable to overweight and obesity.²² The 2010

international obesity task force (IOTF) analysis estimated that approximately 1.0 billion adults are currently overweight (BMI 25-29.9kg/m²) and a further 475 millions are obese.²⁸ There are in addition several associated diseases, which although not usually fatal, cause a great deal of morbidity in the community e.g. varicose vein, abdominal hernia, osteoarthritis of knees, hips and lumbar spine and psychological stresses particularly during adolescence. It may lead to lowered fertility. It lowers life expectancy.²⁴ Traditionally India is known for malnutrition but now overindulge. Overweight and obesity are now on the rise in low and middle income countries, particularly in urban settings. Nearly 35 million overweight children are living in developing countries and 8 million in developed countries.²⁵ Childhood obesity is associated with a higher chance of obesity, premature death and disability in adulthood. But in addition to increased future risks, obese children experience breathing difficulties, increased risk of fractures, hypertension, cardiovascular diseases and psychological effects.²⁶

Types of obesity

Two types of *Saman-e-Mufrat* are described in Unani literature; *Maqami* (Local) and *Umoomi* (General). When *Shahem* deposits in a particular organ it is called local obesity for example protrusion of abdomen or breast due to the deposition of fat. When there is generalized deposition of fat in the body, it is called general obesity.²⁷

ETIOLOGY

The causes of *Saman-e-Mufrat* (Obesity) in Unani text are in accordance with the causes as mentioned in modern system of medicine:

- *Virasati and Khilqi Saman-e-Mufrat* (Hereditary and congenital obesity)
- *Farhat* (excess of joy)
- *Rahat* (excessive rest and lack of exercise)
- *Martoob ghiza* (fatty diet like meat, halwa)
- *Martoob roghanyat* (fatty oils)
- *Sarwat wa ghina* (richness)²⁰
- *Baroodate mizaj* (cold temperament)^{11,12}
- *Kasrate ghiza* (excess of eating)
- *Kasrate sharab noshi* (excess intake of alcohol)¹¹

Razi and *Ibn-e-Nafees* have mentioned that obesity is a hereditary problem.¹³ Some families have history of obesity so their offspring have more chances to be an obese. It is described in *Aqsarai* and *Nafeesi* that congenitally corpulent are endowed with *barid mizaj*.^{11,12,13} According to *Razi* and *Rabban Tabri*, *ratab gizayen* produce obesity much rapidly in comparison to what other diet do.^{17,19}

Clinical features and complications

According to Hippocrates "Sudden death is more common in those who are naturally fat than in the lean."²

The first reference of *Saman-e-Mufrat* was given by Hippocrates (460). Galen has described 'when a person becomes extreme obese, then it is a dangerous condition and the chances of sudden death may increase because of hemorrhage (due to rupture of vessels) or due to loss of *hararat* (heat). This can be described by the fact that the vessels gets compressed due to obesity leading to two types of problem; one is *imtila* (congestion) and other is *adme tarveeh* (tissue anoxia).¹⁹ He further added that obese people have narrow vessels and poor circulations of blood and *rooh* (essence). Obese persons are prone to other diseases as well as death because of narrowing of blood vessels.

If a person is obese since child hood, then the death of such person occurs earlier as compared to lean person.^{18,20}

If obese person suffer from any disease they are not easily cured and they are not easily cured and they are not able to tolerate hunger and thirst.^{12,15,18}

Obese people are intolerant to hunger, hard work and indigestion. These people get involved in co-morbid conditions and severe diseases, they become susceptible to severe diseases like epilepsy, paralysis, dyspnoea, cholera, syncope and hyperpyrexia. Sometimes purgatives kill these people and if they are not killed they become very weak as they have less blood and more phlegm. If the obese female become pregnant, then abortion or difficulty in labour occur.¹⁶

Due to excessive *ratoobat* (Moisture), obese persons are prone to injury (*Zarb*).^{27,30}

Akbar Arzani has mentioned seven complications obesity viz.²³

1. Dyspnoea (due to vasoconstriction and *rooh* is not provided to all organs).
2. Coma and syncope (due to *imtila*).
3. Haemorrhage of vessels or in the body.
4. Palpitation, fever and vomiting.
5. Infertility (both in men and women as *mani* is not formed completely, abortion may occur in women and if conceived the child will be physically unfit)
6. Paralysis.
7. Diarrhoea and dysentery.

Management through ASBAB-E-SITTA ZAROORIA

In unani medicine "Asbab" are the factors which are precursors and have an influence on human body, to generate a new state or maintain an old state. *Asbab-e-Sitta zarooriya* are basically those six essentials of life without which life of human beings is unimaginable.^{31,38} . The six essentials are:

1. Fresh Air (*Hawae Muheet*)
2. Food and Drink (*Makool Mashroob*)
3. Body Movement and Repose (*Harkat wa Sukoone Badania*)

4. Mental Movement and Repose (*Harkat wa Sukoone Nafsania*)

5. Sleep and Wakefulness (*Naum wa Yaqzah*)

6. Retention and Evacuation (*Ehtibas wa Istafraagh*)

Razi has given detailed description of obesity regarding its management. According to him, the *Mizaj* (Nature) of the obese persons becomes *Barid* (cold) so, in such condition, the diets, drugs and exercises which produce hot and dry *Mizaj* should be prescribed.²⁷

Fresh Air (*Hawae Muheet*):

Unani physicians had stated that air is the first among the six basic essentials of life and for the maintenance of health Fresh and clean air is necessary and change in quality of air might be the cause of various diseases. Ancient scholars had described the need of open, ventilated houses with proper ventilating system for maintenance of health. They had also advocated different types of seasons related to change in air and diseases associated with particular seasons and, had also suggested good ideas concerning appropriate aeration for them³³.so, the walking in fresh air in early morning is very helpful for managing obesity because lungs takes more fresh air during walking in early morning which increase the BMR results in reduction of obesity.

According to Majoosi as he documented in Kamil-us-sana, if a person is having martooob mizaj, the desiccant applications should be acquired in order to convert it towards the normal temperament (moatidill mizaj). For this purpose, the person should be stayed in hot climate and at high altitude¹⁵.

According to Razi, as the obese person has barid mizaj so tadabir having har yabis mizaj should be acquired in order to reduce the obesity.²⁷ Mizaj of Winter season is barid ratlab and the air in that season also has barid ratlab mizaj as it contains high moisture content. This results in decreased *tahellul* of body fluids and accumulates the *khilte balgham* in the body during winter season. The daily body activities are also decreased during this season because of accumulation of khilte balgham and it disturbs the metabolism leading to excessive deposition of fat³⁶. So winter season may also play a role in potentiating the obesity. *Ibnesina* said that dry air makes the men lean.³³ According to Unani system of medicine, the mizaj of summer season is har yabis and the air in this season also has the same mizaj because during summer season the sun rays fall directly on earth surface resulting in an increase in temperature making the air warm. This increase in temperature accelerates the *tehellul* of body fluid, increases the sweating and thirst, decreases the urination and the formation of khilte dam and khilte balgham in body. So, the har yabis air plays an important role in reducing the weight.

Diet (*Ghiza*):

According to Greek physicians life relies on diet, *Quwat-e-Tabiyya* (nutritive faculty) and *Hararat-e-Gharizia* (innate energy)³³. They documented that diet is essential for health in every step of ages and also said; probability of disease increases due to insufficiency of nutrition. The amount of energy intake relative to the energy expenditure is the central reason for the development of obesity.

According to *Buqrat* (Hippocrates, 420 BC), the quality (*kaifyat*) and quantity (*Kammiyat*) of diet and importance of balanced diet in relation to occurrence of disease is an important factor in the treatment of obesity. He said, the one who wants to reduce weight should take sattv like diet, chapaties made from husk flour (that is of low calorie value and rich in fibers). With this, it is quite evident that concept of low calorie diet is not new and was present in the minds of ancient Unani physicians. According to *Razi* and *RabbanTabri*, *ratab gizayen* produce obesity much more rapidly in comparison to what the other diet do^{17,19}. *Martooob ghiza*, *rogananiyat* (fatty oils) and *kasrate ghiza* (excessive eating) produces excessive balgham as well as disturbs the metabolism which may lead to excessive deposition of fat in the body and when this fat crosses the normal criterion for a healthy person, it becomes the major cause of obesity. So, in order to reduce the obesity, one must take bulky food with least nutritive values that will provide least time to mesenteric vessels to absorb the nutriment completely. Due to bulky and less nutritious food it occupies the space in stomach and obese person feels fullness in the stomach^{40,41,42}. And also avoiding oily foods and those food which increase the formation of blood and phlegm like kheera, kakdi, kaddu etc. they should be avoided in an attempt to decrease weight.

Hot spices should be added in *ghiza* (food) e.g. *Filfil Daraz*, *Haldi*, *Zeera*, *Lehsun*, *zanjabeel*¹⁵. These are hot and dry in temperament. These are commonly used as spices and found all over the India. Preclinical studies on ginger reported that it contains two major constituents namely gingerol and shaghol which suppress the absorption of dietary fat from the intestines and helps in dissolution of excess fat deposited inside the body. It increases the BMR and thus controls obesity. It also has antihyperlipidemic activity and reduces abnormal cholesterol level in the blood⁴³. *Haldi* has hot and dry temperament. It has *Munaffis Balgham* (Expectorant) and *Mujaffif* (Dessicant) action. It is one of the best natural antiseptics. It is a good digestive tonic and blood and liver purifier. It helps in the clearing and improved the functioning of the entire digestion system particularly the intestines. It also helps in reducing the blood cholesterol levels and regulates the blood sugar level. Its antioxidant property prevents the body from free radical damage and

decreases the oxidative stress and thus prevents cardiovascular complications associated with obesity⁴⁴. *Filfildaraz* also has *har yabis* mizaj and it has digestive and carminative properties. This invigorating herb improves the activity of digestive enzymes that ensure proper processing of food and metabolic waste products. It stimulates the fat metabolism while serving as a mild laxative. Together these actions help to regulate and reduce the weight without causing fatigue⁴⁵. *Zeera* and *lahsun* because of their Hot and Dry temperament and having *Muajaffif* property, absorbs the excess body fluid to cause weight loss.

According to several researches honey diet is considered as a better source for reducing weight. Founder of the honey diet, McInness, discovered that athletes who fed upon diet rich in fructose such as honey, they burnt a more fat and had increased stamina levels as well. Honey act as a fuel for liver to produce glucose. This glucose keeps the brain sugar level high and forces it to release fat burning hormone. So, the use of honey should be increased instead of sugar in an order to reduce the weight⁴⁸.

Voluntary overeating can increase weight in normal weight men and women. It has been calculated that a child whose energy requirement is 2000 kcal/day and who consume 100 kcal/day extra will gain about 5 kg a year. When these subjects stop overeating they invariably lose most or all of the excess weight⁴⁶.

Similarly, along with these measures, the other measures that are adapted in diet alteration for the reduction of body weight, these include:

- ☒ Reduction in the amount of food intake.^{12,14,18,19}
- ☒ Avoid all the fatty diets (*roghni ghizayen*)¹⁴
- ☒ Increase the use of dry and desiccating food¹⁷
- ☒ Promotes fasting in obese persons
- ☒ Restrict meat, milk and liquor
- ☒ Eat green leafy vegetables in excess.
- Skip junk foods
- Use lateef ghizayein^{12,13}
- Single meal in a day^{16,18,20}
- According to *Majoosi*, Foods should be cooked in vinegar^{15,27}, and now it has been established that vinegar increases the basal metabolism so you burn (oxidize) more fat. It decreases the appetite by causing a feeling of fullness (satiety) throughout the day so you eat less. It affects carbohydrate digestion, absorption and metabolism⁴⁷.
- The foods having cold temperament should not be used in winter season³³ because these foods produces *baroodat* in the body and causes the obesity.
- *Ibne Hubal Baghdadi* has cautioned that intake of diet should not be decreased suddenly instead of that it

should be decreased in step by step fashion otherwise the side effects may occur in obese persons.^{9,29,39}

Drinks (*Mashroob*):

Mashroobat are helpful in the carrying of nutrients to the unit of the body. Intake of water rich in salt causes dryness and weakness in the body. Avicenna advocated that intake of warm water also causes improper digestion as well as weakness³³.

According to *Majoosi* as he wrote in his famous book *Kamil us Sana*, if the person is having *sue mizaj barid ratab*, *mastagi* boiled in water should be consumed in order to change the temperament towards the *moatidill*. Avoid the extreme ice cold water.¹⁵

Excessive intake of alcohol has also been described as one of the cause of obesity in Unani text.¹¹

So, averting of alcohol may be beneficial in reducing weight. Peoples having *Har Mizaj* (hot temperament) should consume *Barid Mashrubat* like orange, apple and pomegranate juices etc. because it modulates the hot temperament. So people having cold temperament should not use the barid Mashroobat because it will further increases the baroodat ultimately resulting in baroodat in mizaj.

Lemon Juice is a good digestive and has the Detergent property (*Jali*). Lemon juice is quite effective for obesity patients. 5-10 ml of lemon juice is mixed with one glass of water and should be taken on empty stomach in the morning. This mixture is very useful for melting the adipose tissue from the body as well as for weight loss. However, it is recommended to take the above drink once a day, otherwise, the person may experience loose motion or some digestive problems⁴⁵. Taking of Honey with warm water every night before bed also helpful in reducing weight because body begins to burn more fat during those early hour of sleep.⁴⁸

Body Movement and Repose (*Harkat wa Sukoone Badania*):

Greek-Arab Physicians projected an ideas regarding physical activity which is essential for the activation of innate energy and to excrete the waste products of the body. Rest is necessary to save the body temperature and body fluids. Excess of both causes coldness of the body because motion leads to decrease the innate fluids due to which innate heat also decreases as well as excess of rest increases the body fluid which decreases the innate energy³⁶. Rest helps in digestion and motion disturbs the digestion. So it can be said that to sustain health and good will, regular exercise as well as proper rest is needed.

If the aim is to reduce the body weight, exercise should be done before the meal^{12,13} and according to *Razi* the person should not sleep on soft bed because the person will sleep

more on soft bed and it produces *ratubat* in body.²⁷ Therefore in order to reduce weight, the person should sleep on hard bed as it produces hardness in body, decreases the growth of muscles. He further said that exercise should be done without clothes as it produces more dryness in body.²⁷

Avicenna stated that rest in all conditions induces the cold and moist temperament in body.³³

Majoosi said that *riyazat* is the second name of body movement and he classified body movement into two groups (1) *Riyazat* (Exercise) (2) *Dalak* (Massage)³³.

Riyazat (Exercise): It is one of the most important tools for reducing the obesity by expenditure of extra energy. However, exercise should be on regular basis and it should be introduced gradually and under medical supervision especially in the advanced obesity, otherwise, negative effects may occur. Exercise should be done in the warm places that receive good solar energy. Exercise should be active and followed by massage of *Muhallil Roghaniyat* (resolving oils like Dill oil). Baths should be taken regularly before the meals. Bath should be taken in that water which have effect of alum or sulphur.¹⁵ There are different types of exercises which are helpful in reducing the weight.

- Jogging (435 calories burnt per hour)
- Walking (167 calories burnt per hour)
- Weight training (363 calories burnt per hour)
- Cycling (508 calories burnt per hour)
- Swimming (653 calories burnt per hour)
- Aerobic exercise (399 calories burnt per hour)
- Sex (292 calories burnt per hour)
- Dancing (254 calories burnt per hour)³⁷

Dalak (Massage): *Dalak* is also documented in Unani literature as one of the way for reduction of weight. And it is also included in exercise as it resolves the toxic substances, liquefies the fluid. *Dalak kaseer* means the massage that is done for long duration; it should be used if the aim is to reduce the body weight. Hard massage should be performed until the muscles of body become prominent and then firm³⁶.

Movement and Repose (*Harkat wa Sukoone Nafsania*):

Greek- Arab physicians have a view that certain diseases and mental disorders are caused, in most cases, by emotional strain and maladjustment. *Nafsiwati Awamil* (Psychological factors) such as happiness, sorrow, fear, anger, etc. have significant effect to the health of a human being. There is a branch of Unani medicine known as "*Illaj Nafsania*" (Psychological treatment) which deals with the above mentioned factors, and lots of diseases are treated with psychological means. Ancient Unani physicians has stressed on the *Illaj Nafsani* in the management of obesity. And according to their

observation excess of wakefulness, grief and sorrowfulness are excellent *Muhazzill*.³²

Ibn-e-Nafis substantiated that excess of sukoon-e-nafsani produces coldness and low mental state.³⁶

Sleep and wakefulness (*Naum wa Yaqza*):

Unani scholars had advocated that proper sleep and wakefulness are necessary for maintenance of health. Sleep is an ideal form of rest, physical as well as mental. Excess of wakefulness produces dryness in the body. Excessive sleep causes coldness, weakness, laziness in the body and headache etc.³⁴ disturbs the humor concentration and may develop the *Balghami* diseases like Arthralgia, likewise excess of wakefulness causes dryness in the body. Avicenna stated that rest in all conditions induces the cold and moist temperament in body. So excess of rest i.e. sleep causes change in temperament toward the phlegmatic side (*Balghami*) and as per the Unani philosophy accumulation of *khilt-e-balgham* in the body is the major cause of obesity and as excess of wakefulness produces dryness in the body so it might be taken as a preventive measure for reducing obesity.³³

Elimination and Retention (*Istifragh wa Ehtibas*):

There is production of waste and useful products in the body after taking meal, so useful products should retain in the body and waste should eliminate in order to maintain homeostasis. Waste products of body, if not completely and properly excreted, produce disease. Any disturbance in the normal excretory balances, whether it be excess, diminution or blockage, leads to disease. From time immemorial, Unani Practitioners cured numerous diseases by regulating the excretory processes.³¹

In Unani system of medicine *Istifragh* means the elimination of waste products from the body naturally like urination, defecation, sweating and menstrual bleeding etc and abnormally due to disease through sneezing, coughing, loose motions and vomiting. Excess of *Istifragh* makes the body weak, litharge. *Istifragh* in normal limit (*moatidill*) produces the dryness in body whereas beyond its normal limit (*ghair moatidill*), it produces coldness.³⁸ So in an attempt to reduce the obesity one should do the *Istifragh* in normal limit (*moatidill*)¹⁹.

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Cite this article as:

Sana Sultana, Md Imran Khan, Nida Sultana, Sayid Ahmad, F. S. Sheerani. Concept of *Saman-E-Mufarat* (Obesity) and Role of *Asbab-E-Sitta Zarooriya* in Its Managements. Asian Journal of Complementary and Alternative Medicine, 03(09), 2015, 07-13.