# **CHAPTER TWO**

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### 2: LITERARY RESEARCH

Literary Research deals with ancient literature. In this chapter an attempt is made to evolve a model of the psycho-physiological mechanism of obesity as portrayed in yoga scriptures which points to complete reversibility of the processes involved in the occurrence of obesity. The IAYT used as intervention for this study is based on the panchkosha model. Psychosomatic ailments are on the rise. It has been found that traditional solutions to modern problems are increasingly becoming valid. The scriptures recognize that mind is the central organ of the entire conscious life. Hence it becomes mandatory to understand the mind in all its facets during health and disease. Modern psychology has developed as an experimental science over the last few decades. On the other hand the psychology of Indian scriptures which has evolved over 5000 years started the study with introspective research by normal and highly evolved minds and went on to study the sick minds. Thus, the model has the possibility of providing not only relief from distress but can offer further growth to great heights of evolution beyond the sickness zone. This is what the definition of health by WHO envisages when it defined health as not mere absence of disease but as a state of wellbeing at physical, mental, social and spiritual levels.

### 2.1 BACKGROUND & SCOPE:

Obesity is not only a physical concept, but also involves the state of the mind. Stress levels influence one's eating habits and lifestyle. According to the ancient Indian scriptures, to bring about a balance (samatolanam) at the physical level, a person has to be treated as a whole, body and mind. In this study, the ancient Indian scriptures as well as the modern outlook will be utilized in gaining a better understanding of the subject of obesity, causes and management.

### 2.2 REVIEW OF ANCIENT LITERATURE ON OBESITY:

Obesity is described as one of the eight types of undesirable constitutions in *Charaka Samhitā* Charaka, the great ancient scholar of Ayurveda, stated that people who are Atisthula (overweight) are more likely to be at a health risk than those who are at normal weight. In Chapter 21, Volume 1 of *Charaka Samhitā*, it is mentioned that obese people have shorter life span; they are physically weak and slow, excessively hungry and thirsty and emit bad smell.

#### **Definition of obesity:-**

# मेदोमांसातिवृद्धत्वाच्चलस्फिगुदरस्तनः। अयथोपचयोत्साहो नरोऽतिस्थुल उच्यते॥ -माधव निदान-३४/९॥

medomānisātivṛddhatvāccalasphigudarastanaḥ | ayathopacayotsāho naro'tisthula ucyate | |

-Madhav Nidan-34/9

### 2.3 EPIDEMIOLOGY AS PER ANCIENT SCIENCES:

### The excessively obese have eight inherent defects in them:

- Reduced lifespan, constricted or limited movement (hampered due to loose, tender and heavy fats)
- Reduced sexual activities or impotence (due to small quantity of semen produced and obstruction of the channel of semen by medas)
- ➤ Debility (due to dhatu imbalance)
- Emit bad smell (due to the inherent nature of fatty tissues as well as excessive sweating), profuse sweating (since medas and kapha are vitiated)
- Excessive hunger and thirst (due to excessive digestive Agni and vayu in the body)

Excessive obesity is caused due to over-nourishment as a consequence of the intake of heavy, sweet, cold and fatty diet, lack of physical exercise, abstinence from sexual intercourse, sleeping during the day, uninterrupted cheerfulness, lack of mental activities and hereditary/genetic defects. These consequences may lead to an excess of fat, with further accumulation of only fat and consequent depletion of *Dhātus*.

Charaka correlated an increased desire to eat with increased *agni* in the morbidly obese. Recent evidence suggests that leptin and ghrelin had shown their influence on appetite. In this context, ghrelin is produced from the stomach and leptin is produced by the adipose tissue of fat storage reserves in the body, which is responsible for short-term and long-term appetite control respectively in the body. If we compare this with sleep, Sleep duration may be an important regulator of body weight and metabolism. An association between short habitual sleep time and increased body mass index (BMI) has been reported in large population samples. The potential

role of metabolic hormones in this association is unknown. Study indicates short sleep had reduced leptin and elevated ghrelin. These differences in leptin and ghrelin are likely to increase appetite, possibly explaining the increased BMI observed with short sleep duration. In modern western society, where chronic sleep restriction is common and food is widely available, changes in appetite regulatory hormones with sleep curtailment may contribute to obesity (Taheri, Lin, Austin, Young, & Mignot, 2004).

The causes of obesity are very clearly explained in Ayurveda (*Mādhava Nidāna*). The following are some of the reasons mentioned in Ayurveda that increase the deposition of fat.

अन्यायामदिवास्वप्तश्लेष्मलाहारसेविनः।
मधुरोऽन्नरसः प्रायः स्नेहान्मेदः प्रवर्धयेत्॥
मेदसाऽऽवृतमार्गत्वात् पुष्यन्त्यन्ये न धातवः।
मेदस्तु चीयते तस्मादशक्तः सर्वकर्मसु॥
-माधव निदान ३४/१,२

avyāyāmadivāsvapnaśleṣmalāhārasevinaḥ | madhuro'nnarasaḥ prāyaḥ snehānmedaḥ pravardhayet | | medasā''vṛtamārgatvāt puṣyantyanye na dhātavaḥ | medastu cīyate tasmādaśaktaḥ sarvakarmasu | |

-Madhav Nidān 34/1,2

Obesity is caused by that which can increase *Kaphādoshā* excessive consumption of sweets and sleeping in the afternoon. According to, *Charaka Samhitā* there are seven types of *Dhātus* (the tissues which nourish the body and support it are called as *Dhātus*). In the case of obese people there is obstruction in the channels of adipose tissues which do not allow the *Dhātus* to progress further. There is an increase in the *Meda* which gives rise to excessive accumulation of fat. The *Vāta Doshā* in the abdominal region, being obstructed by *Meda*, makes a person feel hungrier and as a result of overeating.

Due to the obstruction of body channels by medas, the movement of vata is specially confined to koshtha (abdominal viscera) resulting in the stimulation of digestive power and absorption of food. Hence, the person digests food quickly and becomes a voracious eater. By not following rules of taking meals at specific times during the day, he is afflicted by dreadful

diseases. Agni (pitta component responsible for digestion) and vata are the two most troublesome factors from the standpoint of obesity. These factors blight an obese person as wildfire destroys a forest. As the body gains excessive fat, vitiated doshas suddenly cause severe diseases resulting in rapid deterioration of life. The person is considered too obese when there is an excessive increase in fat and muscle tissue in the regions of buttocks, abdomen, and breasts, which become pendulous and suffer from deficient metabolism and energy. These are the causes, signs, and symptoms of an obese person (Charaka Samhitā).

### 2.4 AIMS AND OBJECTIVE

The goal of this review is to establish a comprehensive literature review on obesity and to establish its relevance to the current literature and benefits for wellbeing

### 2.5 MATERIAL AND METHODS

- > Through study and search was made of Indian Ancient Science and scripture to understand the definition, causes & management of obesity
- > Ancient text of Ayurveda
- > Upanishad, Bhagvad Gita, Patanjali Yog Sutra
- ➤ Pub Med-The National Library of Medicine
- Google Scholar
- > Online collections of published research

### 2.6 VEDIC SOURCES AND CLASSICAL TEXT INCULDES

#### 2.6.1 OBESITY ACCORDING TO AYURVEDA

Ayurveda is a "Science of life, Originated in India five thousands of years ago & is appreciated as the world's oldest system of natural medicine". The basic theories on which Ayurvedic medicines is based on three elements, *Vātā*, *Pittā* & *Kaphā* 

According to Ayurveda, obesity or being overweight can be treated with Langhana (fasting) or Asantarpana (lightning) therapies. Langhana treatment brings lightness to the body, reduces fat and weight. Medicinal herbs, foods and other sources used in this treatment principally contain the elements of Tejas (fire),  $V\bar{a}yu$  (air) and  $\bar{A}k\bar{a}sh$  (space or ether). In Langhana therapy light, hot, dry, rough, subtle, liquid and solid medicinal substances are used.

### 2.6.2 OBESITY ACCORDING TO BHAGAVADGĪTĀ

According to Bhagavadgītā, 'Tamas' or inertia or indolence destroys one's judgment and discriminating power. The Tāmasic people exist in a state of inertness and drowsiness.

# तमस्त्वज्ञानजं विद्धि मोहनं सर्वदेहिनाम् । प्रमादालस्यनिद्राभिस्तन्निबध्नाति भारत ॥ -भगवद्गीता १४/८

tamastvajñānajani viddhi mohanani sarvadehinām | pramādālasyanidrābhistannibadhnāti bhārata | |

-Bhagavadgītā 14/8

Tamas arises from ignorance and binds them by misconception, idleness, heedlessness, indolence and sleep. Tamas is the quality in nature that causes misery of all kinds. It is the dark evolute of the illusory power of maya, preventing divine realization and giving a seeming reality to the ego and matter as separate from spirit.

The tamasic man is full of wrong ideas. He is careless, indolent, and oversleeping. *Charaka Samhitā* also points out similar tamasic qualities. *Charaka Samhitā is one of the great three traids in Ayurvedā*.

# भीरुमबुधमाहारलुब्धमनवस्थितमनुषक्तकामकोधं सरणशीलं तोयकामं मात्स्यं विद्यात्। -चरक शारीरस्थान ४/ ३८

bhīrumabudhamāhāralubdhamanavasthitamanuṣaktakāmakrodhani saraṇaśīlani toyakāmani mātsyani vidyāt | caraka śārīrasthāna 4/38

Cowardice, lack of intelligence, greediness for food, unsteadiness, constant passionate, wrathfull disposition and fondness for constant movement, and desire for water. Sri Krishna also emphasizes that *Tāmasic* natured people indulge in *Tāmasic* foods that include heavy meats, food that is spoiled, and processed foods that lack the natural nutrients.

यातयामं गतरसं पोति पयुर्षितं च यत्। उच्छिश्ठमपि चामेध्यं भोजनं तामसप्रियम्॥

-भगवद्गीता १७/१०

#### yātayāmani gatarasani pooti payursitani ca yat |

### ucchisthamapi cāmedhyani bhojanani tāmasapriyam | |

### -Bhagavadgītā 17/10

The food that which is half cooked or half ripe, tasteless, nutritionally worthless, insipid, putrid, stale, refuse and impure is the food that are enjoyed by the *Tāmasic* or ignorant persons.

 $T\bar{a}masic$  foods make the mind dull; they tend to build up the basic acidic energies of the body and the instinctive subconscious mind.  $T\bar{a}masic$  foods also imbue the astral body with heavy; acidic force. The  $T\bar{a}masic$  nature is dull, fearful and heavy. It is the instinctive mind in its negative state and leads to laziness, habitual living, physical and mental inertia.

#### 2.6.3 MANAGEMENT OF OBESITY ACCORDING TO ANCIENT SCRIPTURES:

According to our scriptures, management of obesity is possible through good dietary habits and physical exercise. Ayurveda proclaims that the food we eat affects our mind, body and emotions. What we eat is very important. Sri Krishna in *Bhagavadgītā*, makes clear the type of foods to be consumed by those who seek good health, success in any field and progress on the spiritual path. It is called Sätviaka food & includes wholesome, fresh and oleaginous plant based foods like most vegetables, fruits, legumes, whole grains and nuts.

Lord Sri Krishna emphasizes in *Bhagavadgītā*, the importance of moderation.

# युक्ताहारविहारस्य युक्तचेष्ठस्य कर्मसु। युक्तस्वप्नावबोधस्य योगो भवति दुखःहा॥

## - भगवद्गीता ६/१७

yuktāhāravihārasya yuktaceṣṭhasya karmasu | yuktasvapnāvabodhasya yogo bhavati dukhaḥhā | |

- Bhagavadgītā 6/17.

Yoga becomes the destroyer of pain for him who is moderate in diet and recreation, temperate in actions and regulated in sleep and wakefulness.

The importance of physical exercise and its benefits were mentioned in  $V\bar{a}gbhattasamhit\bar{a}$  authored few centuries ago.

### लाघवं कर्मसामर्थ्यं दीपोग्निमेर्दसः क्षय।

### विभक्तघनगात्रत्वं व्यायामादुपजायते॥

### - अष्टान्गहृदय १० फ

lāghavani karmasāmarthyani dīpognimerdasaḥ kṣaya | vibhaktaghanagātratvani vyāyāmādupajāyate | |

- Aṣṭāngahrudaya 10 pha

Exercise brings lightness in body and mind. It increases the power to work, stimulates the digestive fire and reduces the bulkiness, excess fat of body. It also strengthens, solidifies and helps to bring all the parts of body in a good shape.

### 2.7 SUMMARY

To summarize it, literary research suggests that obesity is caused by lack of physical exertion, dietary habits and improper life style. Imbalance in *Kaphā doshā & Meda dhātu* leads to pathophysiology of obesity. It can be treated with fasting or lightning therapies. In psychological contest, *Tāmasik guňa* leads to causes of obesity. The *tāmasik* man is full of wrong ideas. He is careless, indolent, and oversleeping. This promotes the prognosis of obesity. *tāmasik* food like half cooked or half ripe, tasteless, nutritionally worthless, insipid, putrid, stale, refuse and impure increases *Tāmasik guňa* in mind & *Kaphā doshā* in body. So to treat obesity, one has to follow the lifestyle as mentioned in ancient scripts. Management of obesity is possible through good dietary habits and physical exercise.

The best way to manage an illness like obesity is to take greater responsibility on ourselves to stay healthy & prevent illness & its complications. "Alternate Medicine" is gaining greater approval as potential form of treatment & healing as people are looking for more "natural" or "holistic" ways to maintain good health – not just physical health, but also mental, psychological & spiritual health as well. Studies & research continue to reveal the important role our ancient wisdom plays in fighting disease & promoting healing. Yoga as complementary therapies treats the whole person – body, mind & spirit. So, it becomes essential to blend current knowledge with our ancient, time tested, proven practices and therapies to get best results