

**CHAPTER – 2**  
**LITERARY RESEARCH**

S. No.	DETAILS	PAGE.NO.
<b>2.1</b>	<b>AIM</b>	<b>37</b>
<b>2.2</b>	<b>OBJECTIVE</b>	<b>37</b>
<b>2.3</b>	<b>INCLUSION CRITERIA</b>	<b>37</b>
<b>2.4</b>	<b>EXCLUSION CRITERIA</b>	<b>38</b>
<b>2.5</b>	<b>WORK DONE IN THIS FIELD</b>	<b>38</b>
<b>2.6</b>	<b>PRESENTATION OF VERSES</b>	<b>66</b>
<b>2.7</b>	<b>CONCLUSIONS</b>	<b>66</b>

## 2.0 LITERARY RESEARCH

### 2.1 AIM

To understand how *Rasāhāra* and Yoga practice improves early stages of diabetes.

### 2.2 OBJECTIVES

- To examine the literature of related studies to strengthen the research.
- To find out stated effects and importance of meal time in previous and modern studies.
- To understand the spiritual and physical effect of herbal juices and yoga.
- To examine *Āyurveda* and *Yoga*'s understanding of *Prameha* pathology.

### 2.3 INCLUSION CRITERIA

In the study of modified lifestyle, for newly detected T2DM we studied literature related to the four herbal juices selected for *Rasāhāra*, modified breakfast foods, and specific yoga practices, as follows: .

- The herbs selected for *Rasāhāra*: *Āmalaki*, *Guḍuci*, *Vāsā*, and *Wheatgrass*, as a generally ideal food supplement for *Prameha*.
- The chosen uncooked food - Sprouted grains
- Yoga practices used, including Cyclic Meditation (CM), and its origins.

## 2.4 EXCLUSION CRITERIA

- Other herbs for T2DM, as effective as those selected, but the study restricts itself to those chosen for *Rasāhāra* (*Āmalaki*, *Guḍuci*, *Vāsā*, and *Wheatgrass*).
- Meal times rather than meal ingredients, i.e. foods eaten.
- Yoga practices other than *Sūkṣma Vyāyāma*, *Suryanamaskāra* and CM.

## 2.5 PREVIOUS WORK IN THE FIELD

Many studies concern foods for newly detected T2DM, such as those concerning the ability of various herbs to reduce sugar levels. Others relate meal time to weight loss, or investigate the effect of CM/SMET on sugar level in both newly detected and later cases of T2DM.

Some published studies concern *Praṇa*, the subtle body and its effect on health and disease i.e. *Praṇa* imbalance due to *Ādhi* in the etiology of *Prameha* and *Mdhumeha*.

Lokesh H, in his M.Sc. dissertation, analyzed the effects of mental attitudes on *Prāṇa* from the perspective of *Atharvaveda*, *Āyurveda* and *Sāṃkhya*, where the spectrum of manifestation of *Prāṇa* in different worlds (*lokas*), beings and species is explained. *Marmas* form the seats of the life force. *Prāṇa* (Lokesh H 2003), (Shrudda, 2004) examined correspondences between the Indian concept of *Nāḍī*, and that of meridian in China, listing points of agreement.

Meenakshy (2009), Singh (2009), Nagilla (2012), and Choudhary (2013), surveyed ancient Yogic texts, and correlated characteristics with Traditional Chinese Medicine (TCM). Being grosser or subtler, or impure or pure, were identified as properties of *Prāṇa*.

A comprehensive study (Śarmā, 2012), detailed the parallels and contrasts between principles of Indian and TCM systems, extensively examining the idea of *Marma* in *Suśruta Samhitā*

and *Vaśiṣṭha Saṁhitā*, showing how they are seats of *Prāṇa*, and that injuries to them can prove fatal.

Eight literature reviews have been carried out on the relationship between *prameha* and *madhumeha*. Usha Rani (2003) and Neha (2013) surveyed their causation, symptoms, management and pathogenesis, which apply not only to diabetics, but to every individual, and can help them realize the importance of adopting healthy lifestyles including proper diet, sleep and exercise in managing *prameha*. Here, an integrated *Āyurveda* and *Yoga* regimen was used in the prevention and management of Diabetes.

In his master's dissertation, Pradeep (2013) summarizes how patients are advised to avoid intake of foods containing excess salt, sour, sweet, dairy products, or alcohol; advising fresh grains, fruits and vegetables, e.g. bitter gourd, focusing on maintaining balance in the three *Doṣas*, *Vāta*, *Pitta*, and *Kapha*.

One MD dissertation (Amit, 2014) failed to find correlations between *prameha*'s *pūrvarūpa* and modern pre-diabetes symptoms, nor references to use of *Nāḍī Parīkṣa* to diagnose stages of pre-diabetes at that time. Arun (2014) noted that Naturopathy emphasizes simple, clean, active lifestyles in conjunction with natural laws of health, and how its proponents commonly view diabetes not as a separate disease entity, but as a byproduct of wrong ways of living, that finally afflict the system. Another study (Kumar, 2014), compared *prameha upadrava* with complications of modern diabetes, identifying some with no modern equivalent.

*Rāmacandra* (2014) tried to identify human energy field characteristics correlating with *Prabhā* in relation to Diabetes (*Madhumeha*) explaining that poor *āhāra-vihāra* routines lead to *ojas kṣaya*. Vitiated *Vāta Doṣa* removes *ojas* via the urinary tract (*basti*) leading to *madhumeha* (diabetes). Lack of *ojas* leads to decrease in *Prabhā*, the human energy field, and

to problems like reduced power in all the multiple systems of the body, including the immune system etc.

*Bhāwnā* (2014) states that urinary clinical manifestations form the common ground of *Prameha* and *Madhumeha*, and that different kinds of *Prameha* are distinguished by associated problems of digestion, eyes, ears, teeth, throat, buckle cavity, and nervous system. An aggravated condition of both *Vyāna* and *Apānavāyus* may produce *Prameha*. If these symptoms of *Prameha* are not remediated, they progress to diabetes. Jayalaxmi (2005) and Saini (2011) suggest that detailed study of *ādhi* and *vyādhi* is essential for healthy life style as pathology originates in mental disturbance disrupting *Prāṇa*. In contrast, its proper use leads to positive health, and helps develop highest human potential. Table 2.1 summarizes of previous work at S-VYSA on *Yoga* and *Āyurveda* for diabetes.

**TABLE 2.1: S-VYASA WORK ON YOGA AND ĀYURVEDA AND DIABETES: A SUMMARY**

Authors & Year	Summary	Strength	Limitations
<b>Concept of <i>Prāṇa</i></b>			
<p><i>Lokesh</i>, 2003 (M.Sc. Dissertation)</p>	<ol style="list-style-type: none"> <li>1. Spectrum and manifestation of <i>Prāṇa</i>, in different world, beings, species, <i>lokhas</i> are explained.</li> <li>2. Two basic aspects of <i>Prāṇa</i> are un-manifest and manifest.</li> <li>3. <i>Prāṇa</i> or vital force is a modification of air element.</li> </ol>	<ol style="list-style-type: none"> <li>1. Detailed and comprehensive explanation of <i>Prāṇa</i>.</li> <li>2. Manifestations of <i>Prāṇa</i> in different <i>lokas</i> are explained.</li> <li>3. Concept of <i>Prāṇa</i> in grate details explained in <i>Athervaveda</i>, <i>samkhya</i>, <i>Āyurveda</i> are done.</li> </ol>	<ol style="list-style-type: none"> <li>1. No theoretical model.</li> <li>2. Did not explain definition of <i>Prāṇa</i> and from <i>yoga</i> philosophical texts.</li> </ol>

<p><i>Shraddha</i>,(2003),</p>	<ol style="list-style-type: none"> <li>1. Chinese medicine proposes that there are current of energy in the body, called meridians that are modulated by the effects of yin and yang, and influenced by environmental and emotional effects.</li> </ol>		
<p>Meenakshy, 2009; Nagilla, 2012; H. R. Singh, 2009 (M.Sc. Dissertation)</p>	<ol style="list-style-type: none"> <li>1. There are few correlation found between two concept.</li> <li>2. <i>Chakra</i>: centres of <i>śakti</i> which influence physical, mental and supra mental states.</li> <li>3. <i>yogic</i> concepts of subtle body to similar concepts in TCM.</li> </ol>	<ol style="list-style-type: none"> <li>1. Correlation between <i>Prāṇa</i> in Indian and Qi in Chinese and <i>Nāḍī</i>/meridian are discussed.</li> <li>2. Correlation between Yin/ Ida and Yang/ <i>pingalā</i> correlation are discussed.</li> <li>3. The <i>Prāṇa</i> and Qi comparison had been done.</li> </ol>	<ol style="list-style-type: none"> <li>1. No theoretical model.</li> <li>2. Detailed explanation has not done regarding the <i>Yoga</i> and TCM concept.</li> </ol>
<p><i>Śarmā</i> , 2012 (Seminar Report)</p>	<ol style="list-style-type: none"> <li>1. <i>Āyurveda</i> and <i>Yoga</i> concept of <i>Marmas</i>: definition, types, locations are done in detailed.</li> <li>2. Detailed information on correlation between <i>Prāṇa</i> and Qi; <i>Nāḍīs</i> and meridians; <i>Chakras</i> and dentins; <i>Marma</i> and acupoints.</li> </ol>	<ol style="list-style-type: none"> <li>1. Detailed review of verses relevant to <i>Marma</i>.</li> <li>2. Indian and Chinese concept of the subtle body is explained.</li> <li>3. Important <i>Yoga</i> and <i>Āyurveda</i> texts were referred</li> </ol>	<ol style="list-style-type: none"> <li>1. No theoretical model proposed.</li> </ol>

<b>Concept of <i>prameha</i>/ <i>Madhumeha</i></b>			
<i>Pradīp</i> , 2013	<ol style="list-style-type: none"> <li>1. <i>Madhumeha</i> in <i>Āyurveda</i> text is equivalent to DM in modern medical science.</li> <li>2. The root word and characteristics of <i>prameha</i> has been explained.</li> </ol>	<ol style="list-style-type: none"> <li>1. Detailed and comprehensive explanation Definition of <i>prameha</i> has been explained.</li> </ol>	<ol style="list-style-type: none"> <li>1. Experimental work is Different from literary search.</li> </ol>
<i>Ūśārāni</i> , 2009	<ol style="list-style-type: none"> <li>1. Importance of adopting a healthy life style with proper diet, sleep and exercise which play important role in preventing <i>prameha</i></li> </ol>	<ol style="list-style-type: none"> <li>1. Causation, symptoms and pathogenesis of diabetics or any individual has explained.</li> </ol>	<ol style="list-style-type: none"> <li>1. No theoretical model Proposed.</li> <li>2. Detailed study has not done.</li> </ol>
<i>Bhāwnā</i> , 2012	<ol style="list-style-type: none"> <li>1. <i>Prameha</i>, not properly treated and attended to at the outset, may ultimately develop into Diabetes, which is incurable.</li> </ol>	<ol style="list-style-type: none"> <li>1. <i>Prameha</i>, the precursor of Diabetes Mellitus from the perspective of <i>Prāṇa</i> in refer to <i>Suśruta Samhitā-Nidāna sthānam</i> has referred in details.</li> </ol>	<ol style="list-style-type: none"> <li>1. No theoretical model Proposed.</li> </ol>

Amit, 2013	<ol style="list-style-type: none"> <li>1. No correlation between <i>pūrvarūpa</i> of <i>prameha</i> and modern pre-diabetes symptoms.</li> <li>2. <i>Kara dāha</i> and <i>pādadāha</i> mentioned as <i>pūrvarūpa</i> of <i>prameha</i> can be correlated to skin itching/burning sensation of feet and palm.</li> </ol>	<ol style="list-style-type: none"> <li>1. <i>Pūrvarūpa</i> of <i>prameha</i> or premonitory symptoms of <i>madhumeha</i> explained.</li> <li>2. Comparison between <i>pūrvarūpa</i> of <i>prameha</i> and symptoms of pre-diabetes are detailed.</li> </ol>	<ol style="list-style-type: none"> <li>1. No theoretical model Proposed.</li> <li>2. All the <i>Āyurveda</i> text has not referred.</li> </ol>
Vinod, 2014	<ol style="list-style-type: none"> <li>1. <i>Upadrava</i> /complications of the diabetes and its correlation with complications according to modern medicine understanding.</li> </ol>	<ol style="list-style-type: none"> <li>1. It was possible to correlate majority of <i>upadrava</i> with modern day understanding of the disease.</li> <li>2. Study could find that certain <i>upadrava</i> were matching with several complications of modern day.</li> </ol>	<ol style="list-style-type: none"> <li>1. No theoretical model has not done since the experimental part was on development and validation of yoga module for type 2 DM.</li> </ol>
Rāmcandra, 2014	<ol style="list-style-type: none"> <li>1. <i>Ojas</i> the essence of all <i>Dhātu</i> (essential tissues) is responsible for construction of <i>Vyādhikṣa Āamtwa</i>.</li> <li>2. Aetiology, Pathogenesis Treatment et care summarized.</li> </ol>	<ol style="list-style-type: none"> <li>1. Correlation to <i>Prabhā</i> as explained in classical texts and to explore relations with Diabetes (<i>Madhumeha</i>) as per the classical <i>Āyurveda</i> and <i>yogic</i> texts are studied.</li> </ol>	<ol style="list-style-type: none"> <li>1. Only Commentary of <i>Chakrapāni</i> text referred.</li> </ol>
Arun,2014	<ol style="list-style-type: none"> <li>1. Treatment modalities and scope of treatment correlating it with the <i>Āyurveda</i>, <i>Yoga</i> and</li> </ol>	<ol style="list-style-type: none"> <li>1. Concept of health in naturopathy and its correlation with other holistic system of medicine has been explained.</li> </ol>	<ol style="list-style-type: none"> <li>1. No <i>ślokas</i> included about <i>Yogic</i> concept and naturopathy.</li> </ol>

	<p>Modern Medicine as reviewed.</p> <p>2. Lack of activity and sedentary lifestyle as an important aetiology for the development of disease</p>	<p>2. Concept of diabetes according to naturopathy are Explained the.</p>	
<p><i>Nehā, 2013</i></p>	<p>1. <i>Yoga</i> and <i>Āyurveda</i> been used as an Integral part of <i>Āyurveda</i> regimen for the prevention and management of Diabetes</p>	<p>1. <i>Nidāna</i> Is the Aetiology of Disease Has Been Discussed.</p> <p>2. Detailed study has been done on yoga practices recommended by classical yoga texts.</p>	<p>1. No theoretical model Proposed.</p> <p>2. Detailed explanation on Child born as <i>Madhumehi</i> has not explained.</p>

## 2.6 A THEORETICAL FRAMEWORK FROM VERSES IN VARIOUS TEXTS

### 2.6.1 *Āyurveda* Etiology

An important text in *Āyurveda*'s *Brihatrayi*, blessed to us by *Ācārya Suśruta*, elaborates six stages of the pathogenesis of non-communicable disease known as *Ṣaṭkriyākāla*, as follows-

*Sancaya*- The first stage of *Ṣaṭkriyākāla*, the period of 'accumulation', when *Āma* produced from improper *prapāka* digestion collects in the gastrointestinal tract. This stage of disease manifestation is primarily associated with *Kapha* imbalance accumulating in the stomach.

एतानि खलु दोषस्थानानि एषु सञ्चीयन्ते दोषाः ।

प्राक्सञ्चयहेतुरुक्तः ।

तत्र सञ्चीयतानां खलु दोषाणां स्तब्धपूर्णकोष्ठता पीतावभासता मन्दोष्मता चाङ्गानां गौरवमालस्यं  
चयकारणविद्वेषश्चेति लिंगानि भवन्ति ।

तत्र प्रथमः क्रियाकालः ॥१८॥

*Etāni khaludoṣasthānāni eṣu sanciyante doṣāḥ.*

*Prāksancayaheturuktaḥ.*

*Tatrasancīyatānām khalu doṣānām stabdhapūrṇakoṣṭhatā pītavabhāsatā mandoṣmtā  
cāṅgānām gauravamālasyaṁ cayakāraṇavidveṣaśceti liṅgānibhavanti.*

*Tatra Prathama kriyākālaḥ.*

*(Suśruta Saṁhitā, Sūtrasthāna, Ch21, v18)*

Here, *Suśruta Saṁhitā* states that each *doṣā* accumulates in a specific place; it gives reasons for accumulation of *Vāta*, *Pitta* & *Kapha* in the *Ritucaryā* chapter (*Sūtrasthana*, Ch21, v18). Symptoms of toxin deposition (*Ama*) are heaviness in the lower abdomen, eyes, yellowness in the skin, lack of heat, heaviness in body, dullness, increase in all symptoms. In this situation treatment is called *Prathama kriyākāla*.

सशीताभ्रप्रवातेषु धर्मान्ते च विशेषतः ।

प्रत्यूषस्यपराहेतु जीर्णेन्ने च प्रकुप्यति ॥२० ॥

*Sasitabhrapravatesu dharmante ca visesatah.*

*Pratysasyaparanhetu jirnenne ca prakupyati.*

(*Suṣruta Saṁhitā, Sūtra Sthāna, 21.120*)

*Vāyu* get aggravated during cold and cloudy days, during storms, in morning, afternoon, and after digestion of food.

पित्तप्रकोपणैरेव चाभीक्षण

द्रवस्निग्धगुरुभिराहारैः दिवास्वप्नक्रोधानलातपश्रमाभिघाताजीर्णविरुद्धाध्यशनाभिर्विशेषैरसृक् प्रकोपमापद्यते ॥२५ ॥

*pītaprakopañairevacābhikṣṇa*

*dravasniḡdhagurubhirāhāraiḥdivāsvapnakrodhānalātpaśramābhighātājirṇāvairuddhādhyāśa nābhriṣeṣairasruk prakopamādyate.*

(*Suṣruta Saṁhitā, Sūtra sthāna, chapter 21, v25*)

Regular intake of *Pitta* aggravating food, eating liquid, heavy, oily food, day time sleeping, getting angry, facing the heat of the sun, working too rigorously, being injured, excess or wrong eating aggravates blood.

तेषां प्रकोपात् कोष्ठतोदसञ्चरणाम्लिकापिपासापरिदाहान्नद्वेषहृदयोत्क्लेदाश्चजायानते ।

तत्र द्वितीयः क्रियाकालः ॥२७ ॥

*Teṣāṁ prkopāt*

*koṣṭhatodasancaraṇāmlikāpipāsāparidāhānnadveṣahridayotkledāścajāyānate*

*tatra dvitīyaḥ kriyākālah*

(*Suṣruta Saṁhitā, Sūtra Sthāna, 21.27*)

Symptoms of *prakopa* include feeling pain at pin points in the stomach, belching, feeling burning sensations, hate towards food, the time of aggravation of *doṣa* is second phase of treatment that is *Dvitiyaḥ Kriyākālah*. or is the second phase of *doṣa* aggravation.

एवं प्रकुपितानां प्रसरतां च वायोर्विमार्गगमनाटोपौ ओषचोषपरिदाहधूमायनानि पित्तस्य  
अरोचकाविपाकाङ्गसादाश्छर्दिश्चेति श्लेष्मणो लिङ्गानि भवन्ति ।

तत्र तृतीयः क्रियाकालः ॥३२॥

*Evam prakupitānām prasartām ca vāyorvimārgamanātopau oscosparidāhdhumāyanāni  
pittasya arocikāvīpākāṅgāsādāśchardīśchēti śleṣmaṅolingāni bhavanti  
Tatra Tṛitiya kriyākālah.*

(*Suśruta Saṁhitā, Sūtra sthāna, chapter 21, v32*)

The following symptoms of *doṣa* aggravation concern *Vāyu*: dryness, burning sensation, bad breath, belching are the symptoms of *Pitta*. Restlessness, indigestion, pain vomit & cough are the symptoms of *Pitta*. Treatment at this stage is called third or *Tṛitiya kriyākāla*.

अत ऊर्ध्वं स्थानसंश्रयं वक्ष्यामः - एवं प्रकुपिताः तांस्तान् शरीरप्रदेशानागम्य तांस्तान् व्याधीन् जनयन्ति । ते यदोदरसन्निवेशं कुर्वन्ति तदा गुल्मविद्रध्युदराग्निसङ्गानाहविसूचिकाऽतिसारप्रभृतीन् जनयन्ति । बस्तिगताः प्रमेहाश्मरीमूत्राघातमूत्रदोषप्रभृतीन् । वृषणगताः वृद्धिः । मेदृगता निरुद्धप्रकशोपदंशशूकदोषप्रभृतीन् । गुदगता भगंदरार्शःप्रभृतीन् । पादगताः श्लीपदवातशोणितवातकण्टकप्रभृतीन् । तेषामेवमभिनिविष्टानांपूर्वरूपप्रादुर्भावः तं प्रतिरोगं वक्ष्यामः तत्र पूर्वरूप गतेषु चतुर्थः क्रियाकालः ॥३३॥

*Ata ūrdhvaṁ sthanasamśrayaṁ vakṣyamaḥ Evaṁ prakupitāḥ taṁstan śarīrapradeśānāgamyā  
taṁstān vyādhīn janayanti. Te yadodarasanniveśaṁ kurvanti tadā  
gulmavidradhyudaragnisanganisanganaha visucikātīsārāprabrutīn janayanti. Bastigatāḥ  
pramehāśmarīmūtrāghātāmutradosḥprabhutin. vṛṣaṇagatāḥ vṛiddhiḥ. medhragatā  
niruddhaprakaśopadaṁśaśūkadoshprabhutin. Gudagatābhagandarāśaḥprabhutin.  
padagatāḥślīpadavātaśoṇitavātakantakaprabhutin.  
Teṣāmevamabhiniviṣṭānāmpūrvārupaprādurbhāvaḥ taṁ pratirogaṁ vakṣyāmaḥ tatra  
pūrvārupa gateṣu catūrthaḥ kriyākālah.*

(*Suśruta Saṁhitā, Sūtrasthāna, 21.33*)

The above mentioned aggravated *doṣa* spreads to various places of body, producing *disease*: in the stomach, symptoms like gas, indigestion, ulcers, dropsy or any stomach pathology. When toxins (*Āma*) spread up into the trachea they generate tonsillitis; spreading to the lower abdomen, i.e. *Basti*, they produce *Prameha*, kidney stones, and other urinary diseases. When they spread to the prostate, it gets enlarged or contracts. Vitiated *doṣas*; reaching the rectum,

they create piles; all producing disorders in the relevant organs. OR: On reaching the head, they produce disorders in organs like the eyes, nose, ears, and mouth. They also create skin, muscle problems on spreading there, and Elephantiasis or gout on reaching the legs. When they reach to fatty tissue they generate endocrinal disorders. When they spread in every part of body, they increase the temperature of body. So they create all diseases created by them. In this way All vitiated *doṣas* thus produce early manifestations of disease, before transforming to later stages of disease and there are the in previous stage of treatment which are done in the first phase of *doṣas* vitiation. This further stage of disease is the fourth *kriyākāla*.

अत ऊर्ध्वं व्याधेदर्शनं वक्ष्यामः - शोफाबुद्गग्रन्थिविद्रधिविसर्पप्रभृतीनां प्रव्यक्तलक्षणता ज्वरातिसारप्रभृतीनां प्रव्यक्तलक्षणता ज्वरातिसारप्रभृतीनाञ्च । तत्र पञ्चमः क्रियाकालः ॥३४ ॥

*Ata ūrdhvaṁ vyādhedarśanaṁ vakṣyamaḥ -*

*śofārbudgranthividradhivisarpaprabhrutinām pravvyaktalakṣaṇatā jvarātisāraprabhrutinā pravvyaktalakṣaṇata jvarātisāraprabhrutinānca. tatra pañcamah kriyākālah*

*(Suśruta Saṁhitā, Sūtra sthāna, chapter 21, v34)*

When symptoms of disease like cysts, vitiated *doṣas*, cellulites, fever are visible and aggravated, the stage called fifth *kriyākāla*.

अत ऊर्ध्वमेतेषामवदीर्णानां व्रणमापन्नानां षष्ठः क्रियाकालः ज्वरातिसारप्रभृतीनाञ्च दीर्घकालानुबन्धः ।

तत्राप्रतिक्रियमाणेऽसाध्यतामुपयान्ति ॥३५ ॥

*Ata ūrdhvameteṣāmavadirṇānām vraṇamaṇnānām ṣaṣṭhaḥ kriyākālah*

*jvarātisāraprabhrutinānca dirghakālānubandhah. tatrāpratikriyamāṇeśādhyatāmupayānti*

*(Suśruta Saṁhitā, Sūtrasthāna, 21.35)*

When the above given diseases like fever, come to their chronic stages, they remain in the body for extended periods of time. This state is called *Bhedāvasthā* or sixth *kriyākāla*. If the treatment has not been done at this stage, disease becomes incurable.

## 2.6.2 Seasonal changes in *Doṣabalas* of *Vāta*, *Pitta* and *Kapha*

*Caraka* and *Vāgbhatta*, author of *Aṣṭāṅga Saṅgraha*, only describe two stages of *Doṣa Vruddhi* (pathological increase of *Doṣa*'s). They name them *Sancaya* (accumulation) and

*Prakopa* (aggravation). *Vāgbhatta*, describes a 3rd stage that he calls *Śamana* or *Praśamana*, a stage of spontaneous recovery (pacification) of *Doṣas*, and remission from disease. They both explain these 3 stages of *Doṣa* vitiation in relation to seasonal changes.

इह तु वर्षा शरद्हेमन्तवसन्तग्रीष्मप्रावृषः षड्रह्तवो भवन्ति दोषोपचयप्रकोपोपशमनिमित्तम् । ते तु भाद्रपदाद्येन  
द्विमासिकेन व्याख्याताः तद्यथाभाद्रपदाश्चयुजौ वर्षाः कार्तिकमार्गशीर्षौ शरत् पौषमाघौ फाल्गुनौ वसन्तः वैशाख  
जेष्ठौ ग्रीष्मः प्रावृडिति ॥१० ॥

*Iha tu varṣāśaradahemantavasantagriṣmapravriṣah ṣaḍṛitavo bhavanti  
doṣopacayaprakopopraśamanimittam. Te tu bhādrapadādyena dvimāsikena vyākhyātāh  
tadyathābhādrapadāścayujau varṣāhkārtikamārgaśirṣau śarat pauṣamāghau fālgunau  
vasantah vaiśākh jyeṣṭhau griṣmah prāvriditi.*

(*Suśruta Saṁhitā, Sūtrasthāna, 6.10*)

Each year contains six *ṛitus*: *Varṣā*, *Śarada*, *Hemanta*, *Vasanta*, *Griṣma*, and *Pravriṣa* each lasting two months. For example, *Varṣā* starts in *Bhādrapada* and lasts to *Aśvin*, two months *Kārtika* and *Mārgaśirṣa* for *Śarada*, two months *Pauṣa* and *Māgha* for *Hemanta*, *Phalguna* and *Caitra* for *Vasanta*, *Vaiśakha* and *Jyeṣṭha* for *Griṣma* and *Āṣāḍha* and *Śrāvaṇa* for *Pravriṣa*. In these seasons, *Sancaya*, *Prakopopa* and *Praśaman* take place simultaneously for each *doṣa*.

तत्रवर्षास्वोषध यस्तीण्योऽल्पवीर्या आपश्चपप्रसन्नाः क्षितिमलप्रायः ।

ता उपयुज्यमाना नभसि मेघावतते जलप्रक्लिन्नायां ॥

भूमौक्लिन्नदेहानांशीतवातविष्टम्भिन्ताग्नीनां विदह्यन्ते विदाहात् पित्तसञ्चयमापादयन्ति स सञ्चय शरदि प्रविरलमेघे

वियत्युपशुष्यति पङ्केऽर्ककिरणप्रविलावितः पैत्तिकान् व्याधिञ्जनयति ॥११ ॥

*Tatravarṣasvoṣdh yastīṇyolpavīryā āpascapaprasannāh kstimalaprāyah  
Tā upayujyamānā nabhasi meghāvātate jalapraklinnāyām  
Bhūmauklinnadehānaṁśītavātaviṣṭam̐bhīntagnīnaṁ vidāhāt  
Pittasañcayamāpādayanti sa sañcaya śaradi praviralameghe viyatypaśuṣyati  
pañkerkakiraṇapraṇvilāvitaḥ paittikān vyādhiñjanayati*

(*Suśruta Saṁhitā, Sūtrasthāna, 6.11, p21*)

At the start of the rainy season, fresh herbs are new and contain less vitality. While water fall and absorb the pollution of earth, get contaminated. Due to clouds, the water of earth doesn't get dry, convert in to mud. This include low powered herb accumulate *Pitta*, which aggravates when rain stops and heat of sun increases

ता एवौषधयः कालपरिणामात् परिणतवीर्याबलवत्यो हेमन्ते भवन्त्यापश्च प्रसन्नाः स्निग्धा अत्यर्थं गुर्व्यश्चं ता  
उपयुज्यमाना मन्दकिरणत्वाद्भासोः सतुषारपवनोपस्तंभितदेहानामदेहिनामविदग्धाः स्नेहाच्चैत्यागदौरवादुपलेपाच्च  
श्लेष्मिकान् व्याधिञ्जनयति ॥१२॥

*Ta evausadhyah kalaparinamat parinataviryabalvattyo hemante bhavantyapasca prasannah  
snigdha atyrtham gurvyascam ta upayujyamana mandakirananadvabhasoh  
satusarapavanopastambhitadehanamdehinamvidagdhah snehachaityagdauravadupalepacca  
slesmikan vyadhinjanayati*

(*Suṣruta Saṁhitā, Sūtra sthāna*, chapter 6, v12, p21)

The same herbs become full of *Semen* and healthy. Water becomes clean, oleaginous and heavy. Because of weak sunshine, the air becomes cool and icy. Due to this coolness, herbs increase *Kapha* in all living beings.

ता एवौषधयो निदाधे निस्सारा रूक्षा अतिमात्रं लघ्वयो भवन्त्यापश्च उपयुज्यमानाः सूर्यप्रतापोपशोषित देहानां  
देहिनां रौक्ष्याल्लघुत्वाद्द्वैशद्याच्च वायोः सञ्चयमापादयन्ति । एवमेष दोषाणां सञ्चयप्रकोपहेतुरुक्तः ॥१३॥

*Ta evausadhyo nidadhe nissara ruksa atimatram laghvayo bhavantyapasca upyujyamanah  
surypratapopasosita dehanam dehinam rauksyallaghutvadvaisadyacca vayoh  
sancayamapadayanti. evamesa dosanam sancayaprakopaheturuktah.*

(*Suṣruta Saṁhitā, Sūtra sthāna*, chapter 6, v13, p21)

Concerning *doṣa sancaya* and *prakopa* : When dry and light, herbs become less effective. Due to the sun's heat, herbs accumulate *vāta* in already dried body of living beings. This accumulated *vāta* get aggravated by the first rains in the moansoon.

तत्र पैत्तिकानां व्याधिनामुपशमो हेमन्ते श्लैष्मिकाणां निदाधे वातिकानां शरदि स्वभावत एव । त एते  
सञ्चयप्रकोपोपशमा व्याख्याताः ॥१५॥

*Tatra paittikanam vydhinamupasamo hemante slaismikanam nidadhe vatikanam saradisvabhvata eva.*

*Ta ete sancayaprakopopasama vyakhyatah.*

*(Suṣruta Saṁhitā, Sūtrasthāna, 6.15, p21)*

These diseases mitigate naturally *Pitta* diseases in *Hemanta ṛitu*, *Kaphaj* diseases in *Griṣma* rather and *Vātaja* diseases in *Śarada ṛitu*. In this way the definition of accumulation, aggravation and reduction is now complete.

### ***Vāta Doṣa:***

*Sancaya* – takes place in *Griṣma ṛitu* (Summer season)

*Prakopa* – takes place in *Varṣā ṛitu* (Monsoon, rainy season)

*Praśamana* – takes place in *Śarad ṛitu* (Autumn season)

### ***Pitta Doṣa :***

*Sancaya* – takes place in *Varṣā ṛitu* (Monsoon, rainy season)

*Prakopa* – takes place in *Śarad ṛitu* (Autumn season)

*Praśamana* – takes place in *Hemanta ṛitu* (early winter)

### ***Kapha Doṣa:***

*Sancaya* – takes place in *Śiṣira ṛitu* (Late winter)

*Prakopa* – takes place in *Vasanta ṛitu* (Spring season or early summer)

*Praśamana* – takes place in *Griṣma ṛitu* (Summer season)

## **2.6.3 Quality of food**

ब्रह्मचारीमिताहारीत्यागीयोग परायण ।

अब्दादूर्ध्वं भवेत् सिद्धोनाऽकार्याविचारणा ॥

*Brhmacārī mitāhārī tyāgī yoga parāyaṇa*

*Abdādūrdhvaṁ bhavet siddho nātra kāryā vicaraṇā*

*Hatha Yoga Pradīpikā 1.57*

Eating smooth (unctuous) sweet food taken to please Lord *Shiva*, with one-fourth of the stomach left empty is *Mitāhāra* or *Yuktāhāra* (appropriate food)

*Caraka Saṁhitā* provides the following guidance on diet and food consumption. (*Caraka*, 1998) *Yoga* practitioners should be *Mitāhāri*, (*Swāmi Svātmārāma*, 1980), moderate in food

intake. Only then can they be one-pointed on the spiritual path. Enabling the mind not to lose control of feelings is very important. To do so, yoga practitioners should start by regulating diet (*āhāra*). Yoga *śāstras* list foods best for the yoga way of life. The importance of *sātvik āhāra* is especially stressed. *Bhagavad Gitā* defines *Sātvika āhāra*. (*Bhagavad Gitā*, 2013)

आयुःसत्त्वबलारोग्यंसुखप्रीतिविवर्धनम् ।

रस्याःस्निग्धाःस्थिराः हृद्याः आहारः सात्त्विकःप्रियः ॥

*Āyuh satva balārogyam sukha prīti vivardhanam*

*Rasyāḥ Snigdhaḥ sthirāḥ hridyāḥ āhāraḥ sātvikaḥ priyaḥ*

*Bhagavad Gitā, 17.8*

*Rasya, snigdha, sthira and hridya* are qualities of *sātvika āhāra*, which yoga practitioners need to control feelings. He who eats *sātvika āhāra* has *sātvika vichāra* i.e. positive thinking.

*Yoga* practitioners must have strong physiques. For them to progress on the spiritual path, their food should be easily digestible, so that their digestive systems work less.

रसनमित्तमेवस्थौल्यंकार्श्यं तत्रश्लेष्मालाहारसेविनोऽध्यश्नशीलस्यामिनोदिवास्वप्नस्तस्यचाम एवान्नरसोमधुतर  
शरीरनुक्रामन्तस्नेहान्मेदांजनयन्ति

*Rasnimittamevasthauilyamkāśyāyatratraśleṣmālāhārasevino dhyāśūnaśīlasyāminodivāsvapna  
stasyacāma evānnarasomadhutara śarīranukrāmanntisnehānmedānjanayanti*

*(Suśruta Saṁhitā, Sūtrasthāna, 15.37)*

A human being becomes fat or thin according to the *āhāra rasa* (food and drink) ingested. One who eats too much *Kaphaja āhāra*, who eats more immediately after taking meals, sleeps in the day time, leads a lazy life, increases *meda dhātu*, and becomes fat.

#### 2.6.4 Concept of *Pathya-apathya* in *Āyurveda*

पथ्यंपथोऽनपेतं यद्यच्चोत्कंमनसःप्रियम् ।

यच्चाप्रियमपथ्यं च नियतं तन्न लक्षयेत् ।

*pathyam pathonapetaṁ yadyatcotkaṁmanasḥ priyam.*

*yaccāpriyamapathyam ca niyatantanna lakṣhayet*

(*Carak Samhitā, Sūtrasthāna, 25.45*)

*Ācārya Caraka* says that *Pathya* means wholesome foods, which do no harm to the body, and do not adversely affect body or mind, and are to one's liking; those that adversely affect body or mind are, *Apathya*, unwholesome. Again *Caraka* states:

मात्राकालक्रियाभूमिदेहदोषगुणान्तरम् ।  
 प्राप्यतत्तद्धिदृश्यन्तेते भावास्तथातथा ॥  
 तस्मात् स्वभावोनिर्दिष्टस्तथामात्रादिराश्रयः ।  
 तदपेक्ष्योभयंकर्मप्रयोज्यंसिद्धिमिच्छता ॥

*Mātrākālakriyābhūmidehdoṣaguṇāntaram*  
*prāpyatattadhidruśyante tete bhāvāstathā tathā*  
*tasmāt svabhāvonirdiṣṭastathā mātrādirāśrayaḥ*  
*tadapekshyobhayaṁkarma prayojyamsiddhimichchitā*

(*Carak Samhitā, Sūtrasthāna, 25.46-47*)

Classification as *Pathya* or *Apathya* cannot be accepted in absolute terms as universal rules. The *dravyas* and regimen change their qualities depending on *Mātrā* (dosage), *Kāla* (time/season), *Kriyā* (method of preparation), *Bhūmi* (habitat), *Deha* (different stages depending on age, gender etc.), *Doṣas* and combination with other useful or potentially harmful *dravyas*. So, the natural qualities of *dravyas* and regimen, as well as *mātrā* etc. must be understood before administering the required therapy, in order to achieve desired effects.

Commenting on the above *Chakrapāṇi* defines '*pathya*' as 'that which is not unwholesome to *pathin* (channels of the body). Here '*patha*' includes *doṣas* and *dhātus*, meaning the entire body. Thus *pathya* is effectively what is not harmful to the body, or '*pathin*' may be the path leading to the objectives such as preservation of health and alleviation of disorder, thus '*pathya*' may be taken as that not diverted from this path.

In addition, *pathya* should be favourable to the mind; here, ‘*priya*’ means ‘*hita*’ (wholesome). In some cases like taking bitter dugs for fever, there may be apparent unpleasantness, but this is also wholesome as no psychic disorder is produced in consequence; it is essentially ‘*hita*’. In a psychosomatic sense, *pathya* may thus be defined as what is harmless to mind and body.

*Cakrapāṇi* opines that unpleasantness related to wholesomeness is not fixed, but varies with dose etc. For instance, pleasant sweetness may in some circumstances become unpleasant; likewise, ghee is wholesome, but may prove unpleasant or unwholesome if taken in large quantity, spring, processed with antagonistic drugs, in marshy land, obesity, or *Kapha pracopa*. In contrast, poison is fatal, but may be a *Rasāyana* if taken in the right dose.

आहारसंभवं वस्तु रोगाहारासंभवाः ।

हिताहितविशेषाच्च विशेषः सुखदुःखयोः ॥

*Āhārasmbhavam vasturogāhārāsambhavāḥ*

*hitāhitaviśeṣāchcha vśeṣaḥ sukha duḥkhayoḥ*

(*Carak Samhitā, Sūtrasthāna, 28.45*)

The body as well as diseases is caused by food. Wholesome and unwholesome foods are responsible for happiness and misery.

### 2.6.5 *Madhumeha samprāpti* – Pathogenesis of *Madhumeha*

गुरुस्निग्धाम्ललवणा न्यतिमात्रं समश्नताम् नवमन्नं च पानं च निद्रामास्यासुखानि च ।  
व्यक्तव्यायामचिन्तानां संशोधनमकुर्वताम् । श्लेष्णा पित्तम् च मेदश्च मांसं चातिप्रवर्धते ॥  
तैरावृतगतिर्वायुरोज आदाय गच्छति । यदा वस्तिं तदा कृच्छ्रो मधुमेहः प्रवर्तते ॥  
स मारुतस्य पित्तस्य कफस्य च मुहुर्महुः । दर्शयत्याकृतिं गत्वा क्षयमाप्यायते पुनः ॥  
*Gurusnigdhamlavanā nyatimātram samaśnatām navamannam ca pānam ca*

*nidrāmāsyāsukhāni ca*

*vyaktavyāyāmacintānām samśodhanamakurvātām. śleşnā pittam ca medasca māmsam*  
*cātipravardhate.*

*taerāvritagatirvāyuroja ādāya gachati. yadā vastim tadākrucho madhmehah pravartate.*

*Sa mārutasya pittasya kaphasya ca muhurmuhu. darśaytyākritimgatvā ksayamāpyāyate*  
*punah.*

*(Carak Saṁhitā, Sūtra sthāna, chapter 17 v78-80)*

Those who eat heavy, unctuous, oily, or salty food in excess, newly harvested grains, newly prepared wine, who sleep, sit, or rest for long times, who don't take any exercise, who are careless their routine, who don't regularly perform internal cleansing: their *Shleshma Kapha*, *Pitta*, *Meda* and *Māmsa* increase excessively; for that reasons, they don't release *Vāyu*. The aggravated *Vāyu* enters their thorax, colon and kidneys together with *Ojas*. At that point, *Madhumeha* manifests the vitiated, *Vāta*, *Pitta*, and *Kapha*. This condition may come and go repeatedly.

The involvements of *Dūṣya* are in chronological order in the form of *kaphaja*, *pittaja*, *vātaja*, *prameha*, like –

*Kaphaja Prameha* – *Meda*, *Māmsa*, *Kleda*, *Rasa*

*Pittaja Prameha* – Along with above *rakta dhātu* in addition is deranged.

*Vātaja Prameha* – *Vasā*, *Majjā*, *Lasikā* and *Oja* along with *Meda*, *Mamsa* and *Kleda* are vitiated.

*Srotas* – *Mutravaha- Srotas*,

*Dūṣti Lakshana* – *Prabhutā* and *Avil Mutratā*.

*Udak-vaha Srota – Pipāsa, Jivhā, Tālu, Kantha Śoṣa*

*Medovaha- Srota – Deha Cikkannatā, dantādina, malādhyatvan, snigdha, picchiala, gurūgatrātā, svedādhikya.*

*Māmsavaha Srota – Puti Māmsa Pidikā, Kāya Malam*

*Srota Dūṣṭi Type – Atipravriti, Vimārga Gaman Sang*

*Suṣruta* describes the importance of removal of accumulated *doṣas*

तत्र वर्षहिमन्तग्रीष्मेषु सञ्चितानां दोषाणां शरद्वसंतप्रावृत्सु च प्रकुपितानामं निर्हरणं कर्तव्यं ॥१४ ॥

*Tatra varsa hemantagrimesu sancitanam dosanam saradvasantapravrutsu ca prakupitanam nirharanam kartavyam.*

(*Suṣruta Saṁhitā, Sūtra sthāna, chapter 6, v14, p21*)

Treatment of accumulated *doṣa* should be done in its preliminary stage (*Cayāvsthā*)

### 2.6.6 Dietary Management according to *Caraka*

दन्तीङ्घ्रिदीतैलयुतं प्रमेही तथाऽतसीसर्षपतैलयुक्तम् ॥२० ॥

सषष्टिकं स्यतृणधान्यमन्नंयवप्रधानस्तु भवेत् प्रमेही ।

यवस्यभक्ष्यान्विधानस्थाऽद्यात्कफप्रमेही मधुसम्प्रयुक्तान् ॥२१ ॥

*Dantīṅghṛīdītailayuktam pramehī tathātasīsarsapatailayuktam.*

*Saṣaṣṭikam syatrunadhānyamnamnyavapradhānastu bhavetpramehī.*

*Yavasyabhakshyanvidhānsthādyatkaphapramehī madhusamprayuktān.*

(*Carak Saṁhitā, Cikitsasthāna, Ch.6, v20-21*)

*Danti, Hingot, Atasi* are good to eat. Broth and vegetables can be eaten while fried in oil of mustard. Rice which is old harvested can be eaten. *Sāthi* rice and grain like *Savana, Kodo, Tanguna* should be eaten. *Prameha* patients should always eat Barley as a main grain. It should be eaten with Honey.

*Āyurveda* considers diet to be one of the primary pillars of health. Food is an imperative internal factor that maintains health as well as bringing disease. Correct diet imparts physical

strength and diminishes the morbidity of the *Doṣas*, thereby maintaining equilibrium of the bodily tissues. Eating a proper diet is a key step to preventing and controlling *Apathyanimittaja* (acquired) *Prameha*. The roles of *Aṣṭa Āhāra Vidhiviśeṣa* (*Carak Saṁhitā, Vimanasthāna, 2.4*) and *Āyatana Āhāra Vidhividhāna* (dietetic regulations) (*Carak Saṁhitā, Sūtrasthāna, 28*) take first place among the many means to prevent *Prameha* pathogenesis.

Patients' with *Prameha* must eat a diet pacifying the disease. The best foods to consume are those that are neither sweet, nor too oily, and which have the ability to mitigate *Kapha doṣa* and *Meda dhātu*, and are nourishing. Sweet tasting food and drink, like dairy products, sugar cane (*Ikṣu*) and its products, or foods with *gurū* (heavy) or *śīta* (cooling) qualities (like ice-cream), *madya* (alcoholic beverages and wines), should be avoided as they further aggravate *Kapha* and *Meda*.

### **2.6.7 Role of Agni in Madhumeha- Digestion and metabolism**

To understand how wholesome food is assimilated in the body, the processes of digestion and metabolism need to be properly understood. *Prāṇa vāyu*, with its power of attraction, draws the (ingested) food into and down the *koṣṭha* (alimentary tract). The food gets softened by lubricant substances (*Bodhaka & Kledaka Kapha*) and emulsified by these fluids (saliva and stomach secretions). Next, the *Jataragni* (acid and associated digestive enzymes) located in the *udara* (stomach), gets stimulated by *Samāna Vāyu*. The *Agni*, stimulated by *vāta*, helps digestion of food of appropriate quality and quantity, taken at the right time, and sustains life and promotes health and longevity. *Agni* as heat cooks food; similarly, *Jataragni* digests it; it is the essential factor in digestion, which then produces *rasa* (chyle) and *mala* (waste).

**Avasthā pāka:** - In Ayurveda food is considered to have six *rasas* (Tastes): *Madhura* (sweet), *Lavaṇa* (salt), *Tikta* (bitter), *Amla* (sour), *Kaṭu* (spicey-hot), *Kaṣaya* (astringent). Sweetness (*madhurbhāva*) manifests during the first stage of digestion (by enzymes amylase & maltase),

resulting in the stimulation of a thin and frothy quality of *kapha*. (*Carak Samhitā, Sūtra sthāna*, Ch.8, v3, 4)

During the first stage of digestion, food remains in semi-digested form (*vidagdha*) resulting in sourness. Moving downwards from the *āmāśaya* (stomach), this (semi-digested sour) chyle stimulates production of a shiny brown liquid called *pitta* (bile). *Pitta*, sour in taste itself, is particularly stimulated by the acidic food.

*Cakrapāṇi*, in his commentary on *Caraka Samhitā* observes that, later in the digestive tract, the *rasa* (taste) of the chyle changes to *tikta* (alkaline), and that *Kapha* begins to be released from the food. This corresponds to the digestion of more fats (*Kapha*) following the release of pancreatic alkaline secretions and high pH preferring enzymes. When the chyle finally reaches *pakvāśaya* (colon), it gets further digested and dehydrated by the *Agni* (enzymes) taking a bolus form resulting in pungent taste. This stimulates *apāna vāyu*.

***Bhutāgni pāka***:- The five *agnis* (groups of enzymes), each named for a *mahābhuta*, viz. *Parthivāgni*, *Apyāgni*, *Tejasāgni*, *Vayavāgni* and *Ākāśāgni*, transform food ingredients into the five categories (*pāka*) with *Pārthiva*, *Apya*, *Tejasa*, *Vāyaviya* and *Ākāśiya* qualities (*guṇas*) respectively. Elements in body tissues are thus nourished by the *Mahābhutas* in food.

***Dhātuvāgni pāka***:- By virtue of another seven categories of *agni* (enzymes), the *Sapta Dhātus* (seven tissue types), *Rasa*, *Rakta*, *Māmsa*, *Meda*, *Asthi*, *Majjā*, and *Śukra* are nourished. As sustainers of the body, (*Dhātu* means that which sustains), they undergo metabolic transformation in two different ways, viz. *Kittapāka* (transformation of waste products) and *prasāda pāka* (transformation of nourishing materials).

### 2.6.8. Process of metabolic transformation into the seven tissue types:

The nutrient fraction of *rasa* (plasma) provides nourishment to *rakta* (blood), that of *rakta* (blood) to *māmsa* (muscle tissue), that of *māmsa* to *meda* (fat), that of *medas* to *asthi* (bone), that of *asthi* to *majjā* (bone marrow) and the nutrient fraction of *majjā* nourishes *śukra* (semen). The foetus (*garbha*) is a product of nutrient fraction of both aspects of *śukra*, eggs and sperm in the semen.

*Ayurveda* names three laws of *dhātu* formation (nourishment):-

- a) *Kśira-Dadhi-Nyāya* (the Law of Transformation)
- b) *Kedari-Kulya-Nyāya* ( the Law of Transmission)
- c) *Khale-Kapota-Nyāya* (the Law of Selectivity).

(*Carak Saṁhitā, Sūtra sthāna, Ch. 20 v 8*)

*Caraka Saṁhitā* states, “*Doṣa dhātu mala mūlam hi śariram*”, vitiated *dhātus* are the causes of bodily illness. Since food plays a major role in nourishing *doṣa*, *dhātu* and *malas*, ingesting *pathya āhāra* (nourishing food) maintains the body in both health and disease.

#### ***Dhātu utpatti***

According to *Āchārya Carak*, the *dhātu nirmīti* is from *Rasa dhātu*, which is formed from *āhāra rasa*. *Ranjaka pitta*, which is in *drava* (liquid) form acts on *rasa dhātu*, formed from *āhār-rasa* to form *rakta dhātu*, with its *uṣṇa-vīrya* nature. *Rakta*, in combination with *vāyu*, *jala* and *teja*, *dhātvaṅni* transforms into *māmsa*. *Māmsa agni* in combination with *snigdha jala* leads to formation of *meda dhātu*. From *snigdha* and *drava guṇas* absorbed by *Agni*, *prithvi*, *vāyu* forms *asthi dhātu*. The *vāyu mahabhuta* then forms hollowness in the *asthi*, which is filled by *sneha of meda dhātu*, called *majjā*. It leaks out through the pores of *asthi* and forms *śukra*, the essence of all *dhātus*. Except for *asthi dhātu*, every *dhātu* contains some amount of *drava* or *snigdha guṇa*.

In this way, just as plays a major role in creating disease, *pathya āhāra* (wholesome food) has the capacity to reverse curable diseases. While *Apathya* food increase, levels of disease, *pathya āhāra* synergized with action of *dravyas* can be used in treatment of disease. *Pathya* thus plays an important role in therapy.

### 2.6.9 Importance of Herbs and their Preparation

अथात्र स्वरसः कल्कः क्वाथश्च हिमफाण्टकौ ।

ज्ञेयाः कवायाः पञ्चैते लघवः स्युर्यथोत्तरम् ॥ १ स्वरसादयः ।

*Athātra swarasaḥ kalkaḥ kvāthaśva himafāntakau*

*jñeyāḥ kavayāḥ pancaite laghavaḥ syuryathottaram- Swarasādaya*

There are 5 ways to prepare any fresh herb: *Swarasa*, *Kalka*, *Kaṣaya*, *Hima* and *Fānta*, in descending quality of the herb's therapeutic action. *Swarasa*, fresh juice, is best.

(*Yoga Ratnākara Prameha Cikitsā Prakraṇam Swarasādaya p93, v1*)

अहतातक्षणात्कृष्टाद्द्रव्यात्क्षुष्णात्समुद्भवेत् ।

वस्त्रनिष्पीडितो यः स्याद्रसः स्वरस उच्यते ॥ १ स्वरस

*Ahatātakṣaṇātkruṣṭāddravyātkṣuṣṇātsamungavet*

*vastraniṣpīditoyaḥsyādrasaḥ swarasa ucyate- Swarasa*

(*Yoga Ratnākara Prameha Cikitsā Prakraṇam Swarasakalpanā, p93, v1*)

Preparation of fresh *Rasāhāra* from green herbs- Blend (original: grind into a paste), clean insect-free herbs with water and strain.

कुडवं चूर्णितं द्रव्यं क्षिप्तं च द्विगुणे जले ।

अहोरात्र स्थितं तस्माद्भवेद्वा रस उत्तमः ॥

*Kūḍavaṁ cūrṇitaṁ dravyaṁ kṣiptaṁ ca dvigūṇe jale*

*ahorātraṁ sthitaṁ tasmāṅgavedvā rasa uttamaḥ*

The *Kalka* (dried powder) process of preparing fresh *Rasāhāra* from dried powder: soak the powder in double the amount of water for 24 hours, then strain.

(*Yoga Ratnākara Prameha Cikitsā Prakraṇam Kalka, p93, v2*)

आदाय शुष्कं द्रव्यं वा स्वरमानामसम्भवे ।

जलेऽष्टगुणिते साध्यं पादशिष्टं च गृह्यते ॥ ३ ॥

*Ādāya śuṣkaṁ dravyaṁ vā svaramānāsambhave*

*Jale aṣṭgūṇite sādhyam pādaśiṣṭam ca gṛhyate*

When fresh herbs are not available, *Kaṣāya* or *Kvātha* can be used. Add the dried herb to 8 times their volume of water; boil until the volume is reduced to one quarter, then strain.

*(Yoga Ratnākara Prameha Cikitsā Prakraṇam Kvātha, p93, v3)*

क्षुण्णद्रव्यपलं सम्यक्शब्दहिर्निरपलैः प्लुतं ।

निःशोषितं हिमः स स्यात्तथा शीतकषायकः ॥

तन्मानं फांटवज्ज्ञेयं सर्वत्रैवैष निश्चयः ॥

*Kṣhuṇṇadravyapalaṁ samyakṣadbhīrnirapalaiḥ plutaṁ*

*Niḥśoṣitaṁ himaḥ sa syāttathā śītakaṣāyakaḥ*

*Tnmānaṁ phāṅtavajjñeyam sarvatraivaiṣa niścayaḥ*

When *Kaṣāya* is not possible, the dried powder of the herb can be soaked overnight and used in *Hima* form. (*Yoga Ratnākara Prameha Cikitsā Prakraṇam Hima, p95, v1*)

क्षुण्णद्रव्यपलं सम्यग्जलमुष्णं विक्षिपेत् ।

मृत्पात्रे कुडवोन्मानं ततस्तु स्त्रावयेत्पटात् ॥

*Kṣuṇṇadravyapalaṁ samyagjalamuṣṇaṁ vikṣipet*

*Mṛutpātre kuḍavonmānaṁ tatastu strāvayetpaṭāt*

If the dried powder is soaked in warm water, and then strained, the preparation is called *Fānt*.

*(Yoga Ratnākara Prameha Cikitsā Prakraṇam, Fānt, p93, v1)*

अमृताया रसः क्षौद्रयुक्तः सर्वप्रमेहजित् ।

हरिद्राचूर्णयुक्तो वा रसो धात्र्याः समाक्षिकः ॥ ६ ॥

*Amrutāyā rasaḥ kṣaudryuktaḥ sarvapramehajit*

*Haridrācūrṇayukto vā raso dhātryāḥ samākṣikaḥ*

*(Yoga Ratnākara Prameha Cikitsā Prakraṇam Svarasāh, p93, v6)*

Use of *Guḍuci* for *prameha*: *Guḍuci* is used with *Haridra* (turmeric), *Āmalaka*, and Honey to cure each type of *prameha*.

दार्ढ्यग्निमन्थौ त्रिफला सपाठा पाठा च मूर्वा च तथा श्वदंष्ट्रा ।

*Dārvyagnimanthau triphalā sapāthā pāthā ca mūrvā ca tathā śvadmṣṭrā*

*Carak Saṁhitā* suggests nine herbal combinations for treatment of *Kaphaja prameha*, with *Āmalaki* and *Guḍuci* included in all of them.

(*Carak Saṁhitā, Cikitsāsthāna, 6.30*)

पटोलनिम्बामलकामृतानां

*Paṭolanimbāmalakāmritānām*

*Carak Saṁhitā* suggests ten herbal combinations for treatment of *Pittaja prameha*. Again, *Āmalaki* and *Guḍuci* are included in them all.

(*Carak Saṁhitā, Sūtrasthāna, 30.45*)

Importance of *Vāsā*-

वार्ताकं कटुतिक्तोष्णं मधुरम् कफवातजित् ।

सक्षारमग्नितननंहृद्यंच्यमम्लपित्तलम्

*Vārtākam kaṭutiktoṣṇam madhuraṁ kapha vātajit*

*sakṣāramagnitananāmhṛdyamchyamlapittalam*

*Vāsā* is the best herb to stop vomiting, removes *kapha*, reduces *Rakta pitta*

(*Vāghbatta, 2010, Sūtrasthānam, 7, p81*)

Recommendation of *Āmalaki* juice for *Prameha*:

दावीं सुह्वाणां त्रिफलां समुक्तां कषायमुत्क्वाथ्य पिबेत् प्रमेही ।

क्षौद्रेण युक्तामथवा हरिद्रां पिबेद् रासेनामलकीफलानाम् ॥

*Dārvisuryhaṇām triphalām samuktaṁ kaṣāyamutkvāthya pibet prameha.*

*Kshaudreṇa yuktāmāthvā haridrām pibed rāsenāmalkiplānām.*

*Dāruhaldi, Devdaru, Āmalaki, Haritaki, Baheda, Nagarmotha* are the six herbs which should be taken in morning and evening in the form of *Kvātha* by pre-diabetes state; or fresh juice of

*Āmalaki*, should be taken with dried *Haridrā* powder and Honey. (*Carak Samhitā*, *Cikitsāsthāna*, 6.26)

### 2.6.10 *Āyurveda* Texts Germinated Food

सर्वे शरीर दोषा भवन्ति ग्राम्याहारादम्ल लवण कटुक क्षारशुष्कशाकमांस तिलपलल पिष्टान्न भोजिष्वां विरूढ  
शूकशमीधान्य विद्विसात्म्यरूक्षक्षाराभिष्यन्दि भोजिष्वां ॥

*Sarveśarira doṣā bhavanti grāmyāhāradamlam lavanam kaṭuka kshāraśuskaśākamāmsa  
tilapalala piṣṭānna bhojiśvām virudha śukaśamidhānya vidvisātmyarukṣakṣārābhisyanidi  
bhojiśvām*

Although defects in the body are caused by the following-

Intake of the germinated cereals and pulses, ingredients which are mutually contradictory, unwholesome and ununctuous saline and abhisyanidi (thous which obstructs the channels of circulations) (*Carak Samhitā*, 2005, *Cikitsāsthāna*, 1.3).

### 2.6.11 Yoga Managment of Disease

अविद्या अस्मिता राग द्वेष अभिनिवेशः क्लेशः

*Avidyā Asmitā Rāga Dveśa Abhiniveśāḥ Kleśaḥ*

*Patanjali Yoga Sūtras II.3*

The *Kleśas*, factors obstructing health and spiritual growth, are: *Avidyā*, misunderstanding the spiritual nature of the world in which we live; *Asmitā*, the transcendental sense of being involved in time; *Rāga*, attachment caused by love and affection (as for the divine); *Dveśa*, self-centeredness of the little ego; and *Abhiniveśāḥ*, powerful states of emotion. These five levels of problem in successive layers of the pancakosas lead to physical disease.

समाधि भावनार्थः क्लेश तनूकरणार्थश्च

*Samādhi bhāvanārthaḥ Kleśa tanūkaraṇārthaśca*

*Patanjali Yoga Sūtras II.2*

Adopt yoga to dilute the (power of the) *Kleśas*

ध्यायतो विषयांपुसः सङ्गस्ते षूपजायते ।  
 सङ्गात्सञ्जायते कामः कामात्क्रोधोऽभिजायते ॥  
 क्रोधाद्भवतिसम्मोहः समोहात्स्मृतिविभ्रमः ।  
 स्मृतिभ्रंशाद् बुद्धिनाशो बुद्धिनाशात्प्रणश्यती ॥

*Dhyāyato viṣayānpusaḥ saṅgasteṣūpajayate*

*Sangātsanjayate kāmaḥ kāmātkrodhobhijāyate*

*Krodhātbhavati sammohaḥ samohātsmrutivibhramah*

*Smrutibhramṣatbhuddhināśo buddhināśātpraṅśyatī*

*Bhagavad Gitā (A Yoga Śāstra) II.62-63*

Repeated thinking about objects leads to attachment, attachment to desires, desires (strong likes and dislikes) to anger, (greed, lust, fear possessiveness, etc.) which in turn lead(s) to infatuation, lack of awareness, so that the power of discrimination finally gets lost.

शक्नोतिहैव यः सोढुं प्राक्शरीरविमोक्षणात् ।  
 कामक्रोधोद्भवमं वेगं स युक्तः स सुखी नरः ॥

*Śaknotihaiva yaḥ soḍhum prākśarīra vimokṣaṇāt*

*kāmkrodhodbhavam vegam sa yuktaḥ sa sukhī naraḥ*

*Bhagavad Gitā (A Yoga Śāstra) V.23*

He who is able to withstand, in this very life, before casting off this body, the rush of lust and anger, is accomplished. He is a happy man.

लये सम्बोधयेत् चित्तं विक्षिप्तं शमयेत् पुनः  
 सकषायं विजानीयात् समः प्राप्तं न चालयेत्

*Laye sambodhaye cittam vikṣiptam śamayt punaḥ*

*Sakaṣāyam vijānīyāt samaḥ prāptam na cālayet*

In the state of oblivion → inertia, awaken the mind; when agitated, pacify it; in between the mind. When the mind reaches the state of perfect equilibrium, do not disturb it.

*Gaudapadacārya, Māṇḍukya kārikā III.44*

## 2.7 CONCLUSIONS:

Through the study of literary research, it is found that in modern research of meal time emphasizes breakfast, but the time of breakfast is around 10 am. Whereas in ancient *Āyurveda* literature and yoga text, breakfast is not advised (*Yoga Ratnākara, 1998*).

In other hand *Āyurveda* texts say that snacking is completely prohibited (*Suṣruta Saṁhitā, 2005*).

Unlike cooked food, herbal juices are alkaline (*Saxenā OP, 2005*). Studies say that 80% alkaline food is needed to maintain normal blood ph and optimal health.

All herbal juices which are included in this study having hypoglycaemic effect. Many modern and ancient studies reveal that there are many herbs which are needed to ingress in daily routine to avoid the state of prameha. Despite of that yoga practices are essential to balance *manomaya Koṣa*. Various yoga practices are beneficial and advisable for stress management including CM.