

A HOLISTIC APPROACH TOWARDS THE CONCEPT OF AHAR IN AYURVEDA IN  
RELATION TO MENTAL HEALTH AND ITS ANATOMICAL ASPECTSDr. Prashant G. Sali<sup>1</sup> and Dr. Sruthi K.\*<sup>2</sup><sup>1</sup>Assistant professor, Dept. of *Rachana Sharir*, GAC, Nanded.<sup>2</sup>P.G. Scholar, Dept. of *Rachana Sharir*, GAC, Nanded.

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Article Received on 16/03/2022

Article Revised on 06/04/2022

Article Accepted on 26/04/2022

## ABSTRACT

A healthy mind always resides in a healthy body. The diseases of body effects the mind as well as the diseases of mind effects the body too. The nutrition is very much needed for health to maintain its physical constitution. In *Ayurveda*, specific food has been mentioned for the maintenance of healthy body as well as mind. The wholesome food, unwholesome food, food according to different *ritu* (seasonal regimen), incompatible food, food on the basis of different *doshas* are well detailed in *ayurvedic* dietetics, these altogether affects the body constitution which in turn influence the mind. Various research studies also show the relationship of body and mind through the gut brain axis and the improper food habits as the one of the causes of *manasa rogas*. The *satvavajaya chikitsa* along with the role of nutrition is needed to be more focused in the present era of stressful lifestyle where mind is over worked than the body.

**KEYWORDS:** *Ahara*, *manas*, theory of mind, gut brain axis.

## INTRODUCTION

*Ayurveda* deals with the knowledge of life by the name itself and the life or *ayu* is defined as the combination of healthy state of body, sense organ, mind and soul<sup>1</sup>. The concept of *ayu* is based on the state of *manas* as the *manas* or *satwa* is chiefly responsible for perceiving *sukha dukkha*, *hita*, *ahita* etc in relation to life. The definition of health or *swastha* in *ayurveda* is explained as;

*Samadosha: samaagnishcha samadhatu malakriya:  
Prasanna atmendriya manamsi swastha ityabhidheeyate*  
//

A person is said to be healthy when the *doshas* and bodily elements are balanced and harmonious, when the digestion is normal, when the excretion of waste products is unimpaired and when he is endowed with tranquility and clarity of soul mind and senses.<sup>[2]</sup>

Healthy mind always resides in a healthy body. Therefore, to maintain the physical as well as the mental health proper nutrition is an inevitable factor. The dietetics concept in *ayurveda* is emphasized in detail, the *ahara* concept is given due importance as that of *oushadha*. *Ahara* is been called as *mahabhaishajya* by *acharya Kashyapa*.<sup>[3]</sup> Even in the treatment of diseases the *ahara pathyas* explained are specific, *ayurveda* explains a wide range of dietetics. Food or *ahara* is

having direct relationship with mind. The proper diet should be followed for maintaining the *satwik manasa prakruti* and to protect the mind from the *raja* and *tamo guna* which leads to derange in the psychosomatic aspect of health.

## Aim

- To analyze the relationship between food and mind

## Objectives

- To see the importance of proper nutrition for the maintenance of healthy mind
- To study the anatomical aspects of theory of mind

## MATERIALS AND METHODS

- Classical literature of *Ayurveda* as well as modern medical science on the subject of food, nutrition, mind and anatomy from library as well as from internet were collected, analyzed and presented.

## LITERATURE REVIEW

Concept of *mana* or *satwa* in *ayurveda*

- According to *acharya Charaka* in *sutrasthana*, *Manas* is considered as *atindriya* which means mind transcends the sense organs, it is known as *sattva* while some call it as *chetas*. Its action is dependent on its objects and accomplishment of self and at the

same time, it is responsible for the action of sense organs.<sup>[4]</sup>

- In *sharira sthana Charakacharya* defined mind as the entity which while combining with the respective *indriya* and *indriyaartha* the knowledge through that *indriya* can be perceived, in the absence of *mana*, no *vishaya* can be observed.<sup>[5]</sup>
- *Anutwa* and *ekatwa* (Subtleness and oneness) are known as two qualities of mind.<sup>[6]</sup>
- The object of thinking, analysing, reasoning, meditating, determination and whatever is to be perceived by mind is its object.<sup>[7]</sup>
- *Indriyabhigraha*, *manonigraha*, *ooha*, *vichara* are the actions of *manas*.<sup>[8]</sup>
- *Indriyabhigraha* refers to proper functioning of *jnanendriya* and *karmendriya* in the absence of any defects in the *indriyas* or *indriyadhishtanas*.
- *Manonigraha* is the ability to concentrate on something and stick to the given task or chosen course of action without being unduly interrupted by the distracting stimuli from outside.
- *Ooha* is the ability to guess different possibilities when one come across a familiar situation
- *Vichara* is the ability to discriminate between right and wrong, possible and impossible, acceptable and unacceptable etc.
- The sense-object is received by sense organs along with mind. Then the mind analyses it in forms of merits or demerits and forwards it to *Buddhi* (intellect) which produces decisive knowledge by which one proceeds to speak or to do something with full knowledge.<sup>[9]</sup>
- The location of *mana* according to *acharya Bhela* is said to be between the *shiras* (head) and *talv* (hard palate).<sup>[10]</sup>
- *Ayu* or life is mentioned as the combination of *sharira*(body), *indriya* (sense organs), *satwa* (mind) and *atma* (soul).
- The concept of health is defined as equilibrium state of *doshas*, *agni*, *dhatu*, *mala* and the pleasantness of *atma*, *indriya* and *mana* can be called as *swastha* (healthy individual).

#### Importance of *ahara* / food recommended for healthy life

- *Ahara* is considered as *mahabhaishajya* according to *kashyapa Samhita*
- The importance of food is described in *Charaka Samhita suthrasthana* as food is considered as *prana* or vital breath of living beings. Complexion, cheerfulness, good voice, life, imagination, happiness, contentment, corpulence, strength, intellect-all these are dependent on food.<sup>[11]</sup>
- While explaining about the importance of taking *pathyaahara* or wholesome food, *acharya Charaka* has mentioned the persons too obese, too lean, having uncompact muscles, blood and bones, weak, indulged in unsuitable food, under-nourished and

having weak mind are not able to resist diseases, contrary to them are resistant to diseases.<sup>[12]</sup>

- The use of *hitaahara* leads to the growth of the individual and *ahitahara* leads to disorders.<sup>[13]</sup>
- *Hitaahara* is defined as the food, which maintains the balanced *dhatu* in normalcy and restores the equilibrium in imbalanced ones, should be taken as wholesome.<sup>[14]</sup>

#### Relationship between food and mind

- In *Charaka Samhita sutrasthana*, *annapanavidhi adhyaya* the relationship between the food and mind for proper nutrition is explained as Food and drinks with desirable smell, taste and touch and having been taken according to prescribed method is said as vital strength by the experts on the basis of observing their results directly; because the condition of internal fire depends on their fuel. They produce energy in mind (*satwam oorjayati*), constitution of *dhatu*, strength, complexion and clarity of sense organs, if properly taken, otherwise they become harmful.<sup>[15]</sup>
- While explaining the concept of *virudhhahara*, *unmada* is one among the diseases which are said to be caused due to the intake of incompatible foods.<sup>[16]</sup>
- When a person indulged in having dirty food (*malinaaharasheelasya*) and having himself covered with *rajas* and *tamas*, the vitiated *dosas*, singly or in combination, obstruct the channels carrying *rakta*, *rasa* and consciousness (*sajna vaha srotas*) and are located there, they give rise to diseases-*mada* (narcosis), *murccha* (fainting) and *samnyasa* (coma).<sup>[17]</sup>
- In *Charaka Samhita nidana sthana*, the person who is excessively invaded by anxiety, grief, by envy, over ambition, fear, anger etc results in malnutrition which in turn leads to the disease *shosha*.<sup>[18]</sup>
- *Anuchita ahara* or inappropriate food is considered as one of the causes of *unmade*.<sup>[19]</sup>
- Intake of disliked food and also having food while afflicted with psychic emotions such as passion, anger, greed, confusion, envy, bashfulness, grief, conciet, excitement and fear leads to *ama*.<sup>[20]</sup> Even the wholesome food also taken in proper quantity, does not get digested due to anxiety, grief, fear, anger, uncomfortable bed and vigil.<sup>[21]</sup>

#### Anatomical Aspects

##### 1. Gut brain axis

The central nervous system and in particular hypothalamic pituitary adrenal (HPA) axis can be activated in response to environmental factors, such as emotion or stress. HPA is finalized to cortisol release and is driven by a complex interaction between amygdala, hippocampus, and hypothalamus, constituting the limbic system. Hypothalamus secretion of the corticotropin-releasing factor (CRF) stimulates adrenocorticotrophic hormone (ACTH) secretion from pituitary gland that, in turn, leads to cortisol release from the adrenal glands. In parallel, central nervous system communicate along both

afferent and efferent autonomic pathways with different intestinal targets such as enteric nervous system (ENS), muscle layers and gut mucosa, modulating motility, immunity, permeability and secretion of mucus. The enteric microbiota has a bidirectional communication with these intestinal targets, modulating gastrointestinal functions and being itself modulated by brain-gut interactions.<sup>[22]</sup>

Enterochromaffin cells are important bidirectional transducers that regulate communication between the gut lumen and the nervous system. Vagal, afferent innervation of enterochromaffin cells provides a direct pathway for enterochromaffin-cell signaling to neuronal circuits, which may have an important role in pain and immune-response modulation, control of background emotions and other homeostatic functions.<sup>[23]</sup>

## 2. Theory of mind.<sup>[24]</sup>

- Cognitive and affective aspects of ToM are subserved by dissociable, yet interacting, prefrontal networks. The cognitive ToM network primarily engages the dorsomedial prefrontal cortex, the dorsal anterior cingulate cortex and the dorsal striatum; and the affective ToM network primarily engages the ventromedial and orbitofrontal cortices, the ventral anterior cingulate cortex, the amygdala and the ventral striatum.
- Self and other mental-state representation is processed by distinct brain regions within the mentalizing network, and that the ability to distinguish between self and other mental states is modulated by a functionally interactive dorsal and ventral attention/selection systems at the temporoparietal junction and the anterior cingulate cortex.
- ToM functioning is dependent on the integrity of the dopaminergic and serotonergic systems which are primarily engaged in the maintenance and application processes of represented mental states.

## DISCUSSION

The branch of dietetics is given due importance and elaborate in *ayurveda* as it stands neck to neck along with the treatment procedures as well as medicines. Various aspects of *ahara* and nutrition is well explained achieving good health, maintaining the health for recovering the health from diseases. The preventive aspects of diseases, maintaining the healthy body and mind, and curative aspects from the diseases can be achieved also from food or by following proper diet suitable for different conditions. Here arises the question why the nutrition is given so much importance. Because the food is having direct effect on mind. In *Upanishad*, *chitta* or mind is said to be *annamaya*.<sup>[25]</sup> that which is made up of food. The food we eat directly influence the mental health as equal as its effect on physical health.

*Ayurvedic* and modern literature gives us the clue for the relationship of nutrition and the mental health. The

definition of life as per *ayurveda* is the combination of body mind sense organs and soul. The definition of health is explained as the equilibrium state of *dosha*, *dhatus*, *mala*, digestive function, pleasantness of soul, sense organs, mind. In *ayurveda* system of medicine, body is always considered along with the mind. Both are supporting each other for the well-being. If one gets effected with disease that in-equilibrium is manifested in the other and vice versa. The dietetics is explained in different aspects by enlisting.

- The food articles which can be consumed daily.<sup>[26]</sup>
- Which cannot be consumed in daily basis.<sup>[27]</sup>
- The combinations of food items which should be avoided.<sup>[28]</sup>
- The combinations of food items which must be consumed.<sup>[29]</sup>
- The different accompaniments or *anupanas* that have to be taken along with the specific food items.<sup>[30]</sup>
- The diet regimen according to different seasons to avoid the occurrence of various diseases which can be originated due to the *chaya prakopa prashama* of different doshas with related to specific *ritus*.<sup>[31]</sup>
- The rules of having food as *ashta ahara vidhi vishshaayatanani*.<sup>[32]</sup>
- Method of dieting, in that the food should be consumed with full concentration of mind (*tanmana bhunjeeta*) otherwise, it may hamper the proper nourishment.<sup>[33]</sup>

Improper food intake is mentioned as the cause of various mental diseases. Such as

- The intake of dirty or spoiled food is enumerated as the cause of the *manasa vyadhis* like *mada*, *moorcha* and *sanyasa*.
- By having incompatible and inappropriate food can also lead to the development of *unmade*.
- When a person is excessively invaded by anxiety, grief, by envy, over ambition, fear, anger can lead to malnutrition apart from whatever he consumes the body will be malnourished which leads to *shosha* disease. Here the unhealthy mind is a cause for improper nourished which gives an example of modern theory of gut brain axis.
- *Ama* or toxins can be formed by the intake of disliked food or by consuming food while suffering from psychic emotions.
- Even the wholesome food also taken in proper quantity, does not get digested due to anxiety, grief, fear, anger, uncomfortable bed and hampered sleep.

The concept of *mana* or *satwa* is detailed in ayurvedic literature, the different types of *manasa prakruti*, *manasik doshas* are explained. As we have seen from evidence of maintaining of proper health (mental as well as physical), proper nutrition is an important factor. The food which we consume is not liked by mind or unacceptable for mind will not nourish the body which can be explained by the theory of gut brain axis, which is

the two-way biochemical signaling that takes place between the GIT and CNS. The gut brain axis,<sup>[34]</sup> includes;

- Central nervous system
- Neuroendocrine system
- Neuroimmune system
- Hypothalamic-pituitary adrenal axis
- Autonomic nervous system
- Enteric nervous system
- Vagus nerve
- Gut microbiota

Enteric nervous system governs the functions of gastrointestinal system and is described as a second brain. It connects the CNS through sympathetic (vagus nerve) and para-sympathetic (pre-vertebral ganglia) supply. ENS is capable of carrying reflexes in the absence of CNS input. It makes use of more than 30 neurotransmitters which are identical to the ones present in CNS. More than 90% of body's serotonin and 50% of dopamine lies in the gut.<sup>[35,36]</sup>

Studies shows:

- Stress inhibits the signals send through the vagus nerve and that leads to GIT problems.<sup>[37]</sup>
- Serotonin is largely produced in the gut.<sup>[38]</sup>
- Probiotics reduces the stress hormone in the blood.<sup>[39]</sup>
- Certain probiotics can increase the production of GABA and that resulted in decrease in anxiety and depression like behaviours.<sup>[39]</sup>
- Gut microbes produces neurotransmitter GABA which control feelings of fear and anxiety.<sup>[40]</sup>
- About the concept of theory of mind mainly the cognitive functions are correlated with the pre-frontal cortex which can be assumed as acharya *Bhela's* opinion of location of *mana* as between *shiras* and *talv*.

## CONCLUSION

*Ayurveda* holds the synthetic view of man instead of analysing him into hundreds of parts and reducing him as aggregate of tiny cells. Happiness and unhappiness are the final consequence of health and disease respectively and these affect the person wholly and not partly. *Tridosha* as well as psyche pervade the whole body. This gave rise to the psychosomatic approach towards health and disease. *Tridosha* and psyche interact with each other and the disorders will have to be viewed accordingly. This '*deha-manasa*' (psychosomatic) approach is a very important contribution in the field of medicine. Mind effects body and vice versa. Therefore, the nutrition of body energize the mind. Proper understanding and studies related with the nutrition and its effect in psychological level is needed. The anatomical aspects of food, nutrition and mind, its relations should be more explored regarding the theory of mind, gut-brain axis etc for the further advancements in nutrition and its psychological aspects. Any partial veiw cannot lead to proper understanding and successful

management of diseases. Alongwith the '*Yuktivyapasraya*' treatment '*Sattwavajaya*' (Psychotherapy) has also been given due place.

## REFERENCES

1. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 6: 1/42.
2. P. V. Sharma, *Susrutha Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 15/45.
3. Sri Satyapala Bhisagaacharya, *Kashyapa Samhita*, *Chaukhambha Sanskrit Sansthan Varanasi*, Revised edition, 2019; 378: 4/6.
4. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 54: 8/4.
5. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 398: 1/18.
6. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 398: 1/19.
7. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 398: 1/20.
8. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 398: 1/21.
9. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 398: 1/22,23.
10. Girijadayalu Suklah, *Bhela Samhitha*, *Chaukhambha Bharati Academy*, Reprint, 1999; 398: 8/2.
11. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 225: 27/349.
12. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 227: 28/7.
13. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 165: 25/31.
14. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 166: 25/33.
15. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 193: 27/3.
16. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 191: 26/102,103.
17. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 160: 24/25,26.
18. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 283: 6/7.

19. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 287: 7/4.
20. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 311: 2/8.
21. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 311: 2/9.
22. Carabotti, M., Scirocco, A., Maselli, M. A., & Severi, C. The gut-brain axis: interactions between enteric microbiota, central and enteric nervous systems. *Annals of gastroenterology*, 2015; 28(2): 203–209.
23. Rhee SH, Pothoulakis C, Mayer EA. Principles and clinical implications of the brain-gut-enteric microbiota axis. *Nat Rev Gastroenterol Hepatol*, 2009 May; 6(5): 306-14. doi: 10.1038/nrgastro.2009.35. PMID: 19404271; PMCID: PMC3817714.
24. Abu-Akel A, Shamay-Tsoory S. Neuroanatomical and neurochemical bases of theory of mind. *Neuropsychologia*, 2011 Sep; 49(11): 2971-84. doi: 10.1016/j.neuropsychologia.2011.07.012. Epub 2011 Jul 23. PMID: 21803062.
25. Upanishad ank, gitapress Gorakhpur, 12<sup>th</sup> edition, 59. Chandayoga Upanishad chapter 6, khanda, 5(4): 455.
26. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 33: 5/12,13.
27. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 33: 5/10,11.
28. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 189: 26/84.
29. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 53: 7/61,62.
30. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 222: 27/319-324.
31. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 44: 6/19-48.
32. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 305: 1/21.
33. P. V. Sharma, *Caraka Samhita*, Volume 1, *Chaukambha Orientalia Varanasi*, Revised and enlarged edition, 2014; 306: 1/24.
34. [https://en.wikipedia.org/wiki/Gut%E2%80%93brain\\_axis](https://en.wikipedia.org/wiki/Gut%E2%80%93brain_axis).
35. Martinucci, I; et al. "Genetics and pharmacogenetics of aminergic transmitter pathways in functional gastrointestinal disorders". *Pharmacogenomics*, 2015; 16(5): 523–39. doi:10.2217/pgs.15.12. PMID 25916523.
36. Smitka K, Papezova H, Vondra K, Hill M, Hainer V, Nedvidkova J. The role of "mixed" orexigenic and anorexigenic signals and autoantibodies reacting with appetite-regulating neuropeptides and peptides of the adipose tissue-gut-brain axis: relevance to food intake and nutritional status in patients with anorexia nervosa and bulimia nervosa. *Int J Endocrinol*, 2013; 2013: 483145. doi:10.1155/2013/483145
37. Sahar T, Shalev AY, Porges SW. Vagal modulation of responses to mental challenge in posttraumatic stress disorder. *Biol Psychiatry*, 2001 Apr 1; 49(7): 637-43. doi: 10.1016/s0006-3223(00)01045-3. PMID: 11297721.
38. Yano JM, Yu K, Donaldson GP, et al. Indigenous bacteria from the gut microbiota regulate host serotonin biosynthesis [published correction appears in *Cell*, 2015 Sep 24; 163: 258]. *Cell*, 2015; 161(2): 264-276. doi:10.1016/j.cell.2015.02.047.
39. Janik R, Thomason LAM, Stanisz AM, Forsythe P, Bienenstock J, Stanisz GJ. Magnetic resonance spectroscopy reveals oral *Lactobacillus* promotion of increases in brain GABA, N-acetyl aspartate and glutamate. *Neuroimage*. 2016 Jan 15; 125: 988-995. doi: 10.1016/j.neuroimage.2015.11.018. Epub, 2015 Nov 11. PMID: 26577887.
40. Mazzoli R, Pessione E. The Neuro-endocrinological Role of Microbial Glutamate and GABA Signaling. *Front Microbiol*, 2016; 7: 1934. Published 2016 Nov 30. doi:10.3389/fmicb.2016.01934