



SELINUS UNIVERSITY
OF SCIENCES AND LITERATURE

NUTRITION AND DIETETICS
IN THE CONTEXT OF ANCIENT INDIAN
SCRIPTURES

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ABSTRACT

Background

Non-communicable diseases (NCDs) that are largely preventable (as per the World Health Organization - WHO) cause over 74 percent of worldwide deaths. NCDs are usually the result of unhealthy lifestyles or living conditions. The solution to overcome such lifestyle diseases has been provided thousands of years ago in ancient Indian scriptures, more specifically in 'Ayurveda' – a 5000-year-old Indian medical system.

Objective

Ayurveda says, *"When Diet Is Wrong, Medicine Is of No Use. When Diet Is Correct, Medicine Is of No Need"*. The objective of this research is to understand more about this saying and find solutions to modern-day health issues from this ancient wisdom.

Approach

Ancient Indian scriptures compiled by modern authors have been referred to in this research. A detailed description of the formation and function of the human body, the definition of ideal health, dietary guidelines to be followed as per Ayurveda, influence of food tastes on body and mind, food choices as per the climate, other practices to be followed for holistic wellbeing etc. have been elaborately presented in this dissertation.

Conclusion

Ancient Indian scriptures have all the answers to the modern-day health issues. As per Ayurveda, understanding the unique body type of an individual is of prime importance as health and longevity is all about maintaining the natural state of the body by choosing the right food according to one's - body type, physical activity, medical conditions and climate. Additionally, one's emotional health should be taken care of by the practice of meditation and behavioural changes to accomplish a sense of contentment. Consistent dietary and simple lifestyle changes are all it takes to achieve sustainable holistic health.

1. AN OVERVIEW OF ANCIENT INDIAN SCRIPTURES

Ancient Indian Scriptures are the treasure troves of knowledge. Vedas are the bedrock of *Sanatana dharma* – the way of life (also known as Hinduism or Hindu Dharma).

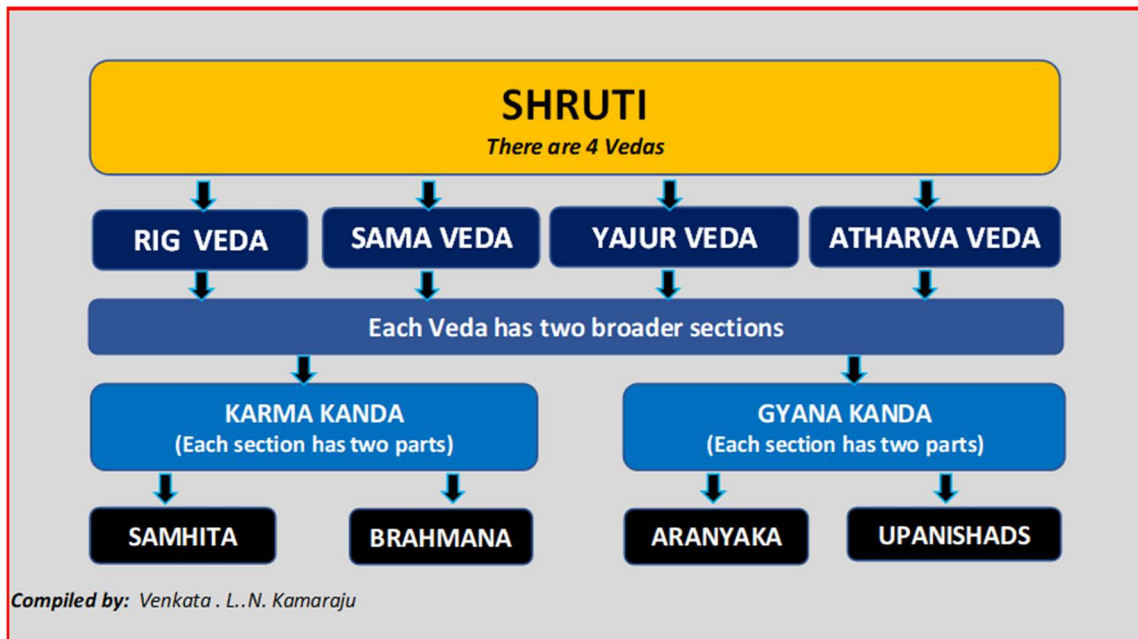
Entire ancient Indian scriptures are classified into two broad categories – Shruti and Smriti.

1.1 Shruti

Origin of the Vedas is unknown and they are considered to have been heard around 5000 BC by ancient sages in their deep penance and transmitted orally to their disciples until they were written down on palm leaves in Sanskrit language around 2500 BC - hence known as '*Shruti*' in Sanskrit, meaning "what is heard"; they are also called as '*apaurusheya*' i.e., "impersonal, authorless" or literally "not of a man".

Veda is a Sanskrit word meaning "knowledge" or "wisdom" that originated from its base word *vid*, meaning 'to know'.

Vedas stood the test of time as a highest religious authority of *Sanatana dharma* (also known as Hinduism) encompassing not only spiritual aspects of life but also many aspects related to science, social, legal, political etc., which are very much relevant even in today's modern world.



Vedas

There are 4 Vedas:

- **The Rigveda:** It is the oldest and the longest of the Vedas, in fact it is an oldest book known to humanity. It contains 1028 hymns (known as *Suktas*) in praise of various deities for happiness, health and wisdom.
- **The Samaveda:** It is the shortest of all the 4 Vedas. Sama means 'melody' and Sama-Veda is the 'Veda of Chants' as it is not supposed to be recited or read but sung. It is a collection of around 1900 verses which are lyrical *mantras* mostly from Rigveda for chanting in ceremonies.
- **The Yajurveda:** 'Yajur' stems from its root word 'yajus' meaning 'worship'. Based on Rigveda, Yajurveda exclusively describes the technicalities of ceremonies and sacred rituals and also prescribes the melodious chants of Samaveda which are to be chanted alongside the rituals. It is a Veda of rituals of 1975 verses chronicled in 40 chapters.

- **The Atharvaveda:** Initially Vedas were considered to be only 3 as mentioned above and later Atharvaveda has also been considered as the 4th Veda. Unlike other Vedas, this Veda is not much about sacred rituals; it contains hymns, chants and prayers involving solutions to daily problems of mankind such as healing of illness, longevity of life, removing maladies and anxieties etc., In simple terms it has the procedures for everyday life. It is a collection of 20 books with around 6000 mantras and 730 hymns.

An example of ancient Indian manuscripts documented on palm leaves.



Source: <https://www.webpages.uidaho.edu/~rfrey/116sanskrit.htm>

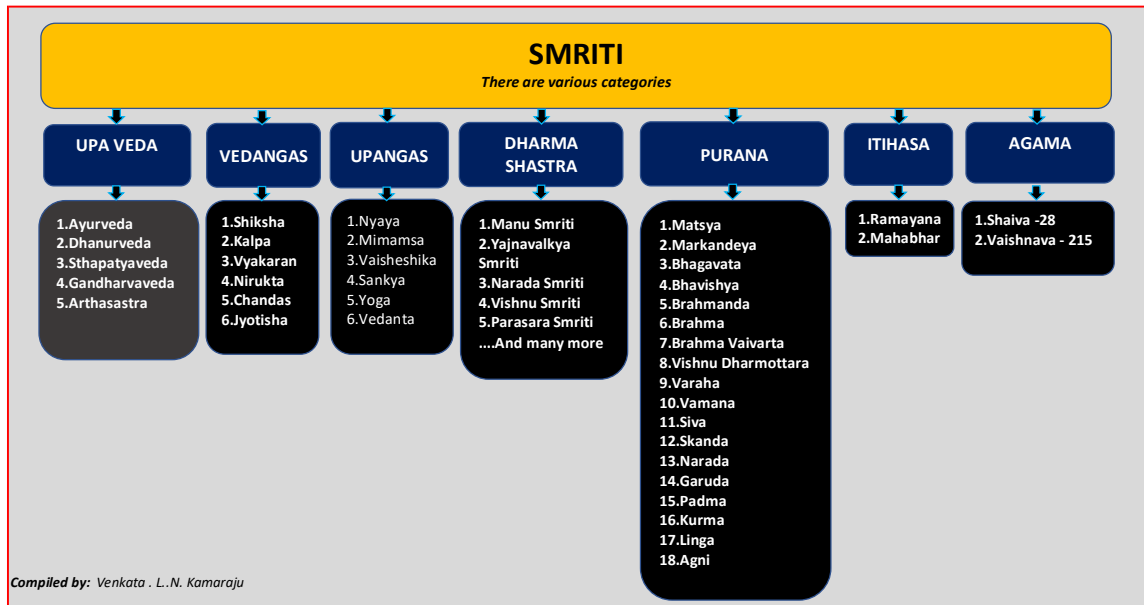
1.2 Smriti

In addition to Vedas which are termed as Shruti, the other ancient Indian scriptures are known as Smriti – meaning ‘which is remembered’ or ‘which is based on memory’.

Smriti texts were written/composed by sages thousands of years ago based on the ‘shruti’.

Scriptures that are categorized as Smriti are:

- Vedang,
- Upaveda,
- Upang,
- Dharma Shastra,
- Purana,
- Itihasa and
- Agama.



Upavedas

Subjects of certain technical works are designated as upavedas i.e., “applied knowledge” which are 5 in number as follows:

1. **Ayurveda (Medicine, Life-Knowledge)** – Originates from the Rigveda
2. **Dhanurveda (Archery, Warfare)** – Originates from the Yajurveda
3. **Sthapatyaveda (Architecture)** - Originates from the Yajurveda
4. **Gandharvaveda (Music and sacred dance)** – Originates from the Samaveda
5. **Arthasastra (Economics, pursuit of wealth)** – Originates from the Atharvaveda.

Vedangas

Veda is considered to be a virtual being (Purusha) and vedangas are considered as the 6 organs of a being as mentioned below:

1. **Shiksha (Phonetics/pronunciation)** – Nose.
2. **Kalpa (Ritual)** – Arms.
3. **Vyakarana (Grammar)** – Mouth.
4. **Nirukta (Etymology)** – Ears.
5. **Chandas (Meter)** – Feet.
6. **Jyotisha (Astronomy)** – Eyes.

Upangas/Darshanas

Upangas contain information on how to gain knowledge from the perspective of the Absolute. They are 6 in number as follows:

1. **Nyaya** – Nyaya is 'judgement', 'method' or 'rules'. It is a system of logic dealing with perception, inference, comparison and testimony. It is a building block for further knowledge containing fundamentals of knowledge emerging from the Absolute.
2. **Mimamsa** – Mimamsa is 'revered thought' or 'reflection'. It provides knowledge of interpreting Vedas with philosophical rationale for observing Vedic rituals through the study of actions – Purva Mimamsa (Prior study) and Uttara Mimamsa (Post study).

3. **Vaisheshika** – The root word of Vaisheshika is 'vishesha' meaning 'distinguishing feature'. It emphasises on metaphysics and naturalism and states that perception and inference are the two reliable means to knowledge.
4. **Sankya** – Sankya is 'enumeration' or 'number'. It perceives that the world is made up of two elements – eternal spirit (purusha) and matter (prakriti). It also deals with innate qualities in human beings and how the interaction between these qualities influences a person's character, likes, dislikes and behaviour.
5. **Yoga** – Yoga originates from its root work 'yuj' meaning union. The practice of yoga aims at uniting and mind, body and spirit and also to creating a union between individual consciousness and universal consciousness.
6. **Vedanta** – 'Veda' is knowledge and 'anta' means end in other words, the end goal of Vedic literature. It is the final section of Vedas with teachings from Upanishads (a section of Vedas that explain self-realization) emphasising that the supreme soul is within everyone and any apparent differences are just superficial.

Dharmasastra

They are texts of moral principles or codes of conduct of an individual to one's self, one's family and the society. There are around 100 such texts and the following are some of the main texts along with the approximate period in which they were written.

1. **Manu Smriti** (3rd century AD)
2. **Yajnavalkya Smriti** (4th century AD)
3. **Narada Smriti** (5th century AD)
4. **Vishnu Smriti** (7th century AD)
5. **Parasara Smriti** (3100 BCE)

Puranas

'Purana' meaning ancient or old were authored by the sage Vyasa between 300 to 1000 BCE. They are meant to provide knowledge to common people on complex philosophies and teachings of ancient Vedic texts through stories of gods, sages and kings of those times. There are 18 puranas as detailed below and 18 upa-puranas (sub-puranas).

- 1. Matsya**
- 2. Markandeya**
- 3. Bhagavatam**
- 4. Bhavishya**
- 5. Brahmanda**
- 6. Brahma**
- 7. Brahma Vaivarta**
- 8. Vishnu Dharmottara**
- 9. Varaha**
- 10. Vamana**
- 11. Siva**
- 12. Skanda**
- 13. Narada**
- 14. Garuda**
- 15. Padma**
- 16. Kurma**
- 17. Linga**
- 18. Agni**

Itihasas (Epics)

'Itihasa' meaning 'thus verily happened' i.e., history as it truly happened that too during the life time of the author.

- **Ramayana:** Ramayana was authored in Sanskrit language by sage Valmiki around 7000 BCE. Sri 'Rama' (a divine incarnation of Lord Vishnu) the prince of Ayodhya kingdom is the hero of the epic and 'aayana' is journey i.e. his life's journey – hence the name 'Ramayana'.

The narrative of the epic is interwoven with philosophy, ethics, virtues etc., alongside an interesting story with multiple characters in its 6 sections containing 534 chapters and 24000 verses.

- **Mahabharata:** 'Mahabharata' meaning 'the great epic of Bharata dynasty' was authored in Sanskrit language by the sage Vyasa around 3000 BCE. It is the longest epic ever written having 100000 verses in 18 chapters.

It exhaustively teaches one how to keep up with human and ethical values required for a prosperous living; the teachings are timeless and hence stated as - "*what is found in the epic may be elsewhere; what is not in this epic is nowhere else*".

'Bhagavad-Gita', the famous scripture on self-less action, philosophical issues etc. is an integral part of the Mahabharata.

Agama

Agama means 'handed down by tradition'. These are the authoritative manuals for worship, rituals, temple architectural requirements etc., in Sanatana dharma (also known as Hinduism).

There are many groups of Agamas and the following are the 3 main Agama groups along with number of Agamas in each of these:

- **Shaiva -28**
- **Vaishnava - 215**
- **Shakta - 77**

2. AYURVEDA – THE SCIENCE OF LIFE

Ayurveda is one of the Upavedas with its roots in Rig Veda and has been in existence since more than 5000 years. It is the “science of life or longevity” which is more holistic and comprehensive having much relevance even today as it did to people of ancient India.

Lord Dhanvantari the first divine incarnation who descended on earth has imparted the knowledge and wisdom of Ayurveda amongst humans – he is known as the father of Ayurveda.

2.1 Branches of Ayurveda

Being an oldest healing science, it is believed to be the basis of other medical sciences, covering various branches of medical science as follows:

- **Kaya Chikitsa**- Internal Medicine.
- **Shalya Chikitsa** – Surgery (organs below the clavicle)
- **Shalaky Chikitsa** – Surgery (organs above the clavicle)
- **Bala Chikitsa**- Paediatrics and Obstetrics.
- **Damstra Chikitsa**- Toxicology.
- **Graha Chikitsa**- Psychiatry.
- **Jara Chikitsa**- Rejuvenation therapy and Geriatrics.
- **Vajikarana Chikitsa**- Aphrodisiac for better progeny.

2.2 Classic Ayurvedic Texts

Charaka Samhita, Susruta Samhita, Ashtanga Sangraha are the three most important ancient texts that are considered as the corner stones of Ayurvedic Medicine.

These texts were originally written in Sanskrit language and later translated by many authors into various world languages. Some of these are in the form of poetry for easy remembrance.

Charaka Samhita

- **Written by:** Charaka, an ancient Physician at the University of Taxila – an ancient Indian University considered to be one of the earliest universities of the world. He is a disciple of Agnivesha who wrote Atreya Samhita.
- **Period:** approx.800 BCE
- **About the text:**

Elaborates theory and practice of medicine through its 120 chapters containing 8400 verses presented as a poetry.

The text focuses on “kaya chikitsa” – Internal Medicine emphasising on balancing “Agni” – digestive fire, responsible for metabolism.

It is considered to be the benchmark text book by Modern Ayurvedic Physicians for training and practice.

Sushruta Samhita

- **Written by:** Sushruta an ancient Surgeon and The Father of Surgery who taught Ayurvedic Medicine and surgery at the University of Banaras (also known as Kasi or Varanasi).
- **Period:** approx. 700BCE.

- **About the text:**

It is a surgical text, containing pioneering techniques of surgery including plastic surgery – surgery of torn intestines, prostate gland removal, cataract operations, brain surgery, skin grafting, earlobe & nose reconstruction etc.

It also contains Ayurvedic definition of health, haematology, marma points (energy points in the body for healing) etc. It is an encyclopaedia of medical learning.

Ashtanga Sangraha

- **Written by:** Acharya Vagbhata, a scientist and an Ayurvedic doctor.
- **Period:** approx. 5th Century AD.

- **About the text:**

It is a compilation of both Charaka Samhita and Susrutha Samhita i.e. it is an elaborate text of internal medicine and surgery covering all the 8 branches of ayurveda; hence the name Ashtanga Sangraha – Ashtanga means 8 branches and Sangraha means compilation. It has 7 divisions and 150 chapters written in the form of poetry.

Additionally, Vagbhata has also authored a concise, simple yet precise version of the Ashtanga Sangraha as 'Ashtanga Hridaya' containing 6 divisions and 120 chapters presented in prose.

Sushruta's statue at Royal Australian College of Surgeons, Australia.



Source: https://commons.wikimedia.org/wiki/File:A_statue_of_Sushruta_at_RACS,_Melbourne.jpg

3. MIND/BODY CONSTITUTION – AS PER AYURVEDA

Before knowing why nutrition is important for good health it is important to understand the basics of human anatomy and physiology from Ayurvedic perspective.

As we all know, the basic functional units of the human body are the “cells” which are the building blocks along with their sub-cellular structures – “organelle”.

But Ayurveda goes beyond the cells, to the very root origins of the cells/tissues which are the 5 natural elements known as “Pancha Bhutas” as below:

- Empty space (or “Ether”),
- Air,
- Fire,
- Water and
- Earth.

The origin of these 5 elements too have been clearly mentioned in Vedas. Yajurveda quotes about these 5 elements as follows:

Sanskrit Version

*Tasmadva etasmadatmana akash sambhuta |
Akasadvayuh | Vayoragnih | Agnerapah |
Adbhyah prithvi | Prithivya osadhayah |
Osadhibhyosnam |Annat purusah ||*

Meaning in English

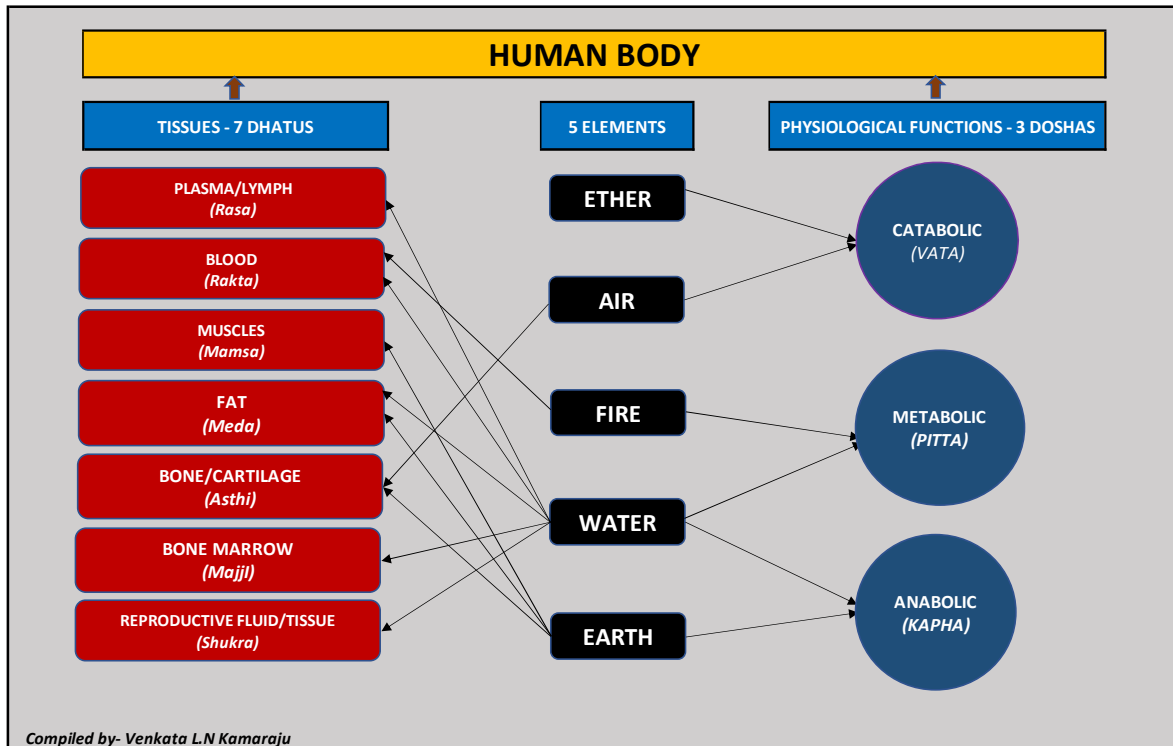
*From the Supreme Soul came space,
from space came wind, from wind fire,
from fire water, from water earth,
from earth plants, from plants food,
from food man came into being.*

So, to put things in perspective from the above verse, humans are made of 5 natural elements as the lineage of 5 elements from space to earth flows into us through the food we eat, thus underlining the importance of food on our health and wellbeing.

With reference to human body the following are the structures and functions that these 5 natural elements contribute to:

- **Empty Space/Ether (Akash)** - is the most subtle of all elements and is present in the hollow cavities of the body in the form of radio frequencies, light radiation, cosmic rays, etc.
- **Air (Vayu)** - responsible for all movement including expansion, contraction, vibration etc.,
- **Fire (Tejas)** - responsible for hunger, thirst, sleep, vision in the eyes skin complexion etc.,
- **Water (Aap)** – forms body fluids such as saliva, urine, blood, sweat etc.,
- **Earth (Prithvi)** - forms solid structures - teeth, nails, bones, muscles, skin etc.,

While a detailed description of human anatomy and physiology is provided in the next section, appended is a high-level overview of 5 elements governing human body.



4. HUMAN ANATOMY – AS PER AYURVEDA

Referring to what we have discussed in the previous section that the five natural elements (Ether, Air, Fire, Water & Earth) are the primary sources that form a human body, let us now discuss on how these five elements form part of specific body tissues.

- One or more of these five natural elements form 7 types of tissues in the human body known as 'Sapta Dhatus'.
- The basic characteristics of the five natural elements (pancha bhutas) influence the form and function of the 7 types of tissues (sapta dhatus).
- Nutrition and life style plays a key role in the formation and nourishment of these 7 types of tissues.

4.1 Seven Types of Body Tissues – Sapta Dhatus

Appended is an overview of how each of these 7 tissues are formed by one or more of the 5 natural elements.

Anatomical Structures/Tissues and the constituent natural elements

Body Tissues	Major Natural Elements that form Tissues
Plasma (<i>Rasa</i>)	Water
Blood (<i>Rakta</i>)	Water and Fire
Muscles (<i>Mamsa</i>)	Earth
Fat (<i>Medha</i>)	Water and Earth
Bone/Cartilage (<i>Asthi</i>)	Earth and Air
Bone Marrow (<i>Majji</i>)	Water
Reproductive Fluid/Tissue (<i>Shukra</i>)	Water

Compiled by: Venkata L.N Kamaraju

4.2 Basic Functions of Body Tissues – Sapta Dhatus

Each of these tissues are meant for a specific function in the human body and are classified by Ayurveda according to their basic function. Following is a brief overview of the tissue functions followed by the nomenclature given to each of these by Ayurveda.

- **Plasma (Rasa)** – It is the essence of food that we eat. Its basic function is to nourish all the body tissues – Prerana
- **Blood (Rakta)** – The red colour of the tissue is named after “Rakta” which gets its colour from “pitta (metabolic bio-energy)” – a combination of water and fire natural elements. Its basic function is enlivening - Jeevana.
- **Muscles (Mamsa)** – This tissue attaches to the bones, gives shape to the body and helps in locomotion. It is the tissue in smooth, hard and cardiac muscles – Lepana.
- **Fat (Medha)** – Its main function is lubrication and also responsible for cushioning and thermoregulation – Snehana.
- **Bone/Cartilage (Asthi)** – Its main function is to provide a framework to hold the body up-right – Dharana.
- **Bone Marrow (Majji)** – Its main function is to fill-in the bones and also support blood formation and bone cells – Purana.
- **Reproductive Fluid/Tissue (Shukra)** – Its main function is reproduction and also responsible for reproductive hormones – Garbhotpaadana.

5. HUMAN PHYSIOLOGY AND THE GOVERNING NATURAL ELEMENTS

5.1 Tri Doshas (bio-energies)

Ayurveda classifies all the biological energies that govern physiology, psychology and the subtle energy into 3 metabolic types known as “*Doshas*”

- Vata Dosha (Catabolic/energy of movement)
- Pitta Dosha (Metabolic/energy of metabolism)
- Kapha Dosha (Anabolic/energy of structure)

Doshas and Natural Elements

Each of these Doshas are governed by two of the five natural elements.

- Vata is Air + Space
- Pitta is Fire + Water
- Kapha is Water + Earth

Qualities of Doshas

Ashtanga Hridaya, the classic ancient Ayurvedic text describes the qualities of each of these doshas as follows:

Qualities of vata:

Sanskrit Version

Tatra ruksho laghu sheetah, khara sukshmaschalo nilah

Meaning in English

*dry, light, cool, rough, subtle and mobile
(Ashtanga Hridayam; Sutrasthana; Chapter 1.10.5)*

Qualities of pitta:

Sanskrit Version

Pittam sasneha tikshnoshnam laghu visram saram dravam

Meaning in English

*Pitta is slightly oily, sharp, hot, light, fleshy smelling, spreading and liquid
(Ashtanga Hridayam; Sutrasthana Chapter 1.11)*

Qualities of kapha:

Sanskrit Version

Snigdham sheeta gururmandam shlakshno mritsnah sthirah kaphah

Meaning in English

*Kapha is unctuous, cool, heavy, slow, smooth, soft and static
(Ashtanga Hridayam; Sutrasthana 1.12)*

5.2 Physiological Functions of Doshas (bio-energies)

Each of these doshas (bio-energies) are responsible for many physiological functions in the body and they are in turn governed by the qualities of the natural elements that constitute the dosha.

Following is a high-level overview of doshas, their functions and their governing natural elements.

Biological Energy (Doshas)	Governed by-Natural Element	Physiological Function	Responsible for
VATA	Air & Space/Ether	Catabolism - Activating & Dynamic	<p>All Movements - circulation, digestion, respiration, excretion, functioning of mind, sensory & motor functions etc.,</p> <p>It is the master of body orchestra and controls other two Doshas - Pitta & Kapha.</p>
PITTA	Fire & Water	Metabolism - Balancing & Transformative	<p>Digestion & Metabolism - both at the digestive track level and cellular level for the absorption of nutrients and energy production.</p> <p>Also responsible for - vision, skin complexion, hunger, thirst, appetite, intelligence, valour, courage, body temperature etc.,</p>
KAPHA	Water & Earth	Anabolism - Conserving & Stabilizing	<p>Structure & Stability - holding the organelle at cellular level to maintain natural shape of the cells, stability and compactness of the joints etc.,</p> <p>Also responsible for - stable thinking, memory, forgiveness, lubrication, bulk and steadiness of the bodily structures etc.,</p>

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5.3 Sub Doshas

Each of these doshas (energies) are further classified into “sub doshas” according to the specific functions that they are responsible for as follows:

VATA Subdoshas	
Subdosha	Responsible for
Prana	Mind, consciousness, senses and inhalation.
Udana	Memory, speech and exhalation.
Samana	Movement of food through the digestive system.
Apana	Elimination, menstruation and sexual function.
Vyana	Nervous system, circulatory system and heart.
PITTA Subdoshas	
Subdosha	Responsible for
Sadhaka	Emotions, judgement and cardiac function.
Alochaka	Optical perception.
Pachaka	Digestion and absorption.
Ranjaka	Detoxification and distribution of nutrients to cells.
Bhrajaka	Texture and pigmentation of skin.
KAPHA Subdoshas	
Subdosha	Responsible for
Tarpaka	Protection through cerebrospinal fluid etc.,
Avalambaka	Nourishment and lubrication of spine, heart and lungs.
Kledaka	Gastric secretions, digestion, absorption and protection of stomach inner lining.
Bhodaka	Lubrication of mucous membranes, tastes, saliva and speech.
Shleshaka	Joints lubrication and nourishment of bones and cartilage.

Compiled by: Venkata L.N Kamaraju

5.4 Tri Malas

Waste products of the physiological process are “Malas” which cause illness when not expelled from the body on time. There are 3 malas as follows:

Malas (waste products)	Responsible for
Stools (<i>Puresha</i>)	Supporting the intestinal walls through ejection of solid waste.
Urine (<i>Mutra</i>)	Stable blood pressure and fluid balance through removal of excess water, salts and mineral wastes.
Sweat (<i>Sweda</i>)	Regulating body temperature and skin tone through removal of excess water and toxins.

Compiled by: Venkata L.N Kamaraju

6. BODY TYPES (DEHA PRAKRITI)

As we have discussed about the basic elements of human body (pancha bhutas or 5 natural elements) and how they manifest into anatomical structures (sapta dhatus or 7 bodily tissues) and physiology (tri doshas or bio-energies) in the above sections, in this section we will discuss on how each of us can be classified as different body types.

6.1 Constituents of Body Types (Deha Prakriti)

Each human being has all the tri doshas/bio-energies in the body constitution but they will be in different proportions.

Proportion of tri doshas (bio-energies) decides the body type of an individual. Such body types specific to an individual is a default state of nature and hence known as “deha prakriti” – in other terms “natural state of body”.

The objective of nutrition and dietetics in addition to life style modifications is to maintain such tri dosha balance as the imbalance of these tri doshas (bio-energies) is the root cause of most of the diseases and disorders.

6.2 Classification of Body Types (Deha Prakriti)

Body type of an individual is decided at the foetal stage itself. The predominance of the 5 basic natural elements and tri doshas in both the sperm (shukra) and ovum

(shonita) interplay at the time of conception to lay the foundations of an individual's body type.

Additionally, the inter uterine environment influenced by maternal factors (matru aahara vihara) like, the food consumed by mother, her physical activities and her emotional factors during pregnancy play a key role in shaping up the body type.

Hence the nutrition, mental wellbeing and lifestyle of the mother is of utmost important for the health of the progeny as the body type that is decided at the time of fertilization generally remains constant through the life of an individual though it can be modified to some extent to better or worst depending on the life style and food habits of the individual.

Ancient Ayurvedic text – Rasavaisheshika states about the formation of body type (deha prakriti) of an individual as follows:

Sanskrit Version

*Prakritih naama janma maranaantara kaala bhaavini, garbhaavakraamti
Samaya svakaaranodreka janita nirvikarini dosha sthitih*

Meaning in English

*Prakriti (body type) is that which remains constant from birth till death,
formed at the time of development of foetus.*

*The non-pathological increase of doshas in an individual
remains constant throughout his life.*

One of the tri doshas (bio-energies) is dominant in some individuals. In some people two of the doshas can be dominant with one among these two being slightly dominant. It is also rarely possible that all the tri doshas are equally dominant too.

Thus, there are 7 body types as follows:

- One dosha (Eka doshaja) dominant – 3 types
 1. **Vataja (catabolic)**
 2. **Pittaja (metabolic)**
 3. **Kaphaja (anabolic)**

- Two doshas (Dwandvaja) dominant out of which one slightly dominant – 3 types
 4. **Vatapittaja (Vata + Pitta)**
 5. **Vaatakapaja (Vata + Kapha)**
 6. **Pittakapaja (Pitta + Kapha)**

- Three doshas (Sama dosha) equally dominant – 1 type
 7. **Vatapittakapaja (Vata + Pitta + Kapha)**

Body types from 1 to 3 with single dosha (eka doshaja) are not that common among individuals and these body types are rated as follows:

- Vataja because of the catabolic dominance is considered as a bad constitution (heena)

- Pittaja because of the metabolic dominance is considered as a moderate constitution (Madhya)

- Kaphaja because of the anabolic dominance is considered as the best body constitution (uttama).

Body types from 4 to 6 having combination of two doshas (dwandva doshaja) are the most common among individuals and is considered as denounced/criticized (nindya).

The 7th body type having all the 3 doshas balanced (sama dosha) is very rare and it is considered as the superior (sreshta).

Sama dosha (7th body type) is the ideal and ultimate body type which can be achieved only through balanced nutrition and healthy lifestyle.

6.3 Characteristics of Body Types

Each of the 7 body types reflect the characteristics of the dosha (bio-energy) that is dominant in them.

In fact, the characteristics are a combination of dominant and recessive doshas within the individual with more characteristics of dominant dosha than the recessive dosha.

Though each individual is unique in the true sense, body type can be assessed based on the what type of characteristics that an individual has in line with the following dosha characteristics.

Vata Characteristics

- Generally, underweight with a thin body frame.
- Dark skin which is dry, rough and cracked.
- Rough, dry and splitting hair.
- Active and quick in performance.
- Usually poor hunger.
- Less physical endurance & poor immunity.
- Prefers hot/warm food and climate.
- Low perspiration & variable thirst.
- Reduced bowel movements/constipation.
- Multiple dreams with lack of deep sleep.
- Unpredictable nature with emotions of anxiety, worry and depression.

Pitta Characteristics

- Generally, with normal body weight with medium body frame.
- Reddish skin which is delicate and warm.
- Soft hair, prone to premature greying and baldness.
- Moderately active in performance.
- Excessive or good appetite.
- Feels warm or hot sensation.
- Intolerance to hot climate and food
- Irritable bowels causing loose motions.
- Excessive perspiration and thirst.

- Bright eyes with light coloured cornea and sharp penetrating vision.
- commanding nature, aggressive intelligent, sharp memory, hot tempered, brave and jealous.

Kapha Characteristics

- Generally, with board body frame and weight gaining tendency.
- Fair complexion with thick, soft, smooth, firm and glossy skin.
- Thick, oily, wavy dark coloured hair.
- Slow in physical activities but possesses good stamina
- Moderate appetite
- Pleasant and deep voice
- Low thirst and moderate perspiration
- Sound and deep sleep
- Stable vision with calm and large eyes.
- Cool, calm, joyful and polite good nature.

7. HEALTH – AS PER AYURVEDA

7.1 Definition of Health

Sushruta a surgeon and teacher of Ayurveda in 700 BCE has provided a specific and clear definition of health in the Ayurvedic classic text – Sushruta Samhita written in Sanskrit language as follows:

Sanskrit Version

*Sam dosha, samagni, samdhatu malakriyah
Prasannatma, indriyas manah swath abhidayate.*

Meaning in English

The swastha (optimal health/stability in the true self) is achieved when:

There is an equilibrium of Doshas (bioenergy – Vata, Pitta & Kapha),

Agni (metabolic & digestive process) and

*Dhatu (plasma, blood, muscles, fat, bones/cartilage,
bone marrow & reproductive material).*

Malas (sweat, urine and faeces) are well excreted.

The Atman (soul), Senses, Manah (intellect)

are in harmony with internal peace.

Health is determined by the harmonization and integration of biological, psychological, ecological, sociocultural, metaphysical and spiritual factors.

Nutrition plays a key role in maintaining such equilibrium that positively results in healthy body and sound mind for longevity and happiness.

7.2 Factors That Influence Health

Ayurveda further states the following 10 factors (Dasavidha Pariksha) that influence health and wellbeing of an individual.

- Genetic constitution (prakriti),
- Age (vaya),
- Location/Country (desha),
- Bodily tissues (sapta dhatus),
- Five senses (panchindriyas),
- Strength (bala),
- Metabolic/Digestive fire (agni),
- Seasons/Climate (ritus/kaal),
- Disposition (sattva),
- Acclimatisation (satmya) and
- Food (ahara)

8. NUTRITION – AS PER AYURVEDA

Various methods of consuming food termed as 'Aahara Vidhi' were clearly detailed in Ayurveda and are documented by author Charaka in his Ayurvedic text – 'Charaka Samhita'.

As per the digestive fire (Agni) of an individual, various methods of eating were recommended in the Aahara Vidhi – Method of taking food.

8.1 Definition of Food (Anna & Aahara)

Though the literal meaning of the Sanskrit words 'Anna' and 'Aahara' denote food, these two are different technical terms from Ayurvedic perspective.

- **Anna:** Anything that is injected through mouth, either solid food or drinks.
- **Aahara:** This includes not only "Anna" as defined above, but also all the inputs that we receive through our sense organs i.e., smells, sounds, touch, vision and taste.

Thus, aahara is not just nutrition to the body but also to the mind and soul to promote holistic wellbeing.

8.2 Classification of Food

There are different types of food classifications in Ayurveda, some of those are as follows:

Classification as per source

- Grains (sukha)
- Vegetables (shaka)
- Greens (harita)
- Fruits (phala)
- Pulses (shami)
- Meat (mamsa)
- Milk products (dugdha)
- Sweet (Ikshu)
- Water (jala)
- Wines (madya)
- Cooked food (kritanna)
- Seasonings, spices and condiments (Aahara yogi)

Classification as per form

- Eatable (ashita)
- Masticable (khadita)
- Lickable (leedha)
- Drinkable (peeta)

Classification as per digestibility

- **Light to digest (laghu):**
 - ✓ Foods that are easily digestible and do not stay for long in the digestive track are laghu foods.

 - ✓ Laghu foods include - Parched rice, honey, fennel seeds, clove oil, pomegranate, moringa, coconut water, butter milk, lemon, old wine, goat milk, camel milk etc.,

- **Heavy to digest (guru):**
 - ✓ These are opposite to light foods as they stay for long in the digestive track.

 - ✓ E.g., Wheat, fresh wine, mutton, fish, cow milk, buffalo milk, jaggary, onion, garlic, black gram, ash gourd, dates, fried foods etc.,

Classification as per taste

- Sour (Amla)
- Pungent (Katu)
- Astringent (Kasaya)
- Sweet (Madhura)
- Salty (Lavana)
- Bitter (Tikta)

Classification as per effects on health

- **Wholesome food (Pathyatama):**

- ✓ Foods that are conducive to the body and mind, promote health and wellbeing are wholesome foods.
- ✓ Generally, foods of which, natural states haven't been materially altered during processing or cooking fall into this category.
- ✓ Principle objective of wholesome food consumption is to maintain the normalcy and balance of bio energies (Vata-catabolic; Pitta-metabolic and Kapha-anabolic).
- ✓ Wholesome foods are recommended for daily consumption.

- **Unwholesome food (Apatyatama):**

- ✓ Foods not conducive to the body and mind, causing physical and mental health issues.
- ✓ Generally, foods that are putrefied, overly fermented, ultra-processed or cooked in unscientific ways resulting in loss of nutritive value fall under this category.
- ✓ Unwholesome foods disturb the balance of the bio energies, adversely affecting body tissues leading to acute and chronic ailments.

Classification as per suitability

- **Ekanta Hita**
 - ✓ Foods that do not harm the body.
 - ✓ These foods can be consumed regularly.

- **Anekanta Hita**
 - ✓ Foods that can cause acute or chronic illness.
 - ✓ These foods should not be consumed at all.

- **Hitaa Hita**
 - ✓ Foods that are harmful in some conditions and unharmed in some.
 - ✓ Appropriate judgement is required while choosing such foods depending on certain conditions.

9. NUTRITION AND THE TISSUE NOURISHMENT

Nutrition plays a key role in the nourishment of tissues; as tissues form organs and the collective balanced function of the organ systems influences the health of an individual.

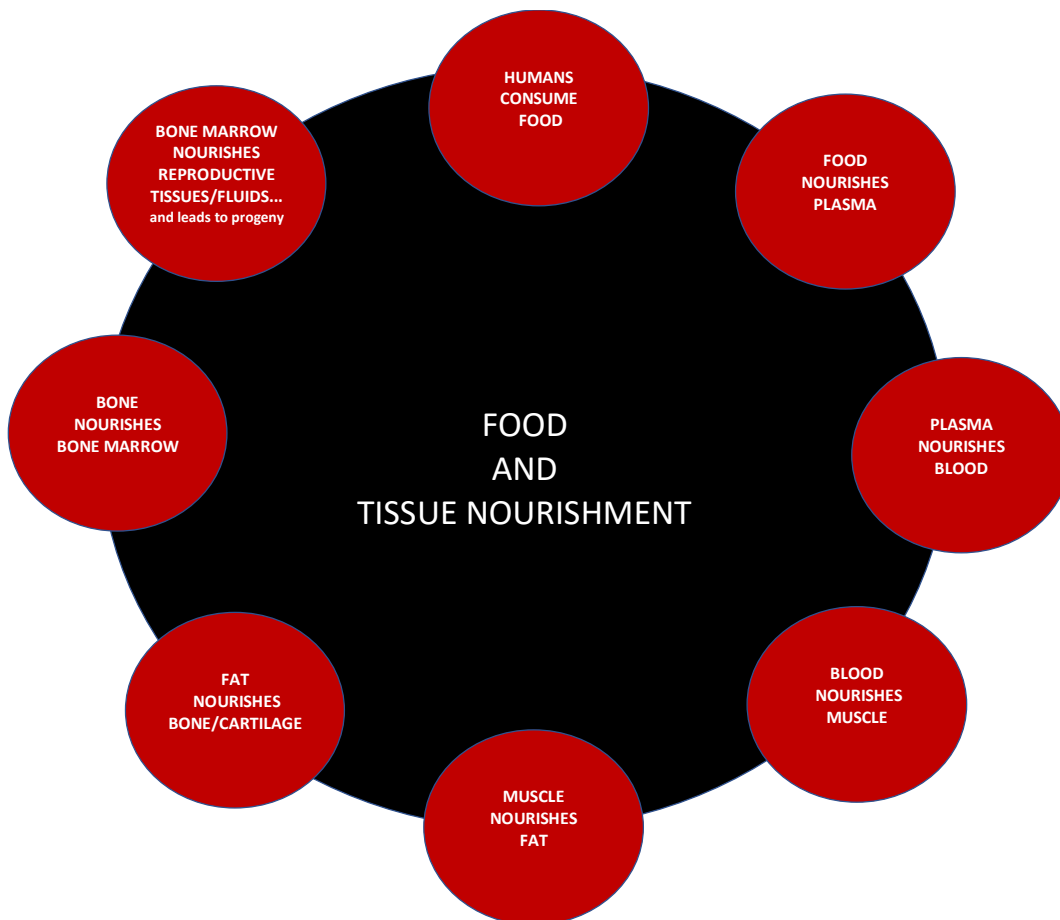
Reiterating what we discussed in the earlier section, the human body is made up of 7 types of tissues known as Sapta Dhatus as follows:

- 1. Plasma (Rasa)**
- 2. Blood (Rakta)**
- 3. Muscles (Mamsa)**
- 4. Fat (Medha)**
- 5. Bone Marrow (Majji)**
- 6. Bone/Cartilage (Asthi)**
- 7. Reproductive Fluid/Tissue (Shukra)**

It is a known fact that the food one eats nourishes these tissues through the life of an individual. Ayurveda has gone a step ahead and provided a clear description on the order in which these tissues are nourished by the food we consume i.e., the interrelation between these tissues in terms of one tissue nourishing the other as follows.

- Food that we eat nourishes Plasma
- Plasma nourishes blood
- Blood nourishes muscles
- Muscles nourish fat
- Fat nourishes bone/cartilage
- Bone/cartilage nourishes bone marrow
- Bone marrow nourishes reproductive fluid/tissue.

A diagrammatic view of this nourishment pattern is provided in the figure below:



Compiled by Venkata. L.N.Kamaraju

It would not be an exaggeration to state that Ayurveda is timeless and ahead of times; because the facts that were documented thousands of years ago are being proved to be correct by modern science even today.

One such example of the above-mentioned fact that 'bone marrow nourishes reproductive fluid/tissue' has been proved by the appended research article in the Discovery magazine in 2007 and 2020 concluding that there is a direct relation between bone marrow and the reproductive fluid/tissues:

Babies from Bone Marrow

By Jessica Marshall Jun 15, 2007 8:00 AM

MICROBIOLOGIST KARIM NAYERNIA OF THE NORTH EAST ENGLAND STEM CELL INSTITUTE JUST TOOK A STEP TOWARD RENDERING MEN OBSOLETE. BY IMMERSING STEM CELLS HARVESTED FROM MEN'S BONE MARROW IN A COCKTAIL OF CHEMICALS THAT MIMIC THE ENVIRONMENT OF THE TESTES, NAYERNIA AND HIS TEAM TURNED THE STEM CELLS INTO IMMATURE SPERM. THE EXPERIMENT MARKS THE FIRST TIME THAT ANY NONREPRODUCTIVE HUMAN TISSUE HAS BEEN TRANSFORMED INTO GAMETES. IF THE CELLS CAN BE GROWN INTO MATURE SPERM, THE TECHNIQUE WOULD ALLOW MEN WITHOUT FUNCTIONING SPERM, OR EVEN TESTES, TO FATHER CHILDREN.

EDITOR'S NOTE: THIS 2007 STUDY WAS RETRACTED IN 2009. WE FOLLOWED UP ON THE TOPIC IN 2020 TO SEE WHERE THE RESEARCH HAD GONE. READ THE NEW STORY: HOW CLOSE ARE WE TO MAKING BABIES FROM BONE MARROW?

NAYERNIA SAYS THE TECHNIQUE COULD ENABLE WOMEN TO HAVE A BIOLOGICAL CHILD WITH TWO MOTHERS AND NO FATHER. THEIR OFFSPRING WOULD ALWAYS BE DAUGHTERS, THOUGH, BECAUSE SPERM MADE FROM A FEMALE CELL WOULD ALWAYS CARRY AN X INSTEAD OF A Y CHROMOSOME. WEIRDER STILL, A WOMAN COULD CONCEIVABLY USE SPERM MADE FROM HER BONE MARROW TO INSEMINATE HER OWN EGGS.

Source: <https://www.discovermagazine.com/health/babies-from-bone-marrow>

10. DIETARY GUIDELINES OF AYURVEDA

Ancient Ayurvedic text - Charaka Samhita has provided clear guidelines on food intake known as Aahara Vidhi (method of taking food). These guidelines serve as a guide to make proper food choices to attain a state of physical and mental equilibrium necessary for holistic wellbeing.

Ayurveda emphasizes that digestive fire/capacity should be taken into account among other factors like age, gender, physical activity, medical condition etc., while making appropriate food choices within the framework of these guidelines.

The famous saying that “We are what we eat” in general is correct, but in context of Ayurveda it would be “*We are **not** what we eat*” but “*We are what we digest*”.

Proper food choices that kindle the digestive fire of an individual is of great importance, as the foods cannot be absorbed for the nourishment of the body if the digestive power is not at its best.

There are 8 such conditions within the dietary guidelines known as – *Ashta Aahara Vidhi Vishesha Ayatana* in Sanskrit language, which are to be fulfilled essentially to consider a meal as a proper complete meal.

Eight conditions/factors to choose right food

1. **Natural quality of food** – Prakriti
2. **Method adapted for processing food** – Karana
3. **Combinations of food substances** – Samyoga
4. **Quantity of food** – Rasi
5. **Place where the food is cultivated & grown** – Desha
6. **Time of food consumption** – Kala
7. **Rules of food intake** – Upayoga Samstha
8. **Person who consumes the food** - Upabhokta

10.1 Natural Quality of Food – Prakriti

Each food has its inborn natural quality which is referred to as prakriti like heavy (guru) and light (laghu) foods with reference to digestibility.

For example, green gram that is easily digestible is considered as light (laghu) and pork that is heavy to digest is considered as heavy (guru).

People with less digestive fire should consider eating more portions of light foods and those with good digestive capacity should consider more portions of heavy foods.

In the same way, due consideration has been given in the dietary guidelines on the natural nutrient density of the foods like – carbohydrates, fats, proteins, vitamins, minerals etc.

10.2 Method Adapted for Processing Food – Karana

Not all foods can be considered for consumption in their natural form as some natural substances may not be absorbed when consumed raw or there can be some anti-nutrients (like lectins) which are counterproductive for the absorption of the nutrients.

To neutralize the bad effects of natural nutrients and to promote the bio-availability of the foods some foods need to be suitably processed without taking away their nutritive value. Karana means food processing which leads to transformation of food properties known as Abhisamskara or Samskara. Various methods adapted for food processing are as follows:

- Treating with water e.g. soaking etc., – Toya Sannikarsha
- Heating, boiling, cooking the food on fire etc., - Agni Sannikarsha
- Washing and cleaning – Soucha
- Churning, grinding – Manthana
- Changing or preserving the food properties by change in its place of storage as the geographical changes impact the nature of food – Desha
- Changes in the food due to climate/season etc., - Kala
- Adding sweet smelling agents, preservatives, flavouring agents etc., - Vasana
- Leaving foods dipped in some liquids e.g. marination – Bhavana.
- Duration of time that brings changes in the food – Kala Prakarsha.
- Container in which foods are stored for preservation e.g. earthen pot, copper vessel etc.,

10.3 Combinations of Food Substances – Samyoga

Some food items may be harmless when consumed individually but when combinedly consumed with other substances may have harmful effects on the body and mind.

Such food combinations that are detrimental to health in terms of disturbing the balance between the bio-energies and adversely affecting the tissues are called as antagonistic food combinations or Viruddha Ahara.

Knowledge of such antagonistic combinations is very important for choosing the right foods or avoiding such combinations that are antagonistic.

Antagonistic combinations may not be showing any immediate harmful health effects other than some signs of discomfort but when consumed regularly can lead to long term chronic health issues.

Basic principles behind these antagonistic combinations are relevant even today though the types of foods that were mentioned in the Ayurvedic texts may be different.

Charaka Samhita Ayurvedic text enlisted 18 such antagonistic combinations, following are such combinations along with some general examples. Sanskrit terms of each of such antagonistic combinations are provided below along with English translation in brackets and the term “Viruddha” should be read as “antagonist”.

Desha (place) Viruddha

Consuming food that is contradictory to the conditions of the given region.

For example - Intake of dry substances in deserts where the heat is more and the need is to have watery and cold substances. Consuming cold and unctuous substances in marshy land where hot substances should be preferred to maintain the body temperature.

Kala (time) Viruddha

Consuming food that is contradictory to the season and time.

For example - Consuming curd/yogurt at night instead of having it in the day time is time antagonist.

While eating cold foods like refrigerated beverages, water, ice creams etc. in winter and hot, dense and pungent foods in summer is season antagonist.

Agni (digestive capacity) Viruddha

Consuming foods that are not in accordance with the individual's digestive fire/capacity.

For example – When the digestive capacity is low (mandagni) and heavy foods are consumed, it may not only cause gastric discomfort but such foods may not be well assimilated by the body.

In the same way a person with good digestive capacity (tikshnagni) consuming just light foods is also considered as antagonist because the digestive fire is a natural indicator for taking heavy foods to meet the requirements of the bodily needs.

Matra (ratio) Viruddha

The ratio of one food to another combined in a meal can impact the overall effect of such food on the health of a person. While, in the same combination if the ratio is altered it can prove to be a beneficial food.

For example – As per Ayurveda, honey and ghee (clarified butter) alone should not be mixed in equal quantities and consumed. However if there are other ingredients too in a specific recipe, such food may not be considered as ratio antagonistic even though ghee and honey are in equal proportion.

Satmya (wholesome) Viruddha

Consuming foods that are not in line with one's eating habits.

For example – Those having habit of just eating bland/sweet foods start eating foods that are pungent/spicy, hot substances etc.

Dosha (Bi—energies) Viruddha

Eating foods that are not suitable to their body type (prakriti)

For example – Vata (catabolic) dominant body type person should not be taking bitter and astringent foods. Pitta (metabolic) dominant person should refrain from sour and salty foods. Kapha (anabolic) dominant person should avoid sweet and sour foods etc.

Sanskara (mode of preparation) Viruddha

Foods prepared in a particular way may alter its properties and cause harm to health.

For example – Heated honey or curd is considered poisonous to the body.

Veerya (potency) Viruddha

Foods having cold potency combined with those of hot potency.

For example – eating proteins sourced from two different environments together like seafood in combination with milk.

Koshtha (Bowel) Viruddha

Consumption of purgative substances without considering the state of individuals bowel movements.

For examples – A small dose of mild purgative taken by a person of constipated bowel will not help the situation and a large dose of purgative taken by a person having laxated bowel might lead to diarrhoea.

Avastha (state of health) Viruddha

Intake of food items that are not in line with their current state of health.

For example – Having heavy food (guru bhojan) during fever; having vata (catabolic) aggravating foods after physical exhaustion; person with excess sleep having kapha (anabolic) dominant foods etc.

Krama (sequence) Viruddha

Intake of food before the person's bowel and urinary bladder are emptied or when the person does not have hunger or after the person's hunger gets aggravated.

This also refers to the order in which the foods are to be consumed or not consumed.

For example – consuming hot water or hot beverages such as tea, milk etc., after consuming honey, having sweet foods at the end of the meal, having curd at night etc.,

Parihara (contraindicative incompatibility) Viruddha

Taking foods are contraindicative with reference to compatibility when consumed at a time.

For example – Consuming cold water immediately after having hot tea or coffee is incompatible with the human metabolism.

Upachara (treatment specific contraindication) Viruddha

Taking foods against a treatment.

For example – taking cold things like, cold water, beverages etc., after taking ghee (clarified butter)

Paaka (cooking) Viruddha

Foods that are improperly cooked – undercooked, overcooked, burnt during cooking, usage of bad fuel or oil etc., during the process of preparation.

For example – overheating or reheating of cooking oils create more oxidation which when consumed causes oxidative stress to the body through free radicles. Such toxic compounds may cause degenerative illness, atherosclerotic disease etc.,

Samyoga (combination) Viruddha

Food items that are incompatible in combinations

For example – consumption of sour substances along with milk, combining milk with fruits is an incompatible combination.

Hridaya Viruddha

Foods that are unpleasant or unpalatable to one's taste and liking.

For example - a person having dislike for fish eating it due to compulsion.

Sampada (richness of quality) Viruddha

Foods that do not have any nutritive value or just calorie dense.

For example - Bakery items, junk food, immature/overmatured/putrefied foods etc.,

Vidhi (rules for eating) Viruddha

Eating food against the set rules, regulations and norms. For example – consuming food in a place which is prohibited by law or by social norms.

10.4 Quantity of Food – Rasi

The quantity of food required for each individual differs from others. There are multiple factors like age, physical activity, gender, health condition, digestive capacity etc. that dictate the quantity required to be consumed by an individual at any given time.

For optimum health benefits it is important to consume the right quantity of food. It should neither be less nor more than the right quantity.

Healthy eating pattern includes eating various types of foods having adequate micro & macro nutrients in a meal instead of eating only one type of food.

From a nutrition perspective there are two types of quantities:

- **Total Quantity of a meal (sarvagraha rasi):**

It is the total quantity of all the foods that are consumed in one meal irrespective of the portion sizes of the foods that are included in that meal. This is dependent on the person's digestive fire.

- **Portion size of foods in a meal (parigraha rasi)**

Unlike sarvagraha rasi quantity or the portion size of each food included in a meal are considered. This is dependent on the nutritional requirement of the individual as the portion sizes chosen should be in line with the health goals, medical conditions of the individual in addition to the capacity to digest.

Food and stomach capacity

In Ayurveda there are guidelines even on the way of utilizing the stomach capacity during a meal to aid better digestion.

It has been suggested that 1/3rd of the stomach should be filled with heavy to digest food and another 1/3rd with light to digest food including water, beverages etc. The remaining 1/3rd should be left empty to facilitate enough space for gastric churning and movements in order to preserve health and prevent diseases.

Signs and symptoms of right quantity of food intake

After a meal, the following symptoms indicate that the meal consumed is the right quantity.

- Feeling light or not heavy due to food.
- Not experiencing any discomfort due to abdominal pressure.
- No congestion or heaviness in chest/flanks or not having obstruction in the functioning of the heart.
- Not experiencing any digestive issues with the food taken.
- Ease and comfort in physical movements such as standing, sitting, walking, talking, breathing and laughing.
- Feeling of satiation.
- Not feeling thirsty or hungry for a long duration.
- Experiencing enhanced strength, complexion, and nourishment of tissues over a period of time.

Signs and Symptoms of insufficient quantity of food intake

After a meal, the following symptoms indicate that the meal consumed is less or of insufficient quantity.

- Dis-satisfaction and lack of satiation.
- Altered movement (peristalsis) of gastro intestinal muscles.
- Susceptibility to catabolic (Vata bio-energy) disorders.
- Under nourished body tissues, reduction of strength and skin complexion over a period of time.
- Reduction of vital functions – strength, stamina, virility and vitality.
- Reduced functioning of sense organs, body, mind and intellect.

Signs and symptoms of excess quantity of food intake

After a meal, the following symptoms indicate that the meal consumed is of excess quantity.

- Aggravation of all three bio-energies (doshas) in abdomen.
- Obstruction and/or sluggish movement of gastrointestinal muscles.
- Experiencing anorexia, indigestion, laziness and heaviness in the body.
- Sudden elimination through vomiting or diarrhoea.
- Experiencing colic pain, abdominal distention/bloating, dryness of mouth.
- Experiencing body aches, rigidity in flanks, back and waist; fainting, giddiness etc.
- Experiencing fever with cold, burning sensation inside body, excessive thirst, delirium etc.

10.5 Place Where the Food Is Cultivated – Desha

Desha refers specifically to the place where the food is grown or cultivated and also to where it is exported and consumed. Locally grown food in a geographical region is generally considered good for those people living in that region.

Not only foods, but also some herbs with medicinal value are best grown only in some specific regions with a suitable soil and climatic conditions. For example, some medicinal plants and herbs of best quality can be grown only in Himalaya region of India.

According to Ayurveda there are three broad classifications of desha (regions) as follows:

- **Desert or dry regions** which are vata bio-energy (catabolic) predominant called 'Jangala'.

Foods grown in these regions are not beneficial for those having vata (catabolic) body type or having vata aggravation in their body.

These foods are beneficial for those having kapha (anabolic) aggravation issues and for those who are native to that region.

- **Marshy or wet regions** which are kapha bio-energy (anabolic) predominant called as 'Anupa'.

Foods grown in these regions are not beneficial for those having kapha (anabolic) body type or having kapha aggravation in the body.

These foods are beneficial for those having vata (catabolic) aggravation issues and for those who are native to that region.

- **Moderate zones** that are neither wet nor dry promoting pitta bio-energy (metabolic) called as 'Sadharana'.

Foods grown in these regions are not beneficial for those having pitta (metabolic) body type or having pitta aggravation in the body in general.

However, such foods should be carefully understood with reference to the dominating bio-energy within them and are to be consumed by people as per their natural body type and their status of bio-energy equilibrium.

10.6 Time of Food Consumption – Kala

Kala refers to time. The time factor for consuming a meal either during the day or as per the seasons in a year plays a key role in the upkeep of health.

To maintain good health it has been prescribed in Ayurveda that one should take two meals in a day ideally at a fixed timing. This fixed time meal consumption will set the rhythm of the biological clock and helps in promoting health through healthy appetite, good digestion, proper assimilation of the nutrients and also excretion of wastes.

Those who do not follow a regular meal timing but eat only when they are hungry will also have a reasonably good health.

To avoid health issues, it is best to either follow a specific meal time every day or to eat only when hunger demands.

From a nutrition perspective there are two types of kalas (times):

Nityaga kala

Nityaga is daily which includes day time and night time. With reference to the year, seasons too are considered as nityaga kala as the seasonal changes happen in a sequential order through the year.

To promote health, it is important to know which time of the day/night is good for eating for e.g. consumption of food at mid-night is not healthy as it disturbs the natural biological clock and rhythm of the body.

Similarly, seasons too play a key role when it comes to the ideal time of eating and the type of foods to be taken to maintain health. Rules/guidelines for healthy eating are not only applicable to each of the seasons but also to the transitioning phase between the seasons – known as “Ritusandhi” (overlapping period between two seasons).

Avasthika Kala

Avasthika is conditional or situational i.e., in modern terminology it refers to life-stage nutrition and clinical nutrition.

Food consumption should be in according to the life stage of a person called as Vaya Kala – Children & youth (Bala), middle age (Madhyama) and old age (Vardhakya). Choosing the right food as per one’s life stage is essential to maintain the equilibrium of the body and also the provide adequate nutrition to support growth, immunity and energy requirements.

In addition to the life stage, the medical condition of the individual in terms of diseases and disorders should be taken into consideration while choosing the right food in order to help recovery from the ailments.

10.7 Rules of Food Intake – Upayoga Samstha

Based on the post digestive symptoms (Jeerna Aahara Lakshanas), Ayurveda has laid down certain dietary rules known as Upayoga Samstha. For the upkeep of health these rules are to be strictly adhered to.

Post Digestive Symptoms

Following symptoms are considered as signs of proper digestion.

- Belching is clean, tasteless and odour less - Udgarasudhi
- Feeling enthusiastic and energetic - Utsaha
- Not having constipation or loose stools. Timely elimination of all the wastes (urine and stools) - Vegotsargayatochitaha
- Feeling light but not heavy and lethargic - Laghuta
- Feeling hungry after a stipulated period of time - Kshut
- Feeling thirsty after stipulated time - Pipasa

Rules of Eating

Do's

- Eat fresh and hot food – Ushnam Ashneeya
- Eat only after the last meal is digested and when hungry - Jeerne Ashneeya
- Eat unctuous food (creamy or oily) – Snigdham Ashneeya

- Eat right quantity as per life stage and digestive capacity – Matravad Ashneeyaata.
- Each food that is potent in nutrients to nourish the body and mind – Veerya Aviruddham Asheeyaata.
- Eat food in a desired place and with desired articles (cutlery etc.,) – Ishta Desha, Ishta Sarva Upakaranam cha Ashneeyaata.
- Eat food by including all the tastes Sour (Amla), Pungent (Katu), Astringent (Kasaya), Sweet (Madhura), Salty (Lavana) and Bitter (Tikta) – Shadrasa Ashneeyaata.
- Eat with full concentration and positive thoughts – Tanmanaa Bhunjeeta
- Eat with self-assessment and awareness i.e., knowing one's own constitution, suitability and tastes.

Don'ts

- Don't eat foods that are antagonistic in potency and or contrary to each other in action.
- Don't eat too fast.
- Don't eat too slow.
- Don't talk or laugh while eating.
- Don't over eat any one of the six tastes.

10.8 Person Who Consumes the Food – Upabhokta/Upayokta

Upabhokta, the consumer of food should assume the ultimate responsibility of habitual consumption of food at right time, in proper quantity and quality.

11. OTHER FACTORS THAT INFLUENCE

DIGESTION & HEALTH

11.1 Personal Hygiene

As per Sutra Sthana chapter of Charaka Samhita Ayurvedic text, one should wash hands, feet and mouth before consuming a meal. It is also said that even the dress of the person consuming a meal should be clean and comfortable too.

It was said that such personal hygiene not only prevents health issues but also proves beneficial in negating the effects of negative meta-physical powers while eating.

11.2 Water

As per Vedic traditions a few drops of water is sipped before starting a meal while chanting a brief prayer – known as “Aachaman”. Besides spiritual significance of such practice, water hydrates and lubricates the throat while the prayer warms up the throat muscles to facilitate smooth movement of food without choking.

It is also important to sip adequate amount of water during the meal as to ensure proper passage of food through the alimentary canal, mixing in stomach, digestion and absorption.

11.3 Effects of Sound on Eating

Before and during eating, it has been a traditional practice for many in India to chant/recite some or the other “mantra”. Literary meaning of mantra is ‘to think’; from a Vedic perspective they are an incantation with words of power generally in Sanskrit language.

Mantra can be a syllable, a word, a group of words or phonemes which are being practiced from ages to calm the mind and for having a sense of peace. It is about prolonged repetitive utterance either chanted with-in silently without making any sound or sometimes outwardly audible depending on the type of mantra and the prescribed chanting rules around it.

Chanting mantras during eating has been prescribed by Ayurveda to trigger neurophysiological impacts that result in calming down the mind and activating parasympathetic response which is responsible for ‘rest & digest’.

For example ‘OM’ is considered to be a strong and auspicious mantra which has been proved by modern scientific experiments that it positively impacts vagus nerve and deactivates the limbic system which is responsible for intense emotions of fear and anger through ‘fight or flight’ sympathetic response.

Such soothing effect of ‘OM’ chanting while eating helps in calming the mind and aids in better digestion and assimilation of food.

A scientific experiment on ‘OM’ was published in Internal Journal of Yoga - 2011 Jan-Jun; 4(1): 3–6 under the title ‘Neurohemodynamic correlates of ‘OM’ chanting: A pilot functional magnetic resonance imaging study’.

Appended below is an abstract of that scientific experiment with key points highlighted in “Red”.

Neurohemodynamic correlates of 'OM' chanting: A pilot functional magnetic resonance imaging study

Internal Journal of Yoga - 2011 Jan-Jun; 4(1): 3–6.

Background:

A sensation of vibration is experienced during audible 'OM' chanting. This has the potential for vagus nerve stimulation through its auricular branches and the effects on the brain thereof. The neurohemodynamic correlates of 'OM' chanting are yet to be explored.

Materials and Methods:

Using functional Magnetic Resonance Imaging (fMRI), the neurohemodynamic correlates of audible 'OM' chanting were examined in right-handed healthy volunteers (n=12; nine men). The 'OM' chanting condition was compared with pronunciation of "ssss" as well as a rest state. fMRI analysis was done using Statistical Parametric Mapping 5 (SPM5).

Results:

In this study, significant deactivation was observed bilaterally during 'OM' chanting in comparison to the resting brain state in bilateral orbitofrontal, anterior cingulate, parahippocampal gyri, thalami and hippocampi. The right amygdala too demonstrated significant deactivation. No significant activation was observed during 'OM' chanting. In contrast, neither activation nor deactivation occurred in these brain regions during the comparative task – namely the 'ssss' pronunciation condition.

Conclusion:

The neurohemodynamic correlates of 'OM' chanting indicate limbic deactivation. As similar observations have been recorded with vagus nerve stimulation treatment used in depression and epilepsy, the study findings argue for a potential role of this 'OM' chanting in clinical practice.

Source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3099099/>

11.4 Effects of Emotions on Digestion

“Vimana Stana” chapter of Charaka Samhita Ayurvedic text talks about the impacts of negative mental factors impact on digestion.

In other words it can be termed as mindful eating for better digestion and absorption of food.

Though the food is of right quality, wholesome and of right quantity the food will not get absorbed when the mental state of the person consuming the food is filled with negative emotions such as – anger, fear, anxiety, depression, grief or even restlessness and irritability caused due to lack of sleep.

It is also considered detrimental to digestion when food is consumed with greed, envy, excitement, bashfulness etc.,

Applying this concept to the modern day, mental distractions such as – checking mobile phone, working on a laptop, reading a book, watching television etc., during the meal should be avoided. As such activities not only cause distractions but may also trigger negative emotions which may result in either under/over eating or poor absorption of food.

12. DIETARY GUIDELINES – AFTER MEALS

Ayurveda prescribes certain guidelines to follow after having a meal as follows:

12.1 Oral Hygiene

“Sutra Sthana” chapter of Charaka Samhita Ayurvedic text prescribes thorough cleaning of mouth after a meal with fresh water to remove all the food particles that are stuck in between the teeth.

Such cleaning is important to prevent tooth decay caused by the decomposed food particles left over in the mouth.

Further, Ayurveda prescribes a mouth freshener to deal with the excess oral secretions and foul odour of the mouth after a meal.

In Indian tradition a typical after meal mouth freshener which is in line with the Ayurvedic prescription that also aids in digestion is made up of areca nut (puga), cubeb (kankola), camphor (karpura), clove (lavanga) and/or fruits of pungent, astringent taste wrapped in betel leaves.

12.2 Activities After a Meal

Lying down immediately after eating food should be avoided, sitting in a straight posture is recommended till the drowsiness due to food intake is gone.

After sitting for a while a brisk slow walk of around 100 steps is recommended followed by lying down on the left side which has a beneficial effect on digestion and absorption.

While lying down is allowed one should avoid - sleeping, sitting for a long time, excess consumption of liquids, exposure to heat, physical activities such as running, swimming etc.,

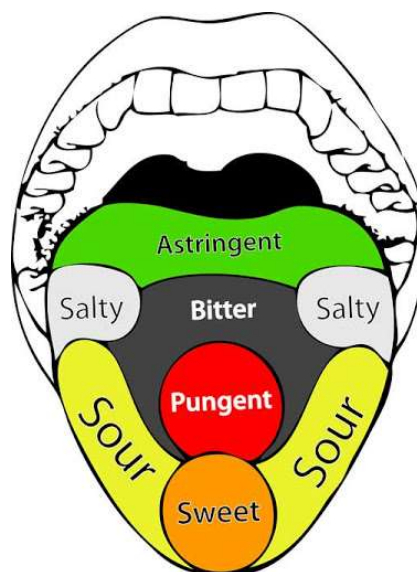
Additionally, it is also very important to keep the senses calm and to avoid any negative emotions or thoughts so that the food is well digested, absorbed and nourishes the senses.

13. INFLUENCE OF FOOD TASTES ON BODY & MIND

The following 6 basic natural tastes of the food serve as good guiding factor for the choices.

- Sour (Amla)
- Pungent (Katu)
- Astringent (Kasaya)
- Sweet (Madhura)
- Salty (Lavana)
- Bitter (Tikta)

Various groups of taste buds on the tongue are responsible for sensing each of the six types of tastes as illustrated in the following picture.



Source: <https://www.ayurhelp.com/6-tastes-shad-rasa/>

Ayurvedic texts have classified the foods that we eat as per the category of each of the 6 tastes and provided an elaborate, specific and scientific description of these foods, their functions and their effects on both body and mind.

Such type of classification as per the food tastes was intended to provide a simple guidance to a common man to make right food choices in his day-to-day life.

13.1 Sweet (Madhura)

Sweet foods are generally rich in sugars in various forms such as – glucose, fructose, galactose, lactose, maltose etc. which are mostly present in carbohydrate rich foods and also in certain fat and protein foods too.

These foods are naturally appealing to many and hence worth noting the beneficial and harmful effects of sweet foods.

Foods that fall into this taste group are:

- Grains – Rice, wheat, corn etc.,
- Nuts & Seeds – Cashews, coconut, almonds etc.,
- Legumes – Black gram, green gram, red lentils, soya, garbanzo beans etc.,
- Vegetables – Sweet potatoes, carrots, beets etc.,
- Eggs & Dairy – Eggs, milk, clarified butter (ghee) etc.,
- Fish & Meat – Salmon, pork, beef etc.,
- Fruits – Mangos, bananas, figs, prunes, melons etc.,
- Seasoning & Spices – Mint, nutmeg, saffron, fennel, basil, bay leaf, vanilla etc.,

Positive effects on body:

- ✓ Balances catabolic (vata) and metabolic (pitta) energies.
- ✓ Aggravates anabolic (kapha) energy.
- ✓ Cools body temperature.
- ✓ Helps building (kapha-anabolic) all the 7 types of tissues (dhatus).
- ✓ Supports lubrication of mucous membrane lining of the internal organs.
- ✓ Provides instant energy.

Excess consumption and negative effects on body:

- ✓ Dampens the digestive fire.
- ✓ Adds to the pre-existing conditions of overweight/obesity.
- ✓ Builds toxic substances in the body

Positive effects on mind:

- ✓ Elevates feelings of joy, pleasure, compassion, sharing, love etc.,
- ✓ Creates soothing effect on mind.

Excess consumption and negative effects on mind:

- ✓ Addictive in nature, increases craving.
- ✓ Causes laziness and excess untimely sleep.

13.2 Sour (Amla)

Sour foods are generally rich in acids such as – ascorbic acid, malic acid, citric acid etc.,

Liking to such foods differ from person to person and also the levels of tolerance too as they immediately trigger salivary secretion in the mouth because of the acidic nature of these foods.

Foods that fall into this taste group are:

- Grains – Doughs made of grains usually for baking bread.
- Vegetables – Tomato (and some pickles made of vegetables)
- Dairy – Yogurt, sour cream, butter, cheese etc.,
- Fruits – Oranges, limes, lemons, Amla (Indian Gooseberry) etc.,
- Seasoning & Spices – Lime juice, lemon juice, tamarind pulp, dried mango powder etc.,
- Others – Fermented foods, alcohol, vinegar etc.,

Positive effects on body:

- ✓ Balances catabolic (vata) energy, enhances body temperature.
- ✓ Aggravates anabolic (kapha) and metabolic (pitta) energies.
- ✓ Helps building (Kapha-anabolic) all the types of tissues (dhatus) except reproductive (shukra).
- ✓ Enhances flow of bile, and promotes liver health.
- ✓ Holds fluid in tissues and also stimulates overall metabolism.
- ✓ Fuels appetite, aids digestion by enhancing digestive enzymes.

Excess consumption and negative effects on body:

- ✓ Erodes tooth enamel and leads to sensitivity.
- ✓ Causes gastric discomfort and excess thirst.
- ✓ Causes itching and congestion through disturbed blood flow.
- ✓ Causes excess heat.
- ✓ Aggravates any pre-existing skin conditions.

Positive effects on mind:

- ✓ Elevates understanding, comprehension, appreciation etc.
- ✓ Awakens the mind and canalizes optimum energy to the brain.

Excess consumption and negative effects on mind:

- ✓ Promotes negative behaviour patterns – Jealousy, criticism etc.,
- ✓ Causes agitation, hyperactivity etc.,

13.3 Pungent (Katu)

Pungent foods are generally spicy and contain volatile aromatic oils resins etc., that trigger instant heat in the mouth.

Spices and herbs contain such pungent taste and the degree of tolerance to such spice dictates the likes and dislikes for such foods.

Foods that fall into this taste group are:

- Vegetables – Ginger, onion, garlic, chillies etc.,
- Seasoning & Spices – Black pepper, red chilli powder, dried ginger powder, cloves, asafoetida etc.,

Positive effects on body:

- ✓ Balances anabolic (kapha) energy.
- ✓ Aggravates catabolic (vata) and metabolic (pitta) energies.
- ✓ Enhances body temperature, in fact it is the hottest of the tastes.
- ✓ Helps better function of blood (rakta) and reproductive (shukra) tissues (dhatus).
- ✓ Enhances blood circulation through vasodilation.
- ✓ Enhances digestive fire and improves digestion, absorption and elimination.
- ✓ Relieves flatulence.
- ✓ Opens up sinuses and clogged channels in the body through its drying action.
- ✓ Clears toxins through sweat and also aids in fat burning.

Excess consumption and negative effects on body:

- ✓ Muscular discomfort.
- ✓ Causes gastric discomfort and excess thirst.
- ✓ Imbalances the nervous system and reproductive system.
- ✓ Causes excess heat.

✓ Aggravates any pre-existing skin conditions.

✓ Worsens hyperacidity.

Positive effects on mind:

✓ Elevates curiosity, concentration, enthusiasm etc.,

Excess consumption and negative effects on mind:

✓ Promotes negative behaviour patterns – anger, rage, envy etc.,

✓ Causes irritability etc.,

13.4 Astringent (Kasaya)

Astringent foods are generally those from leaves, barks of the trees, outer skin of fruits etc., that cause dry, chalky sensation in the mouth.

Foods that fall into this taste group are:

- Fruits – Bananas, apples (with a layer of its inner/outer skin), pomegranate etc.
- Vegetables – Most raw vegetables - Peas, raw carrot, lettuce, broccoli, avocado etc.
- Grains – Rye, wheat etc.
- Meat – Venison etc.
- Seasoning & Spices – Coriander, fennel, parsley, saffron, bay leaf, turmeric etc.

Positive effects on body:

- ✓ Balances anabolic (Kapha) and metabolic (Pitta) energies.
- ✓ Aggravates catabolic (vata) energy.
- ✓ Cools the body.
- ✓ Helps better function of plasma (rasa), blood (rakta), muscles (mamsa) and reproductive (shukra) tissues (dhatus).
- ✓ Enhances vasoconstriction and reduces excess sweating.
- ✓ Enhances nutrient absorption.
- ✓ Promotes elimination of bodily wastes (malas) – Sweat, stools and urine.
- ✓ Helps toning muscles, skin and internal organs.
- ✓ Aids in fat burning.

Excess consumption and negative effects on body:

- ✓ Dampens digestive fire.
- ✓ Causes gastric discomfort and excess thirst.
- ✓ Causes excess weight loss, muscle & joint discomfort etc.
- ✓ Through excess vasoconstriction it causes sluggish circulation of blood and lymph.
- ✓ Results in impaired reproductive function.
- ✓ Worsens any pre-existing conditions related to excess dryness, blockages etc.

Positive effects on mind:

- ✓ Helps in being grounded, composed and stable.

Excess consumption and negative effects on mind:

- ✓ Promotes negative behaviour patterns – fear, anxiousness, rigidity, sadness, nervousness, harshness etc.

13.5 Salty (Lavana)

Salt is an easily identifiable taste which is present in most of the meals that we eat and the most common source of the saltiness is natural salt (from sea etc.).

Foods that fall into this taste group are:

- Vegetables – Seaweed, celery etc.,
- Fish – Tuna and some of the sundried fish.
- Dairy – Cottage cheese.
- Seasoning & Spices – Rock salt, sea salt, table salt etc.,

Positive effects on body:

- ✓ Balances catabolic (vata) energy.
- ✓ Aggravates anabolic (Kapha) and metabolic (Pitta) energies.
- ✓ Mildest of the tastes, helps in maintaining body temperature.
- ✓ Helps better function of plasma (rasa), blood (rakta), muscles (mamsa), and fat (medha) tissues (dhatus).
- ✓ Helps maintain water-electrolyte balance.

- ✓ Supports digestion, absorption and elimination.
- ✓ Supports muscle strength and moistens body.
- ✓ Works as an appetizer and also as an expectorant.

Excess consumption and negative effects on body:

- ✓ It can disturb all the metabolic energies (dhatus – vata, pitta & kapha)
- ✓ Causes electrolyte imbalance and excess fluid retention in the body.
- ✓ Causes thickening and narrowing of the blood vessels.
- ✓ Causes excess heat.
- ✓ Worsens any pre-existing skin imbalances.

Positive effects on mind:

- ✓ Helps in being confident, enthusiastic and courageous.

Excess consumption and negative effects on mind:

- ✓ Promotes negative behaviour patterns – addiction, greed, temptation, irritability, possessiveness etc.

13.6 Bitter (Tikta)

This is the taste which is commonly disliked by almost all of us. But it has significant health benefits for e.g. foods that are bitter are proved to be good for liver health by modern medical science and hence such foods should also be included in the diet.

Foods that fall into this taste group are:

- Vegetables – Bitter gourd etc.
- Seasoning & Spices – fenugreek seeds etc.

Positive effects on body:

- ✓ Balances anabolic (Kapha) and metabolic (Pitta) energies.
- ✓ Aggravates catabolic (vata) energy.
- ✓ Cools the body – it is the coldest of the cooling tastes
- ✓ Helps better function of plasma (rasa), blood (rakta), muscles fat (medha) and reproductive (shukra) tissues (dhatus).
- ✓ Promotes healthy flow of bile and promotes digestive fire.
- ✓ Stimulates appetite and helps cleansing gastrointestinal track.
- ✓ Supports cleansing of liver and blood.
- ✓ Stimulates nervous system.
- ✓ Promotes elimination of bodily wastes (malas) – Sweat, stools and urine.
- ✓ Aids in fat burning and tones muscles and skin.

Excess consumption and negative effects on body:

- ✓ Causes excessive dryness in the mouth.
- ✓ Causes excess cold.
- ✓ Causes a feeling of tissue depletion and excess weight loss.
- ✓ Worsens any pre-existing skin conditions like dryness, roughness etc.

Positive effects on mind:

- ✓ Enhances clarity, introspection, self-realization etc.,

Excess consumption and negative effects on mind:

- ✓ Causes feelings of isolation, loneliness, rejection and cynicism.

14. IMPACT OF NUTRITION ON BEHAVIOURAL QUALITIES/ATTRIBUTES

The food we eat not only influences our body but also our mind and thus our behaviours too. People choose food as per their behaviours or their mood at that moment which in turn influences their behaviour – it's a cyclic phenomenon that calls for a change in food choices to deal with the behavioural issues.

Such behavioural impacts of foods and also the types of foods that are generally chosen by people of each type of behaviour have been specifically discussed in Bhagavad Gita, a holy book of mankind, which is an integral part of the ancient Indian epic – Mahabharata written in 3000 BCE.

Bhagavad Gita

To put things in perspective, before going into the details of this topic it is important to have a high-level overview of the Bhagavad Gita:

Amidst the battle field, when the war was about to begin, Arjuna the great warrior and an ace archer of all times had ambiguity with reference to the war and almost decided to turn back from the battle field with a perspective that war causes only destruction.

He turned to Lord Krishna (a divine incarnation of Lord Vishnu) and asked, what should be his attitude and perspective at that moment. A brief motivational discourse by Lord Krishna to Arjuna reminding him, his duty to fight as a warrior covered various aspects of life including righteousness, desireless action, yoga, self-realization etc., which was later documented by sage Vyasa in 18 chapters containing 700 verses known as the Bhagavad Gita.

Bhagavad Gita verses relevant to this topic have been quoted in this section along with a literary translation and also the best possible explanation on the core preaching in each of those verses.

Three Behavioural Qualities – Tri-Gunas

In the appended verse, Bhagavad Gita says:

Sanskrit Version

*tri-vidhā bhavati śhraddhā dehinām sā svabhāva-jā
sāttvikī rājasī chaiva tāmasī cheti tām śhrīṇu
(Bhagavad Gita – Chapter 17.2)*

Meaning in English

*Every human being is born with innate faith,
which can be of three kinds—sāttvic, rājasic, or tāmasic.*

There are 3 broad categories of behaviours/qualities referred to as faith in the verses known as ‘Gunas’:

- **Sattva** (Mode of Goodness): Knowledge, compassion, forgiveness, harmony, concentration, courage, dedication, serenity etc. that leads a person into the right path.
- **Rajas** (Mode of Passion): Passion, activity, attraction, drive etc. leading to jealousy, hatred, anger, aggression etc.
- **Tamas** (Mode of Ignorance): Ignorance, inertia, laziness, inaction, sleep, delusion etc.

These 3 gunas are in fact basic qualities of physical matter (prakriti) of which we all are made up of and thus they reflect in our health, behaviour, thinking and also diet.

We as humans have one of these as our dominant behaviour in general but the other two also may emerge into dominance at times depending on the circumstances in life.

The interplay of these gunas defines our character and determines the progress of life. Sattva is the path to holistic wellbeing in terms of having a healthy body, peaceful mind and to lead a righteous life with longevity.

Sattva is an ideal behaviour one should aim at and can be cultivated through making the right food choices in addition to practicing yoga, meditation and self-reflection.

A verse from the ancient Indian scripture 'Chhandogya Upanishad' quotes the relation between food choice, mind and behaviour as follows:

Sanskrit Version

*“āhāra śhuddhau sattva śhuddhiḥ”
(Chhāndogya Upaniṣhad -Chapter 7.26.2)*

Meaning in English

“By eating pure food, the mind becomes pure.”

Rajas being a behaviour of action, though required in the day-to-day life to achieve worldly objectives as per need should be well controlled and kept at the level of 'need' without progressing into 'greed'.

Tamas is the cause of most of our miseries disturbing our mental, physical and social wellbeing. Tamas is the negative of all the 3 behaviours (gunas) and it should be our life's endeavour to keep it in check.

Foods that influence variations in these three behaviours/gunas are discussed below:

14.1 Sattvik Foods

In the appended verse, Bhagavad Gita says:

Sanskrit Version

*āyuh-sattva-balārogya-sukha-prīti-vivardhanāḥ
rasyāḥ snigdhaḥ sthirā hṛidyā āhārāḥ sāttvika-priyāḥ
(Bhagavad Gita – Chapter 17.8)*

Meaning in English

“Persons in the mode of goodness prefer foods that promote life span, and increase virtue, strength, health, happiness, and satisfaction. Such foods are juicy, succulent, nourishing, and naturally tasteful.”

As per the above verse, sattva foods promote - longevity (Ayur vivardhana), quality of mind (Sattva vivardhana), immunity & strength (Bala vivardhana), restoration of health (Aarogya vivardhana), pleasure (Sukha vivardhana), sense of satisfaction (Trupti vivardhanam) and feelings of love (Preeti vivardhana).

Sattva foods among the currently available foods include:

- Grains – Wild rice, sprouted barley, millet etc.
- Vegetables – Spinach, kelp, lettuce and many other green leafy vegetables etc.
- Legumes & Beans – Lentils, chickpeas, soya bean, green gram etc.
- Nuts & Seeds – Almonds, cashew, sesame, pumpkin & flax seeds etc.
- Dairy – Whole milk, cottage cheese, yogurt etc.
- Non-Dairy – Almond Milk, coconut milk, seed-based cheese etc.
- Fruits – Fruit juices & fruits like pomegranates, grapes, guava, banana etc.
- Fats & Oils – Ghee (clarified butter), coconut oil, etc.

- Sweeteners – Honey & Jaggery.
- Beverages – Water, fruit juice and non-caffeinated herbal tea.
- Seasoning & Spices – Coriander, turmeric etc.

14.2 Rajasic Foods

In the appended verse, Bhagavad Gita says:

Sanskrit Version

*kaṭv-amlā-lavaṇāty-uṣhṇa- tīkṣhṇa-rūkṣha-vidāhinaḥ
āhārā rājasasyeṣṭhā duḥkha-śhokāmaya-pradāḥ
(Bhagavad Gita – Chapter 17.9)*

Meaning in English

*“Foods that are too bitter, too sour, salty, very hot,
pungent, dry, and full of chillies,
are dear to persons in the mode of passion.
Such foods produce pain, grief, and disease.”*

Rajasic foods are stimulants to body and mind. As per Ayurveda, they are neither considered unhealthy nor too nutritious.

These foods when consumed in right quantities are beneficial for people with more physical activity – farmers, manual labourers, athletes etc.

Rajasic foods help maintain good balance between normal and yogic life.

Most of these foods are generally pungent in taste that stimulate senses and call for action.

Following is some of the examples of such foods:

- Vegetables – Garlic, onion, ginger, chillies, asparagus etc.
- Beverages – Coffee, tea etc.
- Seasoning & Spices – Cumin, black pepper, red chilli powder, etc.

14.3 Tamasic Foods

In the appended verse, Bhagavad Gita says:

Sanskrit Version

*yāta-yāmaṁ gata-rasaṁ pūti paryuṣhitaṁ cha yat
uchchhiṣṭam api chāmedhyaṁ bhojanaṁ tāmāsa-priyam
(Bhagavad Gita – Chapter 17.10)*

Meaning in English

*“Foods that are overcooked, stale, putrid, polluted, and impure
are dear to persons in the mode of ignorance.”*

Tamasic foods cause anger, greed and aggression. These foods cause imbalance in the body and are detrimental to both mind and body. Needless to say, these foods should be avoided.

Tamasic foods include:

- Fish, meat and eggs (these foods if they are organic may be good for the body and may be required for some people depending on their physical activity. But for those who are in the path of enlightenment or self-realization through yogic practices these foods should be avoided).
- Ultra-processed foods – chips, breakfast cereals, microwave meals and many other fast foods.
- Processed sugars – table sugar (sucrose), high fructose corn syrup etc.
- Sugar rich sweet foods – cakes, cookies, candies etc.
- Foods with artificial additives – Emulsifiers, food enhancers, preservatives, artificial colouring etc.
- Deep fried foods – Donuts, fries, wedges etc.
- Alcohol, drugs, cigarettes etc. though not classified as foods should be fully avoided.

15. NUTRITIONAL REGIME AS PER SEASONS AND CLIMATE

Dietary adaptations and lifestyle should be in line with the climatic and seasonal changes to prevent diseases and to maintain optimum health.

In Charaka Samhita, the text of Ayurveda, author Charaka says (in Sanskrit language):

Sanskrit Version

*“Tasya Shitadiya Ahaarbalam Varnascha Vardhate.
Tasyartusatmayam Vaditam Chestaharvyapasrayam”*

Meaning in English

One's' diet (of various types) leads to promotion of strength and complexion only if he knows the wholesomeness according to (different) seasons dependent on behaviour and diet.

Considering the importance of dietary adaptations according to the seasons, Ayurveda has prescribed a set of rules called 'Ritucharya'. 'Ritu' meaning season and 'charya' being the regime to be followed.

15.1 Seasons

The year is divided into 6 seasons (Ritus) according to the climatic changes.

- Late-Winter (Shishira)
- Spring (Vasanta)
- Summer (Grishma)
- Monsoon (Varsha)
- Autumn (Sharad)
- Pre-Winter (Hemanta)

As per the direction of the Sun's movement on the celestial hemisphere, these 6 seasons are further grouped into two Solstices (Ayana)

- Northern Solstice (Uttarayana) and
- Solstice Southern (Dakshinayana).

Solstice (Ayana)	Season (Ritu)	Months
Northern/Summer (Uttarayana/ Adan)	Late-Winter (Shishira)	Mid January to Mid March
	Spring (Vasanta)	Mid March to Mid May
	Summer (Grishma)	Mid May to Mid July
Southern/Winter (Dakshinayana/Visarga)	Monsoon (Varsha)	Mid July to Mid September
	Autumn (Sharad)	Mid September to Mid November
	Pre-Winter (Hemanta)	Mid November to Mid January

Compiled by: Venkata L.N Kamaraju

Ayurveda further says that just like the seasons in a year, each day in a year too represents different seasons during specific times of the day as follows:

- Features of *Pre-Winter* (Hemanta) are seen in the early morning time (Pratyusha).
- Features of *Spring* (Vasanta) are seen in the morning time (Purvahna).
- Features of *Summer* (Grishma) are seen in the afternoon time (Madhyahna).
- Features of *Late-Winter* (Shishira) are seen in the mid-day (Aparahna).
- Features of *Monsoon* (Varsha) are seen in the evening time (Pradosha).
- Features of *Autumn* (Sharad) are seen in the midnight (Madhya Ratri).

15.2 Seasons and The Digestive Fire

Changes in climate has an impact on the digestive fire of the individuals due to the result of the sun dominant northern solstice and the moon dominant southern solstice.

While a detailed nutritional intervention as per the seasons is described in the next sections, appended is a high-level view of food choices as per taste that are advisable for each season.

Solstice (Ayana)	Season (Ritu)	Intensity of Digestive Fire	Nutritional Intervention As per The Basic Tastes Of Foods
Northern/Summer (Uttarayana/ Adan)	Late-Winter (Shishira)	Very Good	Sour (Amla)
	Spring (Vasanta)	Moderate	Bitter (Tikta), Pungent (Katu) & Astringent (Kasaya)
	Summer (Grishma)	Mild	Sweet (Madhura)
Southern/Winter (Dakshinayana/Visarga)	Monsoon (Varsha)	Mild	Sweet (Madhura), Salty (Lavana) & Sour (Amla)
	Autumn (Sharad)	Moderate	Sweet (Madhura) & Bitter (Tikta)
	Pre-Winter (Hemanta)	Very Good	Sweet (Madhura), Sour (Amla) & Salty (Lavana)

Compiled by: Venkata L.N Kamaraju

Ayurveda recommends that the type of diet and lifestyle to be followed should be opposite to the properties of the surroundings and the seasons to preserve health and prevent diseases as discussed below:

15.3 Pre-Winter (Hemanta) – Nutrition and Lifestyle

Characteristics of the season:

As per the Charaka Samhita Ayurvedic text, the following verse explains that the digestive power is very good during this season.

Sanskrit Version

*shite shitanilasparsasha mruddho balinam bali
pakta bhavati hemante matradravyagurukshamah*

Meaning in English

During pre-winter due to the contact of cold wind, the digestive power of healthy individuals gets trapped in the body and becomes more and more powerful to digest foods that are inherently heavy and excess in quantity.

Diet:

- Foods that should be consumed include:
 - ✓ Tastes – Sour, salty and sweet.
 - ✓ Qualities - Heavy to digest and unctuous food.
 - ✓ Food groups etc. - new rice and wheat i.e. grains that are not aged after harvest, fats and oils, black gram and its products, milk and its products, sugarcane products, warm water, honey, meat of animals that live in marshy lands and in the water, specific types of liquor in moderation etc.
- Foods that should be avoided:
 - ✓ Light to digest hulled grains that are fragmented and all foods that promote catabolic bio-energy (vata).

Specific verses on diet from Ayurveda (Charaka Samhita):

Sanskrit Version

*sa yada nendhanam yuktam labhate dehajam tada
rasam hinastyato vayuh shitah shite prakupyati*

Meaning in English

*When adequate food is not provided to the body,
the prevailing increased digestive power consumes the intrinsic body fluids of the
body. Catabolic bio-energy having cold property gets vitiated in this cold season.*

Sanskrit Version

*tasmattusharasamaye snigdhamlalavanan rasan
audakanupamamsanam medyanamupayojayet*

Meaning in English

*During the period of snowfall, unctuous, sour and salty food items should be
predominantly consumed.
Fatty meat of animals that live in aquatic and marshy habitat should be taken.*

Sanskrit Version

*bileshayanam mamsani prasahanam bhurutani ca
bhakshayenmadiram shidhum madhu canupibennarah*

Meaning in English

*Meat of animals that live in burrows and roasted meat of animals that eat by
snatching the prey should be consumed
followed by drinking of wines and honey (madira and sidhu) is advised.*

Sanskrit Version

gorasanikshuvikrutirvasam tailam navaudanam
hemante~abhyasyatastoyamushnam cayurna hiyate

Meaning in English

A person who is used to consuming milk products, cane sugar products, fats and oils, new rice (i.e., rice that is not aged after harvest) and warm water during pre-winter, enhances his longevity i.e., these help in prevention of diseases and early aging.

Sanskrit Version

varjayedannapanani vatalani laghuni ca
pravatam pramitaharamudamantham himagame

Meaning in English

*At onset of pre-winter intake of food and drinks that vitiate vata (catabolic bio-energy) such as inherently light to digest and intake of diluted gruel should be avoided and should not get exposed to strong winds.
Eating inadequate quantities of food, should also be avoided.*

Lifestyle:

- To be followed:
 - ✓ Protection from cold by warm clothes and beddings, living in warm house, regular use of shoes, bathing with warm water, therapeutic massage, physical exercise, exposing body to sun light, sexual intercourse etc.

- To be avoided:
 - ✓ Sleeping during day time and direct exposure to cold winds.
- **Specific verses on lifestyle from Ayurveda (Charaka Samhita):**

Sanskrit Version

abhya~ggotsadanam murdhni tailam jentakamatapam
bhajedbhumigruham coshnamushnam garbhagruham tatha

Meaning in English

During pre-winter – massage, anointing oil on the head, fomentation by jentaka (a type of fomentation/sudation) method, sunbath, spending time in hot underground houses and warmer inner rooms of the house are recommended.

15.4 Late-Winter (Shishira) – Nutrition and Lifestyle

Characteristics of the season:

Late winter is almost similar to pre-winter, with late winter being much colder & dry, with wind chills and rains as mentioned in the following verse of Ayurveda (Charaka Samhita).

Sanskrit Version

hemantashishirau tulyau shishire~alpam visheshanam
rauakshyamadanajam shitam meghamarutavarshajam

Meaning in English

Pre-winter and late-winter seasons are almost similar in characteristics but late-winter has some specific additional characteristics.

In this late-winter, due to clouds, winds and rain, dryness increases and cold prevails.

Diet and lifestyle prescribed for pre-winter and late winter are similar, but additionally the following should be followed.

Diet:

- Avoid eating
 - ✓ Foods that taste - pungent, bitter or astringent.
 - ✓ Foods that are – light to digest, cold, foods/drinks that promote catabolic bio-energy (vata).

Specific verses on diet from Ayurveda (Charaka Samhita):

Sanskrit Version

*katutiktakashayani vatalani laghuni ca
varjayedannapanani shishire shitalani ca*

Meaning in English

In the late-winter, food and drinks that are predominantly pungent, bitter and astringent in taste, catabolic vitiating, and inherently light to digest and cold in properties should be avoided.

Lifestyle:

Living in warm interiors of the house should be preferred avoiding exposure to direct wind.

Sanskrit Version

*tasmaddhaimantikah sarvah shishire vidhirishyate
nivatamushnam tvadhikam shishire gruhamashrayet*

Meaning in English

*Lifestyle advised for pre-winter should also be followed in late-winter too.
Additionally, one should stay in less windy and warm shelters (homes).*

15.5 Spring (Vasanta) – Nutrition and Lifestyle

Characteristics of the season:

During the spring which follows late-winter, the digestive power gets disturbed due to liquification of mucous that was accumulated during winter which can potentially cause diseases as mentioned in the following verse of Ayurveda (Charaka Samhita).

Sanskrit Version

*vasante nicitah shleshma dinakrudbhabhiriritah
kayagnim badhate rogamstatah prakurute bahun*

Meaning in English

*Mucous accumulated in winter gets liquefied by hot Sun rays in Spring,
disturbing/decreasing the digestive power giving rise to many diseases.*

Diet:

- Foods that should be consumed include:
 - ✓ Tastes – Astringent, pungent and bitter.
 - ✓ Qualities – Hot foods that are light to digest and unctuous food.
 - ✓ Food groups etc. - old rice, barley and wheat, grains aged after harvest, water medicated with ginger, black cutch leaves (acacia catechu linn), coco-grass (cyperus rotundus linn), honey, meat of terrestrial animals, specific types of liquor in moderation etc.

- Foods that should be avoided:
 - ✓ Heavy to digest foods (including excess fats), cold foods/drinks and curd/yogurt.

Specific verses on diet from Ayurveda (Charaka Samhita):**Sanskrit Version**

*tasmadvasante karmani vamanadini karayet
gurvamlasnigdhamadhuram divasvapnam ca varjayet*

Meaning in English

During spring purifications procedures such as therapeutic emesis should be done.

Sleeping during the day time and consuming heavy to digest, sour, unctuous and sweet food items should be avoided.

Sanskrit Version

*candanagurudigdha~ggo yavagodhumabhojanah
sharabham shashamaineyam mamsam lavakapi~jjalam*

Meaning in English

Applying pastes of sandalwood and eagle-wood on the body should be considered.

*One should consume food made up of barley and wheat, meat of
antelope, rabbit, elk/large red deer, common quail grey partridge.*

Lifestyle:

- To be followed:
 - ✓ Medicated gargling, application of collyrium to the eyes, inhaling smoke of medicated herbs, applying pastes of sandalwood /agarwood on the body, therapeutic emesis, sexual intercourse etc.

- To be avoided:
 - ✓ Exposure to direct sunlight, sleeping during day time and sleeping under the dew.

Specific verses on lifestyle from Ayurveda (Charaka Samhita):

Sanskrit Version

*vyayamodvartanam dhumam kavalagrahama~jjanam
sukhambuna shaucavidhim shilayet kusumagame*

Meaning in English

At the advent of spring when flowers blossom one should resort to regular physical exercise, dry massage, gargling, medicated smoking, and collyrium. Bathing and cleaning of excretory orifices should be done with lukewarm water.

Sanskrit Version

*bhakshayennirgadam sidhum pibenmadhvikameva va
vasante~anubhavet strinam kanananam ca yauvanam*

Meaning in English

During spring one should drink clean alcoholic drinks like - Fermented sugarcane drink, honey-based wines and enjoy the youthfulness of women and of gardens.

15.6 Summer (Grishma) – Nutrition and Lifestyle

Characteristics of the season:

In summer season, excessive heat from the rays of the Sun dries up the environment.

Diet:

- Foods that should be consumed include:
 - ✓ Tastes – Sweet.
 - ✓ Qualities - Light to digest and unctuous food. Cold liquids.
 - ✓ Food groups etc. - rice, sugar, milk and ghee (clarified butter) preparations, red rice and meat of terrestrial animals.

- Foods that should be avoided:
 - ✓ Heavy to digest foods. Salty, sour, pungent tastes. Hot liquids, curd and liquor.

Specific verses on diet from Ayurveda (Charaka Samhita):

Sanskrit Version

*mayukhairjagatah sneham grishme pepiyate ravih
svadu shitam dravam snigdhamannapanam tada hitam*

Meaning in English

During summer season, Sun rays, excessively dries up the environment. So, in this season, unctuous food and drinks having sweet, cold qualities are considered wholesome and healthy.

Sanskrit Version

*shitam sasharkaram mantham ja~ggalanmrugapakshinah
ghrutam payah sashalyannam bhajan grishme na sidati*

Meaning in English

In summer season, those who consume cold and sweet mantha (a type of liquid diet), meat of wild animals and birds, ghee (clarified butter) and milk with red rice do not suffer from diseases.

Sanskrit Version

*madyamalpam na va peyamathava subahudakam
lavanamlakatushnani vyayamam ca vivarjayet*

Meaning in English

*Alcoholic beverages should be consumed in little quantities or should not be
consumed at all, or if taken, should be well diluted with plenty of water.*

*One should not consume salty, sour, pungent and hot food,
and avoid physical exercise.*

Lifestyle:

- To be followed:
 - ✓ Taking a nap during daytime, living/sleeping in cool surroundings, being away from heat, bathing with cold water. Applying pastes of sandalwood, wearing light clothes etc.
- To be avoided:
 - ✓ Sunbath, physical exercise and sexual intercourse.

Specific verses on lifestyle from Ayurveda (Charaka Samhita):

Sanskrit Version

*diva shitagruhe nidram nishi candramshushitale
bhajeccandanadigdha~ggah pravate harmyamastake*

Meaning in English

*During daytime, one should sleep in a cool shelter and during night, apply
sandalwood paste on the body and sleep in the
airy roof/terrace of the house which is cooled by the Moon-rays.*

Sanskrit Version

*vyajanaih panisamsparshaishcandanodakashitalaih
sevyamano bhajedasyam muktamanivibhushitah*

Meaning in English

*One should be seated on a surface decorated with pearl and gems,
using a fan for breeze. A gentle touch on the body with soft hands
cooled with sandal water helps relieve from the excess heat.*

Sanskrit Version

*kananani ca shitani jalani kusumani ca
grishmakale nishaveta maithunadvirato narah*

Meaning in English

*During summer, one should enjoy the coolness of gardens,
flowers and cold water and should avoid sexual intercourse.*

15.7 Rainy Season (Varsha) – Nutrition and Lifestyle

Characteristics of the season:

During rainy season, the digestive power weakens along with weak metabolic energy leading to imbalance in bio-energies causing diseases as mentioned in the following verses of Ayurveda (Charaka Samhita).

Sanskrit Version

adanadurbale dehe pakta bhavati durbalah
sa varshasvaniladinam dushanairbadhyate punah

Meaning in English

*In a weak body, during the period of dehydration, digestive fire is also weak,
and further deteriorates due to vitiated metabolic,
catabolic and anabolic energies during rainy season.*

Sanskrit Version

bhubashpanmeghanisyandat pakadamlajjalasya ca
varshasvagnibale kshine kupyanti pavanadayah

Meaning in English

*In this season, due to rainfall, evaporating vapors from the earth, and acidic
transformation of water, the digestive fire is weakened,
leading to the further vitiation of all the bio energies.*

Diet:

- Foods that should be consumed include:
 - ✓ Tastes – Sweet, sour and salty.
 - ✓ Qualities - unctuous food. Hot liquids.
 - ✓ Food groups etc. - aged rice, barley and wheat. Gruel made of pulses. Sugar. Food and drinks with honey, boiled and cold water. Meat of animals that live in deserts or areas with less rain fall. Specific types of liquor in moderation etc.

- Foods that should be avoided:
 - ✓ Grains without hull and broken into fragments, excess consumption of water, consumption of river water etc.

Specific verses on diet from Ayurveda (Charaka Samhita):

Sanskrit Version

*vyaktamlalavanasneham vatavarshakule~ahani
visheshashite bhoktavyam varshasvanilashantaye*

Meaning in English

*In the rainy season when the days are cooler due to wind and rain,
one should predominantly consume salty, sour and unctuous food to
alleviate catabolic bio-energy.*

Sanskrit Version

*agnisamrakshanavata yavagodhumashalayah
purana ja~ggalairmamsairbhojya yushaishca samskrutaih*

Meaning in English

*To take care of digestive fire one should consume aged barley,
wheat and red rice along with processed soup and meat of wild animals.*

Sanskrit Version

*pibet kshaudranvitam calpam madhvikarishtamambu va
mahendram taptashitam va kaupam sarasameva va*

Meaning in English

*While consuming sweet wines or other fermented liquors and water
a little amount of honey should also be mixed.
Rain water or water from wells or ponds should
be properly boiled and cooled for drinking.*

Life style:

- To be followed:
 - ✓ Living in dry places, wearing light clothes, using flowers and perfume, rubbing palms of both hands one against the other, body massage with herbal paste/powder, purging the bowels etc.
- To be avoided:
 - ✓ Sleeping during the day time, physical exercise, sexual intercourse exposure to – dew, eastern winds, excessive sunlight etc.

Specific verses on lifestyle from Ayurveda (Charaka Samhita):

Sanskrit Version

*pragharshodvartanasnanagandhamalyaparo bhavet
laghushuddhambarah sthanam bhajedakledi varshikam*

Meaning in English

*In the rainy season, friction massage, dry massage, bath, use of fragrance,
garlands, wearing light and clean clothes are advised.
Should reside in the places which are free from humidity.*

Sanskrit Version

tasmat sadharanah sarvo vidhirvarshasu shasyate
udamantham divasvapnamavashyayam nadijalam

vyayamamatapam caiva vyavayam catra varjayet
panabhojanasamskaran prayah kshaudranvitan bhajet

Meaning in English

*During rainy season all basic rules prescribed regarding
diet and lifestyle are to balance all three bio-energies.
One should avoid diluted/excess liquid diet, sleeping during the day,
exposure to dew, river water, sun rays, physical exercise,
and sexual intercourse in this season.*

15.8 Autumn (Sharad) – Nutrition and Lifestyle

Characteristics of the season:

During autumn, the metabolic energy gets aggravated due to sudden change in the climate from cold to hot as mentioned in the following verses of Ayurveda (Charaka Samhita).

Sanskrit Version

varshashitocita~gghanam sahasaivarkarashmibhih
taptanamacitam pittam prayah sharadi kupyati

Meaning in English

*When a body habituated to cold and rain in the preceding seasons
is suddenly exposed to the Sun's heat in the autumn season,
the accumulated metabolic bio-energy in the body often gets aggravated.*

Diet:

- Foods that should be consumed include:
 - ✓ Tastes – Sweet and bitter.
 - ✓ Qualities – Foods that are light to digest. Foods that are rough and cold.
 - ✓ Food groups etc. - Wheat, barley, green gram, sugar, milk, sugarcane, ghee (clarified butter) mixed with bitter medicated herbs, river water, rain water, meat of animals that live in deserts or areas with less rain fall.
- Foods that should be avoided:
 - ✓ Sour, pungent, sharp, hot/dry, oils/fats, curd/yogurt, ginger, meat of animals with aquatic or marshy land habitat, liquor.

Specific verses on diet from Ayurveda (Charaka Samhita):**Sanskrit Version**

*tatrannapanam madhuram laghu shitam satiktakam
pittaprashamanam sevyam matraya supraka~gkshitaih*

Meaning in English

During autumn food and drinks that are predominantly of sweet, light, cold and slightly bitter and all those foods that alleviate having metabolic bio-energy should be taken in appropriate quantity, only when there is good hunger.

Sanskrit Version

*lavan kapi~jjalanenanurabhra~jcharabhan shashan
shalin sayavagodhuman sevyanahurghanatyaye*

Meaning in English

During autumn, the meat of antelope, sheep, common quail, grey partridge, elk and rabbit, red rice, barley and wheat should be taken.

Sanskrit Version

*tiktasya sarpishah panam vireko raktamokshanam
dharadharatyaye karyamatapasya ca varjanam*

Meaning in English

During autumn, when the clouds disappear, consumption of ghee (clarified butter) medicated with bitter items, use of purgatives, and blood-letting are prescribed.

Sanskrit Version

*vasam tailamavashyayamaudakanupamamisham
ksharam dadhi divasvapnam pragvatam catra varjayet*

Meaning in English

*During autumn exposure to Sun, intake of muscle fats and oils, exposure to dew, meat of aquatic and marshy animals, alkaline preparations, and curd/yogurt are to be avoided.
Sleep during daytime and exposure to eastern winds should also be avoided.*

Sanskrit Version

diva suryamshusantaptam nishi candramshushitalam

kalena pakvam nirdoshamagastyenavishikrutam

hamsodakamiti khyatam sharadam vimalam shuci

snanapanavagaheshu hitamambu yatha~amrutam

Meaning in English

Water naturally heated with sunrays during daytime and cooled with moon rays during night, well purified by the course of time and detoxified by the effects of the Canopus star (known as Hamsodaka) available during autumn is clean and clear.

This water is beneficial as nectar when used as drinking water or for bathing.

Life style:

- To be followed:
 - ✓ Therapeutic purgation & bloodletting, wearing pearls, flowers, clean clothes, exposure to moon light etc.
- To be avoided:
 - ✓ Sleeping during the day time, physical exercise, exposure to – dew, eastern winds, excessive sunlight etc.

Specific verses on lifestyle from Ayurveda (Charaka Samhita):

Sanskrit Version

*sharadani ca malyani vasamsi vimalani ca
sharatkale prashasyante pradoshe cendurashmayah*

Meaning in English

*During autumn, garlands of seasonal flowers, clean clothes,
and exposure to moon light in early nights are highly beneficial.*

16. FASTING IN INDIAN CULTURE

Fasting, a wilful abstention from food/drink for a certain period of time has been prescribed by most religions in the world. In India, followers of Sanatanadharm (known as Hindu religion), practice various fasting regimes all through the year, popularly known as Vrat, Viradham or Upavasa based on the lunar calendar. The literary meaning of 'Upavasa' is 'to sit or stay near (the Lord)' i.e. to keep the Lord close to your heart and mind.

Origins of such fasting practices can be traced back to ancient Indian scriptures like the Vedas and Puranas. Ayurveda too prescribes several fasting techniques like Sajalaupavasa (fasting by consuming only water for a certain period) and Nirjalaupavasa (complete fasting without food or water) for cleansing metabolic toxins and rejuvenating the body. This is termed as Langana in Ayurveda.

One of the 18 Puranas (ancient Indian scriptures), Srimad-Bhagavatam (7.12.23) quotes the words of Lord Sri Krishna as follows:

Sanskrit Version

yadākalpaḥ sva-kriyāyām

vyādhibhir jarayāthavā

ānvīkṣikyām vā vidyāyām

kuryād anaśanādikam

Meaning in English

*When because of disease or old age one is unable to perform
his prescribed duties for advancement in
spiritual consciousness or study of the Vedas,
he should practice fasting, not taking any food.*

Depending on the region, customs and beliefs, people in India adopt various fasting methods like skipping a meal, eating only one meal a day for a specified number of days, usually 30 or 48 days . Sometimes, methods of fasting involve sustaining on vegan diets or fruit diets during certain months.

Though these fasting practices are followed for religious or spiritual reasons, one of the main reasons for prescribing such practices is for the enhancement of health, wellbeing and longevity.

When it comes to health, fasting is a very effective tool to prevent and even cure many diseases as confirmed by modern medical sciences too. In this context, it is pertinent to refer to the Nobel prize awarded to Dr. Yoshinori Ohsumi in Physiology or Medicine on October 3, 2016, for his work 'Discoveries of The Mechanisms For Autophagy'.

Autophagy (literary meaning – self eating) is our own bodies process of reusing/consuming old and damaged cells and cell parts which is triggered by fasting for 12+ to 24+ hours. The benefits of autophagy triggered through therapeutic fasting include - improved blood sugar control, weight loss, improved brain function, organellar remodelling, protein and organelle quality control, prevention of genotoxic stress, tumour suppression, pathogen elimination, regulation of immunity and inflammation, maternal DNA inheritance, cellular survival etc.

Though there are various forms of fasting followed in India, appended are only some of those. In actual practice, they may differ from region to region, a broader description of those fasts are provided in this section. Donating clothes and food to the needy is also a practice followed by many along with the fasting; thus contributing to the social cause while enhancing health and spiritual awakening.

16.1 Fasting During Normal Days

Monday Fast (Somvar Vrat)

Somvar is Monday. This fast is done for 16 consecutive Mondays starting from the 1st Monday of the waxing moon phase of any of the lunar months - Chaitra (March/April), Vaishaka (April/May), Jyeshtha (May/June), Shraavan (July/August), Kartika (October/November) or Margaseersha (November/December).

It is actually a full day fast (water only), but those who cannot fast due to health reasons can consume fruits, milk, curd, buttermilk or foods made of sago palm (Sabo dana).

Tuesday Fast (Mangalvar Vrat)

Mangalvar is Tuesday, this fasting is done for 21 consecutive Tuesdays starting from the 1st Tuesday of the waxing moon phase during the lunar months when the Sun is in the Northern solstice phase of the year (mid-January to mid-July).

It is actually a full day fast (water only), but those who cannot fast due to health reasons can consume fruits and food prepared with wheat and jaggary (cane sugar).

Wednesday Fast (Budhvar Vrat)

Budhvar is Wednesday, this fasting is done for a minimum of 21 consecutive Wednesdays for 3 consecutive years starting from the 1st Wednesday of the waxing moon phase of any lunar month. The observer of the fast can consume fruits, fruit juices, water and moderate quantities of prashad (food that is offered to the God during prayers). It's typically a fruit (and water) only fasting.

Thursday Fast (Guruvar Vrat)

Guruvar is Thursday, this fasting is done for 16 consecutive Thursdays for 3 consecutive years (except in the Pushya lunar month i.e. December/January) starting from the 1st Thursday of the waxing moon phase of any lunar month.

This fasting can either be for the entire day or one meal in a day. The meal should include yellow-coloured fruits and gram flour. Eatables with salt are avoided.

Friday Fast (Shukravar Vrat)

Shukravar is Friday, this fasting is done for 16 consecutive Fridays from the 1st Friday of the waxing moon phase of any lunar month.

Fasting period is typically through the entire day and breaking the fast happens in the evening, accounting for around 20 + hours of fast counted from the meal that was consumed on the evening of previous day. While breaking the fast, jaggary and fried black chickpeas are consumed along with the meal and sour foods are avoided.

Saturday Fast (Shanivar Vrat)

Shanivar is Saturday, depending on the traditional practices/health conditions people either fast for 24 hrs or will have only one meal. This fasting is done for 11 to 51 consecutive Saturdays starting from the 1st Saturday of the waxing moon phase of any lunar month. From the religious belief perspective, this type of fasting pleases Lord Shani (Saturn) and drives away all the ill happenings in life.

Sunday Fast (Ravivar Vrat)

Ravivar is Sunday, this fasting is done to please the Lord Sun who is considered as the Lord of health, thus promoting the importance of Sun exposure for the prevention and cure of many diseases – for example, enhancing vitamin D, curing skin, eye, hair and bone related ailments, alleviating depression, boosting immunity etc.

This 24 hours fasting is done for 12 to 30 consecutive Sundays starting from the 1st Sunday of the waxing moon phase of the lunar month Ashwin (September/ October). Fast will end before the sunset by having food without salt and oils.

16.2 Fasting on Auspicious Days

Shravan Somvar Vrat

Shravan is the name of 5th lunar month (October/November) and Somvar is Monday hence this fasting is practiced on all the Mondays during the month.

Fasting period is typically through the entire day and breaking the fast happens after the prayers are offered to Lord Shiva in the evening, accounting for around 20 + hours of fast counted from the meal that was consumed on the evening of previous day.

During the eating window i.e. after breaking the fast in the evening, foods that are sattvic in nature such as fruits, curd/yogurt, bland food without spice/salt etc. are

consumed. In fact during the entire month it is a common practice to refrain from meat, fish and eggs.

Masik Shivratri

Masik refers to month, Shiv is the God Shiva and ratri is night – fourteenth day of waning moon phase i.e. a day before new moon day of every month is considered as Masik Shivratri.

Full day fasting (water only) is observed through the day till the lunar calendar turns to the new moon day i.e. generally till mid night and repeated on the same lunar day of each of the 12 months in the year. Additionally, some people perform a 'Jagran' (an all-night vigil) especially on the Maha Shivratri that comes in February/March.

Purnima

Purnima is a full moon day; people observe fasting every month during this day.

This is a full day fasting (water only); waxing and waning of moon has certain effects on physical/mental health impacting the behaviour, mood changes, etc. Fasting during these days bring many health benefits and prevent diseases.

Amavasya

Amavasya is a new moon day i.e. the end of waning period. Fasting during this day also brings health benefits as it is also dependent on the moon cycle just as in Purnima fasting mentioned above. More specifically, as the physical and mental state are imbalanced during these days, fasting helps in maintaining the balance.

Additionally, people refrain from eating Tamasic foods – meat, fish, egg etc. as the low gravitational force of the moon impacts the digestive capacity of such foods.

Pradosh

Pradosh is the evening twilight time which starts 90 minutes before sunset and lasts up to 60 minutes after sunset. This kind of fasting is observed on the 13th lunar calendar day of every month. There are two ways to observe this fast – one way is to fast for 24 hrs i.e. from the sunrise to sunrise of the next day without even sleeping in the night or from the sunrise to the sunset of the same day.

Breaking the fast will be with fresh food – generally fruits and raw vegetable salads followed by a sattvic meal like curd with potatoes, salt and ghee; boiled sweet potato etc.

Ekadashi

Ekadashi is the 11th day in a lunar month which occurs twice in a lunar month (one before a new moon day and one before a full moon day). Thus each year will have 24 such days; additionally once in 3 years because of the 28+ days moon cycle there will be one additional lunar month (called Adhika lunar month) with yet again 2 Ekadashi days.

Ekadashi fasting is considered most auspicious from religious/spiritual perspective. People fast for the full day. There are specific guidelines on what to eat and what not to eat after breaking the fast (or for those who need to eat some food while partially fasting due to health reasons) during each of these 24 days in the year (plus the additional 2 days once in 3 years due to Adhika month) as detailed below.

Lunar Month	Eating Guidelines
Chaitra (March/April)	Only milk, fruits/juices are allowed. Vegetables either raw or cooked are not allowed.
Vaishaka (April/May)	One meal without any tamsic food like garlic/onion is allowed and the fast is broken the next day morning.
Jyeshtha (May/June)	Waterless fasting - few drops of water are allowed to be consumed before sunset.
Ashaada (June/July)	Saltless sattvic food is allowed.
Shraavana (July/August)	One meal in the afternoon is allowed without grains and beans.
Bhadrapada (August/September)	Fruits, diary and dry fruits are allowed after the evening prayers.
Asvin (September/October)	Water only fasting.
Kartik (October/November)	Fruits and diary products are allowed.
Margashirsha (November/December)	Milk, water, fruits and sweets are allowed.
Pushya (December/January)	Milk, water and fruits are allowed.
Magha (January/February)	Fruits are allowed.
Phalguna (February/March)	Fruits, milk, potatoes, nuts, blackpepper and rock salt are allowed.
Adhika (once in 3 years)	Fruits and diary products are allowed.

Compiled by: Venkata L.N Kamaraju

17. AYURVEDIC HOME REMEDIES

As described in the previous chapters, through proper food habits one can enjoy absolute health and be disease free; but in case of any reason when common diseases either acute or chronic occur, Ayurveda prescribes simple remedies from the foods that are readily available in and around our kitchen.

These remedies are safe without any side effects, economic and readily available too. Though there are many such remedies following are some of such foods that can be used as medicine.

TULSI - Holy Basil Leaves (*Ocimum Sanctum*)

- **Cough/ Cold** - 5-10 ml. juice twice or thrice a day with honey.
- **Fever** - 30 ml. decoction from handful of leaves with 5 gm of Dhania (*Conundrum sativum* Linn) powder thrice a day.
- **Skin allergy** - 5-10 ml. juice twice or thrice daily.
- **Indigestion/ Loss of appetite** - 5-10 ml. juice twice or thrice daily.
- **Greying of hair** - Coconut oil processed with Tulsi juice for regular application on hair/scalp.
- **Wound/ulcer** – External application of juice mixed with honey & Haldi (*Curcuma longa* Linn) powder for application.
- **Ear pain** (without any discharge) - 2-3 Luke warm drops of Tulsi juice 2 times daily.

Haldi - Turmeric (*Curcuma Longa* Linn)

- **Diabetes** - 10 ml. fresh juice with 10 ml. juice of Amla (*Emblica officinalis* Gaertn) twice daily.
- **Acne** - Application of turmeric paste to the effected part twice a day. Application of turmeric with water, milk or cream on face gives glow to the skin & also removes unwanted hair if used regularly.
- **Cold** - 2 gm. powder with warm milk and sugar twice a day. Decoction of 1 gm. Turmeric powder or use of turmeric herbal tea prevents all allergic problems.
- **Wound/ulcer/ skin disease** - To be washed with decoction of turmeric & paste of turmeric should be applied. Paste made by mixing with Ghee/coconut oil should be applied over affected part.
- **Skin allergy** - 1-3 gm. powder should be taken with jaggery twice a day.

Amla (*Emblica Officinalis* Gaertn)

- **Hyper Acidity/ Peptic Ulcer/ Constipation** - 3-5 gm. powered fruit rind twice a day with milk. or 10-20 ml. fruit juice twice a day. or 3-5 gm. powered fruit rind twice a day with milk (Even raw Amla can be eaten).
- **Stress** - External application of 25-50 gm. of fruit rind ground in butter milk on the forehead.
- **Diabetes** - 10-20 m fruit juice with 10-20 ml. juice of fresh rhizome of turmeric twice a day.
- **Greying of Hair / Hair fall / Dandruff** - Fruit rind soaked overnight in water for application on scalp two hours before bath or paste prepared from fruit rind should be applied two hours before bath. 1-2 fresh fruits eaten every morning prevents hair fall & early greying.
- **Bleeding gums** - Fine powder should be gently massaged to gums after brushing at least twice a day regularly.

Dalchini - Cinnamon (Cinnamomum Zeylamcum Blume)

- **Indigestion** - 2 gm. powder of bark with water twice a day.
- **Loss of Appetite** - 2 gm. powder of equal parts of Cinnamon and Ajvain (ajowan caraway) for chewing in three divided doses before food.
- **Vomiting** - 1-2 gm. powder with honey thrice a day in divided doses.
- **Headache due to stress** – Paste prepared by rubbing the bark on a rough surface (with little water) and applied to fore head.
- **Mental tension** - The aroma has soothing action on mind. Crushed pieces may be kept in hanky or near the pillow.
- **Dry cough** - Chewing controls the throat irritation and helps in dry cough.

Dhania - Coriander seeds (Conundrum Sativum Linn)

- **Cold/ Cough** - 20 ml. decoction prepared from 5 gm. coarse powder with sugar and turmeric powder thrice a day. or use of dhania powder as herbal tea every morning prevents cold, cough & digestive issues.
- **Intestinal worms** - 3-5 gm. powder with jaggery twice a day for 5 days.
- **Sunstroke/ Dehydration** - 20 ml. decoction prepared from coarse powder with sugar and a pinch of salt frequently.
- **Indigestion** - 20 ml. decoction prepared from 5 gm. coarse powder with a pinch of ginger powder thrice a day.
- **Fever** - 20 ml. decoction from 5 gm. powder with sugar 3-4 times a day.

Ghee (Clarified Butter)

- **Ulcer/ Wounds/ Bums** - Application over affected part frequently.
- **Loss of Appetite** - With Hing (Asafoetida) and Jeer (cumin) a powder with food.
- **Memory** - Use of ghee every day in children improves memory.
- **Constipation** - 5 ml. ghee put in a cup of warm milk should be taken with sugar at bed time.

Elaichi - Cardamom (Elettaria Cardamomum)

- **Hiccups** - 1-2 to be chewed frequently (not more than 4/day).
- **Vomiting** - 250-500 gm. powder of seeds fried in ghee thrice daily with honey.
- **Bad breath** - 1-2 seeds to be chewed frequently (not more than 4/ day).
- **Diarrhoea/Vomiting** - Ash of the Elaichi skin 2 gm. with a little honey 4-5 times a day.
- **Cough** - Little elaichi powder with a tea spoon full of honey 3-4 times day. Even chewing elaichi (Not more than 3 per day) frequently is helpful in dry as well as productive cough.

Jeera - Cumin (Cuminum Cyminum Linn)

- **Indigestion** - 3-6 gm. powder of fried Jeera and rock-salt with warm water thrice daily.
- **Diarrhoea/Dysentery** - 1-2 gm. powder of fried jeera with 250 ml. butter milk four times daily.
- **Hyper-acidity** - 5-10 gm. ghee boiled with jeera should be taken with rice during meals.
- **Skin disease** - 1-2 gm. powder of fried jeera with milk twice daily.
- **Cold** - Warm decoction of 2 gm. jeera, 5 gm. Dhania (Coriander seeds), 1 gm. Haldi (turmeric), 1 gm. Methi powder (Fenugreek) and little pepper should be taken with honey/ sugar and lemon two to three times.
- **Cough** - Either decoction as mentioned above or chewing few grains frequently helps in dry as well as productive cough.

Kalimirch - Black Pepper (Piper Nigrum Linn)

- **Cough** - 1 gm. powder of seeds with ghee and honey twice daily.
- **Skin diseases** - little powder with coconut oil for local application.
- **Hoarseness of voice** - 1-2 gm. powder of seed fried with ghee twice daily, to be kept in mouth.
- **Hiccups** - 1-2 gm. powder of seeds with sugar twice daily.
- **Indigestion** - A pinch of powder with a piece of crushed ginger & rock salt should be taken before meal.
- **Loss of appetite** - A pinch of powder with 2 tea spoon full of lemon juice with water 2 hour before food.
- **Bleeding gums/ tartar/ bad breath** - Pinch of powder mixed with honey should be applied to gums after gargling with warm salt water twice a day.

Madhu - Honey

- **Obesity** - One teaspoon with glass of water in the morning.
- **Loss Appetite** - With a pinch of pepper powder three to four times a day .
- **Cough** - With a pinch of powder of Laung (cloves) three to four times.
- **Wounds/Ulcer/Bum** - Honey and ghee should be mixed and applied.
- **Pyorrhoea/ (Bleeding gums)** - Apply mixture of ginger, pepper, rock salt, honey & Ghee to the gums twice a day.
- **Skin Glow** - Application of honey gives glow to the skin.

Lahsun/Garlic (Allium Sativum Linn)

- **Ear pain (without discharge)** - 2-4 drops of warm fresh juice for instillation in ear twice a day or little paste boiled in coconut or mustard oil should be filled in ear 2-3 time a day.
- **Flatulence** - 6 ml. juice with honey twice a day.
- **Gough/ Gold** - Crushed bulb boiled in water is to be taken with sugar.

- **Joint pain** - 5 gm paste of bulb with honey or with food twice a day. Warm paste mixed in any oil should be applied over the joint

Nimbu - Lemon (Citrus Limon Linn)

- **Indigestion** - 5-10 ml. juice with a pinch of salt and pepper before food.
- **Dehydration/ sun stroke** - One lemon squeezed into a glass of water mixed with salt and sugar.
- **Bleeding gums** - The fruit skin should be crushed & rubbed gently twice a day regularly to the gums.
- **Loss of appetite** - 5 ml. juice with salt and a pinch of pepper before meals.
- **Hair fall** - Coconut oil processed with the fruit skin dried & powdered.
- **Vomiting** - 5-10 ml juice mixed with water, sugar and a pinch of salt frequently in small quantities.

18. HOLISTIC WELLBEING

As mentioned in the earlier sections, right food choices and eating habits result in healthy physiology and also promote physical and emotional wellbeing to a large extent. To achieve absolute and complete wellbeing in terms of not only having a healthy physiology but also to have an agile body and a sound mind, one should practice the principles of Yoga.

'Yoga' is a Sanskrit word which means 'to unite' mind, body and spirit to ultimately aim at uniting individual consciousness with the universal consciousness to reach a state of everlasting bliss known as 'Ananda' in Sanskrit.

Hence, for those who realize that the 'sole' purpose of human life is to understand the 'soul' purpose which is 'moksha (salvation)' or in other words, liberation from the birth and rebirth cycle, one may choose to achieve it by any of the below detailed 4 paths as per their individual preferences and goals.

Jnana Yoga

'Jnana' is knowledge or wisdom. It is not about worldly knowledge or wisdom, it's about uncovering the ultimate truth through deep self-enquiry, meditation and detachment. At the pinnacle of this practice, the illusion of a 'separate self' dissolves with the knowledge of 'Advaita' (non-duality) i.e. realising that the inner self/spirit is the same as universal consciousness (absolute reality) and there are 'no two'. Though a challenging means of spiritual development, this is considered to be the most direct path.

Karma Yoga

'Karma' is the result of a person's actions as well as the actions themselves. In this context it is 'Nishphalapeksha Karma' i.e. serving others without expecting any return which results in purifying the heart and taking the individual further along the path of spiritual evolution.

Bhakti Yoga

'Bhakti' is derived from a Sanskrit word 'Bhaj' which means 'to serve God'. Bhakti Yoga is about recognizing God in every living and non-living thing and selfless devotion to the divine. This is practiced through rituals, chanting etc. by devoting one's self to the divine in everything thus achieving a state of oneness with the universal consciousness.

Raja Yoga

'Raja' means King or Royal and hence Raja Yoga is also known as a 'royal path'. It is about harmonizing and balancing all the three dimensions of human existence – physical, mental and spiritual. Raja yogis achieve such balance and harmony through meditation, pranayama (breathing control) and asanas (poses) to channelize mental and physical energies into spiritual energy.

18.1 Ashtanga Yoga (Eight Limbs of Yoga)

Patanjali Yoga Sutra is a classic ancient Indian text written by sage Patanjali. According to this, Raja Yoga has eight limbs which provide a sequential and step-wise learning curve to the practitioners with an ultimate aim to reach the state of absolute bliss through the union of individual and universal consciousness.

Ashtanga yoga is a path of transformation, as mentioned in the earlier sections, food is just not that we eat or drink through our mouth (referred to as Anna), when it comes to absolute health it also includes all the inputs we receive (referred to as Aahara)

through our sense organs – smell, taste, touch, vision and the sounds that we hear. The sequential steps of ashtanga yoga starts from outwards to inwards i.e. from the social to physical, emotional and spiritual as detailed below.

Yama

These are the five disciplines or restraints as follows with reference to our interactions with the world around us.

- **Non-violence (Ahimsa):** Not harming any living creature through practice of compassion and kindness.
- **Non-falsehood (Satya):** Speaking only truth and not hiding truth.
- **Non-stealing (Asteya):** Not taking anything that does not belong to us.
- **Chastity (Brahmacharya):** Marital fidelity – having integrity in relationship.
- **Non-hoarding (Aparigraha):** Taking what is necessary and not exploiting others through greed.

Niyama

These are 5 disciplines with reference to the way we should act with ourselves.

- **Purity (Saucha):** Purity of mind, speech and body.
- **Contentment (Santosh):** Contentment with one's self and the circumstances with an optimistic outlook.
- **Self-discipline (Tapas):** Self-discipline, perseverance and persistence.
- **Self-reflection (Svadyaya):** Self introspection of thoughts, speech and actions.
- **Devotion to higher power (Iswara-pranidhana):** Contemplation of and devotion to the supreme power/God.

Asana

The literal meaning of Asana is 'take a seat'. In the context of ashtanga yoga it is about sitting in an appropriate and comfortable position so that one can steadily be in that posture motionless for a long period of time while practicing meditation.

This is normally achieved through daily practice of various physical yogic postures to train the body for endurance of such long duration postures.

Such practice of yoga postures not only helps in having a flexible and healthy body but also helps as a tool to achieve higher purpose of life as one progress through the path of ashtanga yoga.

Pranayama

Pranayama is defined by Patanjali as the 'controlled intake and outflow of breath in a firmly established posture'. It is the ability to regulate inhalation and exhalation as well as the pauses between breath.

This is done in several ways with variation in number of breaths as well as the length and pace of breath. Having control over breath not only helps in healthy physiological processes but also aids in controlling the mind.

Pratyahara

Pratyahara is wilful withdrawal of senses from the external world and practicing inward travel into one's self. This is practiced through meditation by closing the eyes with an objective of being empowered and to stop being controlled by the external world.

Pratyahara is a transition step in the Ashtanga yoga as the initial 4 steps are external forms and the next 3 steps are the travel towards the inner state.

Dharana

Dharana means 'to hold'. This represents the steadfast concentration of the mind through focus on breath, naval, tip of tongue or any object, concept, idea, mantra etc. without wavering.

This is practiced to achieve one pointed focus of the mind by avoiding all the distractions.

Dhyana

Dhyana is contemplating, reflecting on what was focused on during the previous step – dharana. Thus dharana is a state of mind and dhyana is a process of mind where the concentration on the movement of mind in meditation is narrowed down to awareness through non-judgemental and non-presumptuous observation of the object chosen.

Samadhi

Samadhi is a state of enlightenment achieved through the union of individual consciousness with the universal consciousness. This is an ultimate state of eternal bliss.

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GLOSSARY OF SANSKRIT LANGUAGE TERMS

All the ancient Indian scriptures were written in Sanskrit Language which is the oldest language of the world. English translated versions of the relevant texts are now available, knowing the meaning of some Sanskrit terms is very important as each Sanskrit word (or even letter) has several meanings and most of the times these words/letters are more of definitions than just meanings.

During the research, English version of such texts, more specifically texts related to Ayurveda were referred to and hence some of the Sanskrit terms related to Ayurveda (and also to my research topic) are appended below along with English meaning.

A

aaahara: Generally used as a synonym to food (Anna). But from Ayurveda perspective it is not only food but all the inputs that we receive through our sense organs (smell, taste, touch etc.,) too.

aap: water (one of the 5 mahabhutas).

agni: the “digestive fire” in the context of Ayurveda. Digestive fire stimulates catabolism to breakdown foods that we consume. Agni is also responsible for appetite, healthy skin, energy, healthy immune system etc.,

anna: Food that we consume.

akash: space/ether (one of the 5 mahabhutas).

ama: undigested food residue that lodges within the tissues and organs due to poor digestion. It is toxic in nature and causes both physical and mental health issues.

amla: sour taste

asana: a posture in yoga that is performed for strength, flexibility and to maximize the flow of life energy.

asthi (bone/cartilage): Refers to bones and cartilage which are one among the seven types of body tissues (sapta dhatus).

Ayurveda: In Sanskrit, Ayus means “life,” and Veda means “science or knowledge.” It’s a 5,000-year-old Indian medical system that considers health as a wellbeing of not just the physical body but also mind and soul too. Hence the approach of treatment for diseases is customized as per the unique mental and physical nature of an individual by applying appropriate nutrition, medicines, exercise, therapies and rest.

B

bhut: elements (as in 5 natural elements like air, fire etc.).

C

Chikitsa: healing, medication, treatment.

D

dhatus: the tissues that comprise the physical structure of our bodies. There are seven tissues that are responsible for anatomical function and structure – plasma (rasa), blood (rakta), muscles (mamsa), fat (medha), bone/cartilage (asti), bone marrow (majji), and reproductive fluid/tissue (shukra).

dinacharya: the ideal daily routine in tune with circadian rhythms of the nature to attain optimum health.

dosha: bio-energies that drive the physiological and psychological functions. The three doshas are Vata (catabolic), Pitta (metabolic), and Kapha (anabolic).

G

ghrita: ghee/clarified butter

grishma: Summer season

gunas: dichotomies of ten pairs of opposite qualities - cold/hot, heavy/light, oily/dry, dull/sharp, dense/liquid, soft/hard, stable/mobile, smooth/rough, gross/subtle, cloudy/clear.

H

hemanta: pre-winter

hridaya: heart

I

indriya: Senses (acting and knowledge gathering) classified as Karmendriya and Gyanendriya.

J

Jatharagni: digestive fire in the stomach.

K

Kapha: one of the three doshas which is made up of two natural elements (mahabhutas) – Water (jala) and Earth (Prithvi).

Kasaya: astringent taste.

Katu: pungent taste.

L

Lavana: salty taste

M

mahabhuta: the five fundamental natural elements that are the building blocks of the entire nature – Space/Ether (akash), Air (vayu) Fire (agni), Water (aap/jala), and Earth (prithvi).

majji (bone marrow): one of the seven dhatus. The semi-solid marrow that fills the bone.

mala: waste from digestion. There are three forms of mala: urine, stools, and sweat.

mamsa (muscles): one of the seven dhatus. The muscles cover the bones to provide physical strength and movement to the body.

mantra: a sacred word or phrase that is often repetitively chanted for physical, mental and spiritual wellbeing.

marma: an energy point on the skin which is a point for touch and massage in one aspect of the treatments of Ayurveda.

meda (fat): one of the seven dhatus. Fat provides insulation and lubrication for the organs.

mutra: urine

O

ojas: a state of being in a perfect balance of healthy mind, body, senses and spirit due to adequate digestive fire, and appropriate elimination of wastes (malas).

P

panchamahabhutas: The five elements natural elements or mahabhutas (See mahabhutas) – “pancha” meaning “five”.

Pitta: one of the three doshas. Pitta is formed by combination of Fire and Water mahabhutas (elements).

prakriti: a person’s individual body constitution at birth which remains more or less the same throughout the life which is a combination of tri-doshas Vata, Pitta, or Kapha.

prana: vital life energy that circulates throughout the body and also throughout the universe.

prithvi: earth (one of the 5 mahabhutas).

puresha: stools

R

rakta (blood): one of the seven dhatus.

rasa (plasma): one of the seven dhatus. Rasa literally means “sap” or “juice”, but technically it is plasma.

S

sharad: autumn season

shishira: late-winter

shukra (reproductive fluid or tissue): one of the seven dhatus which is capable of creating life and is the essence of all the bodily tissues.

subdoshas: Each of the three doshas is divided into five subdoshas, which show various, specific function within its main dosha.

sweda: sweat

T

tejas: fire (one of the 5 mahabhutas).

tikta: bitter taste

tridoshic: having a more-or-less equal amount of all three doshas (Vata-Pitta-Kapha). Also known as samadosha

V

Varsha: rainy season

vasanta: spring season

vata: one of the three doshas. Vata is comprised of a combination of Space/Ether and Air natural elements

vayu: air (one of the 5 mahabhutas).

vikriti: a dosha imbalance, one that diverges from the constitution that was determined at your conception (prakriti).

Y

yoga: means 'union' and refers to the union of mind, body and soul and also the union of individual consciousness with the universal consciousness.