

Lesson 3 Handout

Āyurvedic Anatomy & Physiology; The Dūṣyas: Dhātus & Malas

Note if you are taking this lesson outside of the context of the entire course: While the video titles relay the subject being presented, each of these videos is presented within the context of the full course, so some material may not be fully presented in any one video, as it may be partially presented or explored in preceding or following videos and lessons..

Learning Objectives:

Dhātus

1. List the *sapta dhātus* (seven bodily tissues) in English and Sanskrit
2. Understand the main functions of the 7 *dhātus*
3. Memorize and understand the definition of the *sapta* (7) *dhātus*, their associated *upadhātus* (secondary tissues) and *malas* (wastes)
4. Recognize signs, symptoms and possible causes of vitiated *dhātus*
5. Recognize symptoms associated with the entry of each *doṣa* into each *dhātu*
6. Recognize the signs and clinical significance of *dhātu sāra*
7. Understand the role of *agni* in the transformation of raw elements (*tattvas* or *bhūtas*) into *āhāra rasa*, *āhāra rasa* into first *rasa dhātu* and then, successively, the rest of the *dhātus*.
8. Understand the concept of *dhātu vṛddhi*, *dhātu kṣaya* and *dhātu duṣṭi* and why they develop
9. Memorize and understand The Three Laws of Nutrition as related to *dhātu* formation

Malas

10. List the three *malas*: urine, feces & sweat

Suggested Sequence for Study:

1. Read the handout for this lesson (or at least familiarize yourself with it) before watching the videos.
 - a. The lesson handouts in Foundations of Āyurveda Part I were often written in prose, rather like essays. In this course, the handouts serve more as outlines of information so you can more easily follow along as you watch the videos. They also help clarify and supplement the information in the videos.
 - b. If you would like to chant along with the chants, a handout and an audio file are available to download on your online class page.
 - c. Regarding Transliteration: We have made our best attempt at employing standard transliteration throughout these lessons. For a brief guide to standard transliteration, go to https://en.wikipedia.org/wiki/International_Alphabet_of_Sanskrit_Transliteration. When there have been differing opinions on correct transliterations, we've deferred to the direction and corrections of our friend and colleague, Fred Smith, Ph.D., Professor of Sanskrit and Classical Indian Literature at The University of Iowa. We appreciate and thank him for his assistance. In any case of faulty transliteration, it is our fault and not his, as we may have accidentally missed certain words, or not consulted him on certain words about which we felt (perhaps mistakenly) confident.
2. Watch the videos for this lesson and have your handout handy as you do, so you can follow along. Once we have introduced an exercise in the video, it would be good to pause the video and give

yourself 20 minutes to do the exercise yourself. (Even when we announce in the videos, that we are taking less time for the exercise, we found it always took at least 20 minutes to do them).

- a. Video #5: Introduction to Dhātus, Upadhātus and Malas
 - b. Video #6: Rasa, Part I
 - c. Video #7: Rasa Part II: An Exercise and Discussion on V, P, K Entering Rasa Dhātu and Why Diagnosis is Important
 - d. Video # 8: Rakta & Exercise and Discussion on V, P, K Entering Rakta Dhātu
 - e. Video # 9: Māmsa & Meda
 - f. Video #10: Māmsa & Meda Q&A & Exercise
 - g. Video # 11: Asthi & Majjā
 - h. Video #12: Śukra & Ārtava
 - i. Video #13: Asthi Through Ārtava and Dhātu Sāra: Discussion & Exercise
 - j. Video #14: Dhātu Creation (how dhātus, upadhātus & malas are produced through dhātu agnis, how they become vṛddhi or kṣaya, and 3 Laws of nutrition)
 - k. Bonus Video: Planetary Association With Dhātus
 - l. Bonus Video: Reductionist Thinking & Amino Acids Vs. Neiguan & The Elements
 - m. Video #15: Discussion On Dhātus And Dhātu Production
 - n. Video #16: Exercise & Discussion on Describing Dhātu Production and Influences
 - o. Video #17: Malas
3. Recommended Reading: After you have read the handout for this lesson and watched the corresponding videos, we suggest the recommended readings listed at the bottom of the handout. The purposes of these readings are both to increase understanding of the subject matter and to provide additional perspectives on and approaches to the material. By reading various texts and authors, we can become clearer on what material is so standard that everybody agrees on it and perceives it roughly the same way, and what material is subject to varied interpretations or lends itself to varied approaches. It is helpful to keep in mind that models of disease and health are not reality. They are simply sincere attempts at describing reality. Therefore some models, approaches, or perspectives are more elegant representations of reality than others for each possible situation, condition or disease.
4. Review the Learning Objectives & Vocabulary for the lesson, revisiting the videos as needed to be sure you are comfortable with each objective and vocabulary word.
5. Take lesson quiz.

Vocabulary:

dūṣya (*dūṣya* = that which gets vitiated = *dhātus* & *malas*), *dhātu*, *rasa*, *rakta*, *māmsa*, *meda*, *asthi*, *majjā*, *śukra*, *ārtava*, *upadhātu*, *mala*, *prīṇanam*, *jīvanam*, *lepanam*, *snehanam*, *dhāraṇam*, *pūraṇam*, *prajananam*, *poṣaka*, *añjali*, *sāra*, *āhāra*, *sthāyi*, *asthāyi*, *vṛddhi*, *kṣaya*, *duṣṭi*, *bala*, *nyāya*, *dhātu dhara kalā*, *purīṣa*, *mala*, *mūtra*, *sveda*, *bala*

New words to be familiar with, but that are not as essential to memorize:

asṛk, *kandara*, *sirā*, *tvak*, *vasā*, *khamala*, *snāyu*, *danta*, *keśa*, *loma*, *nakha*, *kedāri kulya nyāya*, *khale kapota nyāya*, *kṣiradadhi nyāya*, *Mādhava Nidānam*, *anuloma*, *pratiloma*. Also, you don't need to memorize the word, "tarpaṇa" but it comes up in this lesson & is defined in the "malas" video.

Objective (1): List the *sapta dhātus* (seven bodily tissues) in English and Sanskrit

Sapta (7) Dhātus

Rasa, *asṛk* (*rakta*), *māmsa*, *meda*, *asthi*, *majjā* and *śukra* are the seven *dhātus* and are also known as *dūṣyas* (those that get vitiated by the *doṣas*). *Aṣṭāṅga Hṛdayam: Sūtrasthāna: 1:13*

Dhātu=that which holds the body together. Constructing material that nourishes and comprises the body, & holds the organs in place. Bodily tissues.

Objective (2): Understand the main functions of the 7 *dhātus*

The main functions of the 7 dhātus:

Prīṇanam, jīvanam, lepanam, snehanam, dhāraṇam, pūraṇam, prajānam
Nourishment, life-giving, plastering, lubrication, support, filling-of-space, reproduction

Objective (3): Memorize and understand the definition of the *sapta (7) dhātus*, their associated *upadhātus* (secondary tissues) and *malas* (wastes)

Notes for Dhātu Table: The entries in this Table come either from the *Āyurvedic* classics or have become commonly accepted. It is essential to know Sanskrit names for *dhātus* but not so important for *upadhātus* and *malas*.

DHĀTU	PRIMARY FUNCTION	ASSOCIATED UPADHĀTU	ASSOCIATED MALA	ASSOCIATED SIZE
Rasa Plasma/chyle/lymph/ cooling, nourishing, liquid aspects of the body	Nutrition	Breast milk, menstrual blood, top layer of skin	<i>(poṣaka) kapha</i>	9 <i>añjali</i> (2 hands cupped together)
Rakta Blood	Life-giving	Small tendons and sinews (<i>kandara</i>), blood vessels (<i>sirā</i>)	<i>(poṣaka) pitta</i>	8 <i>añjali</i>
Māmsa Muscle tissue	Plastering and all that entails	Six layers of skin (<i>tvak</i>), subcutaneous fat (<i>vasā</i>)	<i>khamala</i> (waste products of the external orifices)	Varies
Meda (or Medas) Adipose tissue	Lubrication, bulk, insulation	Ligaments (<i>snāyu</i>), flat muscles, joints	sweat	2 <i>añjali</i>
Asthi Bone	Support, protection	Teeth (<i>danta</i>), cartilage (the classics list nothing here. <i>Caraka</i> says teeth are part of the bone count)	Head hair (<i>keśa</i>), short hairs (<i>loma</i>), nails (<i>nakha</i>)	about 360*, depending on the source
Majjā Marrow, cerebrospinal fluid, brain, nervous tissue	“Fills the spaces” nervous response to stimulation	Lacrimal secretions (<i>Bṛhat Trayī</i> list nothing for this)	Fatty material of the eyes, skin and feces	2 <i>añjali</i>
Śukra/Ārtava reproductive tissue and organs	Reproduction	[none, according to classics]	<i>ojas</i> (no!)	½ <i>añjali</i>

*This number changes, depending on which *Āyurvedic* source consulted, and it differs with the number provided in Western science. We have been taught that this discrepancy is due to *Āyurveda* including in the total bone count the teeth, certain cartilaginous structures, and the bone count at birth, before many bones fuse together.

Objectives (4-6): For these objectives, refer to the summary of the *dhātus* that follows & videos 6-13.

4. Recognize signs, symptoms and possible causes of vitiated *dhātus*
5. Recognize symptoms associated with the entry of each *doṣa* into each *dhātu*
6. Recognize the signs and clinical significance of *dhātu sāra*

Rasa

The rasa, though running through the whole organism, has its primary seat in the heart, whence it flows through the twenty-four vessels which branch off from the heart to the remotest parts and extremities of the body. Of the aforesaid 24 vessels, 10 are up-coursing, 10 are down-coursing, and four have a lateral direction. The rasa, thus flowing out of the heart, constantly soothes, maintains, and irrigates by transudation, the body, and further contributes to its growth, and supports life owing to the dynamical effects of causes which lie beyond the ken of human understanding. The nature and course of this rasa which runs through the whole system, can be inferred from the growth, attenuation, or other modified conditions of the body. Suśruta Saṃhitā: Sūtrasthāna: XIV:3

...since the rasa is a fluid, and possessed of lubricating, vitalizing, moistening and nutritive, it must be included within the class of saumya (cooling) substances. Rasa, though a saumya fluid, obtains its characteristic pigment (rāgam) in its passage through the spleen and liver.

Suśruta Saṃhitā: Sūtrasthāna: XIV:5

Rasa is derived from the root “Ras” to go, and it is so called from the fact of its continually flowing through and permeating every vital principle of an animated organism.

Suśruta Saṃhitā: Sūtrasthāna: XIV:12

Rasa courses through the whole body in invisible currents of zigzag shape, like the waves of sound, or (in an upward direction) like flames of fire, or (in a downward direction) like rivulets of water.

Suśruta Saṃhitā: Sūtrasthāna: XIV:15

1. *Rasa* functions: *prīṇanam*, transport of respiratory gases, nutrients, hormones, vitamins, drainage of waste products, maintains water-electrolyte balance, regulates blood pressure and volume, circulates 5 elements in a form that is accessible to the body, maintains functions of menstruation and lactation
2. *Rasa sāra*=radiant, healthy skin, cheerful, healthy, kapha-like, glowing, vital
3. When excessive can result in: lymphatic & venous congestion, repeated colds, congestion, water retention, edema, drooling, heavy feeling in heart, allergies, pale
4. When deficient can result in: tired, pale, thin, anxious

I will describe further the diseases produced by doṣas vitiated in different locations like rasa, etc.: Loss of desire for food, anorexia, distaste in mouth, loss of taste sensation, nausea, heaviness, drowsiness, body-ache, fever, feeling of darkness, paleness, obstruction in channels, impotency, malaise, leanness, loss of digestive power, untimely wrinkles and grey hair—these are the disorders due to morbid affliction of rasa dhātu.

Caraka Saṃhitā: Sūtrasthāna: XXVIII:9-10

Rakta

*Rasa, colored through the effect of the healthy normal dyeing heat of the body, obtains the name of blood...
Suśruta Saṃhitā: Sūtrasthāna: XIV:6*

In rakta, the properties such as a raw or fleshy-smell, fluidity, redness, lightness and mobility, which respectively characterize the fundamental principles (of earth, water, fire, air and ether, respectively) are to be found, thus representing those specific elements in its composition.

Suśruta Saṃhitā: Sūtrasthāna: XIV:8

1. *Rakta* functions: *jīvanam*, transport of gases, regulates temperature, transport *rasa*, hormones, vitamins, maintains blood pressure, defensive action, coagulation, formation of new blood vessels
2. *Rakta sāra*: red conjunctiva, cheeks, lips, tongue and nails, complexion, vitality, energy, mental work without fatigue, bright intellect. Physical weakness in the hot sun.
3. When excessive can result in: polycythemia, bleeding disorders, rash, skin eruptions
4. When deficient can result in: anemia, pallor, conjunctiva, shortness of breath on exertion, cold extremities, crave: iron, hot, spicy foods, citrus.
5. Contains *rasa* (plasma and red blood cells).

Further will be mentioned the diseases due to affliction of rakta. Leprosy, erysipelas, boils, internal hemorrhage, menorrhagia, suppuration of anus, penis and mouth, spleen, gulma, abscess, nīlaka, jaundice, vyanga, pīplu, tilakālaka (black moles), ringworm, psoriasis, leucoderma, papules, urticarial patches, red patches—these are caused by morbid affliction of rakta.

Caraka Saṃhitā: Sūtrasthāna: XXVIII:11-12

Māṃsa

1. *Māṃsa* functions: *lepanam*, movement, contraction, skill, speech/mouth muscles, etc, power and tone, heat production, respiration muscles, agents of the brain. Physical expression of the experience generated in the brain & nervous system, reacts during danger. Provides protection for the vital organs.
2. *Māṃsa sāra*: muscular bulk and tone, well developed, strong, endurance, vitality, heavy lifting without tiring, love, compassion, patience
3. When excessive can result in: hypertrophy, growths in muscle tissue, myomas, fibromas, fibrocystic breasts/uterus
4. When deficient can result in: atrophy, wasting, emaciation, fatigue, joint dislocation, TMJ (temporomandibular joint disorders), craving for meat

Meda (or Medas)

1. *Meda* functions: *snehanam*, stores energy, provides fuel, solvent for fat-soluble vitamins, hormones, chemicals, structural component of cell membrane, lubrication, hormone synthesis, provides shape, keeps organs in place and protects them, insulation
2. *Meda sāra*: oily, curly hair; soft skin, feces, nice body shape and bulk. Big deer eyes, melodious voice, rich, forgiving, loving, delicate, not hard working
3. When excessive can result in: obesity, joint pain, shortness of breath on exertion
4. When deficient can result in: dry skin, cracking joints; arthritis, lumbago, osteoporosis

Asthi

1. *Asthi* functions: *dhāraṇam*, provides shape, support, movement, storage of salts, minerals, provides marrow for red blood cell formation, protection, detox blood. Heavy metals are stored in the bone and eventually excreted through hair and nails.
2. *Asthi sāra*: tall, broad chest, long neck, round joints, sturdy, symmetrical skeleton, stamina, strength, hard labor ok, kapha hair, nails, teeth, jaw
3. When excessive can result in: spurs, bony protuberances, osteomas, calcification (in breast tissue), spinal misalignment, shortened height; bone fusion
4. When deficient can result in: hair loss, weak, rough, dry brittle nails, osteoporosis, massive bone loss, fracture, scoliotic changes

Ādhyasthi, ādhidanta, dantabheda, asthiśūla, discoloration, abnormality in hairs of head, body hairs, nails, beards-moustaches—these are disorders due to morbid affliction of asthi.

Caraka Saṃhitā: Sūtrasthāna: XXVIII:16

Majjā

1. *Majjā* functions: *pūraṇam*, transmission of nerve impulse, sensory perception, motor function, intellectual function, emotional reaction, memory, sleep, red blood cell formation, fills the space
2. *Majjā sāra*: memory, attractive eyes, perceptive, bright intellect and capacity for comprehension
3. When excessive can result in: pinealoma, tumors of the endocrine system, heaviness of the eyes
4. When deficient can result in: (osteoporosis, indirectly), anemia, arthritis, sexual debility, insomnia, neurological problems like Multiple Sclerosis, Parkinson's, Alzheimer's, etc.

Pain in joints, giddiness, fainting, feeling of darkness and appearance of thick-based wounds—these are caused due to morbid affliction of majjā. Caraka Saṃhitā: Sūtrasthāna: XXVIII:17

Śukra

1. *Śukra* functions: *prajānam*, procreation, libido, production of pure *ojas*, genetics
2. *Śukra sāra*: magnetism, attractive eyes, teeth, chest, voice, handsome, charming, glowing
3. When excessive can result in: sexual preoccupation, prostatic calculi, excess secretion but decreased sperm, premature ejaculation
4. When deficient can result in: low sperm count, impotency, erectile dysfunction, pain with intercourse

By the morbid affliction of śukra, there will be impotency and non-erection of penis. His progeny will be sick or impotent or short-lived or deformed. There is more likelihood that the conception will not take place or if conceived, it will be miscarried or aborted. The semen, if affected morbidly, afflicts the person along with his wife and progeny. Caraka Saṃhitā: Sūtrasthāna: XXVIII:18-19

Ārtava

1. *Ārtava* functions: Same as *śukra*
2. *Ārtava sāra*: magnetism, attractive eyes, teeth, chest, voice, symmetrical, attractive features, well developed breasts, regular, healthy menstrual cycle, glowing
3. When excessive can result in: heavy flow, symptoms of “estrogen dominance”
4. When deficient can result in: scanty or no period, late menarche, early menopause

Objective (7): Understand the role of *agni* in the transformation of raw elements (*tattvas* or *bhūtas*) into *āhāra rasa*, *āhāra rasa* into first *rasa dhātu* and then, successively, the rest of the *dhātus*

Rasa is successively transformed into each of the six remaining fundamental principles of the body, and continues in the shape of each for the period of 3,015 kālas (5 days according to modern computation).

Thus rasa is converted into semen or menstrual blood in the course of a month.

Suśruta Saṃhitā: Sūtrasthāna: XIV:13

Āhāra rasa: *āhāra* = “diet”. So *āhāra rasa* is simply the *rasa* derived from the diet (as opposed to *rasa* derived from *prāṇa* or the mind).

The *bhūta agnis* are sometimes said to be inherent within whatever we ingest (because everything is made of all 5 elements, which would mean that there is at least a latent form of *agni* in everything that exists). This perspective holds that this inherent *agni* becomes activated by *jaṭhara agni*. We can look at it like that, or simply consider that there are five specialized *agnis* present in the liver, that aid in the refinement of all elements—in any form—into more refined substances that are more biologically useful to the organism. These raw elements:

- either circulate in *rasa* and *rakta dhātus* through the liver, where the *bhūta agnis* act on them or
- are present in the small intestine and the five *bhūta agnis* are secreted into the small intestine from the liver, to aid in the refinement of these incoming raw elements, into the more refined, biologically useful *āhāra rasa*.

How does *āhāra rasa* become *rasa dhātu*? *Rasa dhātu agni* acts on *āhāra rasa* to form first *asthāyi* then *sthāyi rasa dhātu*, which we then may simply call, “*rasa dhātu*.” Whenever you hear, “*rasa dhātu*,” “*sthāyi*” is implied. The same is true of all the *dhātus*.

- *Asthāyi*=non-fixed, immature, unformed, unstable, circulating, unprocessed
- *Sthāyi*=fixed, mature, formed, stable, processed

Here’s a summary of how *dhātus* and *upadhātus* are produced:

“x” *dhātu agni* works on *asthāyi* “x” *dhātu* to **simultaneously** create:

1. *Sthāyi dhātu* “x”
2. *Upadhātu of dhātu* “x”
3. *Mala of dhātu* “x”
4. *Asthāyi* “y” *dhātu*, where “y” represents the next *dhātu* in line
5. This process is repeated for each successive *dhātu* through *śukra* and *ārtava*

This process can seem complicated at first. If you are reading this handout for the first time and haven’t watched the associated video, it will likely be beneficial to watch that before trying to fully understand this process. We go through the production of each *dhātu* in the video, so we really have time to play with it. So ...in case you are a little stressed about this...the video should help ☺

Dhātu Dhara Kalās is a sort of (theoretical, almost metaphoric) membrane between the *dhātus*, wherein resides *dhātu agni*. Each *kalā* is named for the *dhātu* it serves, with the exception of *purīṣa dhara kalā*, which is the name for the *kalā* associated with *asthi dhātu*. This membrane is the mucous membrane of the large intestine. *Purīṣa* means feces.

Objective (8): Understand the concept of *dhātu vṛddhi*, *dhātu kṣaya* and *dhātu duṣṭi* and why they develop

*Vṛddhi of all of them (doṣas, dhātus, and malas) is caused by the use of samāna (similars) and its opposite (decrease) by use of viparīta (dissimilars).
Aṣṭāṅga Hṛdayam: Sūtrasthāna: 1:14*

When *dhātu agni* is too low or too high, it has an inversely proportional effect on *dhātu* mass. When *dhātu agni* is low, mass increases and vice versa. For example, if *rasa dhātu agni* is too low, we will see increased quantity of *rasa*. If *rasa dhātu agni* is too high, we will see reduced quantity of *rasa*. This is not the only cause of insufficient or excess *rasa dhātu*, however. We also see decreased *rasa* if we simply have insufficient intake of nutrition and excess *rasa* if we consume too much. *Rasa dhātu* holds a place of particular importance in this case because it is the first *dhātu* in the line. For example, if *rasa dhātu* is deficient, *dhātu kṣaya* may result in the rest of the *dhātus*. We discuss this in the video lectures.

There is one thing that we don't mention in the videos, however, but is important to know: *Dhātus* can be affected from the bottom up as well as the top down. For example if *śukra dhātu* is troubled, the preceding *dhātus* may also become troubled. Consider this important passage from the *Āyurvedic* classic, *Mādhava Nidānam*:

When the rasavāhasrotas [the channel system that nourishes rasa dhātu, that we will learn about in Lesson 4] becomes obstructed by the three doṣas, among which kapha is predominant; or in persons who indulge in excessive sexual intercourse leading to the loss of semen, all the other dhātus of the body undergo deficiency, making the person emaciated. Mādhava Nidānam: X:2

In Appendix I of *Mādhava Nidānam*, "Some salient points from *Madhukośa Vyākhyā*," there is a commentary that makes this point even clearer:

Dhātu kṣaya can take place in two ways: a) anuloma ["with the hair or grain," in a natural direction—in this case downward]—starting from loss of rasa, all the succeeding dhātus undergo wasting, b) pratiloma ["against the hair or grain," contrary to the natural order—in this case, upward] starting from śukra, all the preceding dhātus undergo wasting. Can pratiloma be accepted? How can we say that the destruction of the effect will destroy the cause? The answer to the objection will be that śukra kṣaya causes vāta vṛddhi and that, in turn, causes wasting of majjā and so on. An example can be given of, "a heated iron ball which dries up the moist mud surrounding it."

Objective (9): Memorize and understand The Three Laws of Nutrition as related to *dhātu* formation

3 Laws of Nutrition	
Law of Irrigation (<i>kedāri kulya nyāya</i>)	<i>Dhātus</i> are irrigated with nutrients and qualities from both the previous <i>dhātu</i> and from circulating <i>rasa</i> and <i>rakta dhātus</i>
Law of Selection (<i>khale kapota nyāya</i>)	<i>Dhātus</i> select what they need either from the previous <i>dhātu</i> or from circulating <i>rasa</i> and <i>rakta dhātus</i>

Law of Transformation (*kṣiradadhi nyāya*)

Substances can transform into a *dhātu* from either the previous *dhātu* or from circulating *rasa* and *rakta dhātus*

Each of these 3 laws works in 2 ways, simultaneously or individually:

1. Through each *dhātu* successively
2. Directly to any *dhātu* via the 5 elements circulating in *rasa* and *rakta dhātus*

In Video #14, while exploring how *dhātus* are created and nourished, the Law of Selection (*khale kapota nyāya*) was emphasized in the context of *dhātus* selecting what they need from circulating *rasa* and *rakta dhātus*, and the Law of Transformation (*kṣiradadhi nyāya*) was emphasized in the context of one *dhātu* nourishing or becoming the next *dhātu*. It is important to understand, however, that all three Laws of Nutrition apply both in the case of a *dhātu* obtaining nourishment from a previous *dhātu* and in the case of a *dhātu* obtaining nourishment from circulating *rasa* and *rakta*.

Bala (strength) is an end product of healthy tissue metabolism. (refer also to Video #14: “Dhātu Creation”)

Malas

Malas are the mūtra, śakṛt (feces/purīṣa), sveda, etc. Aṣṭāṅga Hṛdayam: Sūtrasthāna: I:13

Objective (10): List the three *malas*: urine, feces & sweat

Doṣas vitiated in ligaments, vessels and tendons afflict the person with stiffness, contraction, twisting, glands, throbbing and numbness. Caraka Saṃhitā: Sūtrasthāna: XXVIII:21

Doṣas vitiated, while located in malas, cause breaking, drying up, and other abnormalities of malas (excretions) and also their excessive retention and elimination.

Caraka Saṃhitā: Sūtrasthāna: XXVIII:22

One who is established in Self, who has balanced doṣas, balanced agni, properly formed dhātus, proper elimination of malas, well functioning bodily processes, and whose mind, soul, and senses are full of contentment, is called a healthy person.

Suśruta Saṃhitā: Sūtrasthāna XV:44¹

doṣa dhātu malam mūlam hi śarīram

The doṣas, dhatus & malas comprise the foundation of the body.

Recommended Reading:

1. Dr. Lad’s Textbook of Āyurveda, Volume 1, Chapter 5: “Dhātus, The Seven Bodily Tissues” and the chart on p. 288, “The Seven Bodily Tissues (*Sapta Dhātu*)”.

- a. **Note about page numbers and chapter names:** *In 2010, this book went through a revision in format. Despite the resulting changes to page numbers and chapter numbers and titles, Dr. Lad’s book was not printed as a new edition. We refer to the page and chapter numbers and chapter titles as they appear in the 2010 revision. If you have an older copy (older versions*

¹ While one version of *Suśruta Saṃhitā* lists this in verse 44, varying versions have it listed as 38 or 41.

don't have "Volume 1" printed on the side of the book) the correct page number generally occurs a few pages later than the 2010 version. You can also use the index to find the corresponding page number(s).

2. Dr. Lad's Textbook of Āyurveda, Volume 2, A Complete Guide to Clinical Assessment, Chapter 11: "Dhātu and Mala Vijñānam: Specialized Knowledge of Disorders of the Tissues and Bodily Wastes," pp. 237-279.

How to Look Up References in the Classical Āyurvedic Texts

If you would like to look up the references we give to various verses from the Āyurvedic classics, in those classical texts themselves, this could be helpful. The classical texts we quote from include, among others, *Caraka Saṃhitā*, *Suśruta Saṃhitā*, *Aṣṭāṅga Hṛdayam* which are subdivided into sections based on type of content such as *Sūtrasthāna*, *Śārīrasthāna*, *Cikitsāsthāna*, etc. Within each section the chapter numbers start from "I", in roman numerals. The verses within a given chapter are numbered in Sanskrit script or Latin script (what we generally use in the West). When we list the references to quotes from any of the classical Āyurvedic texts, we list them according to a standard format used for referencing:

{Name of the Text}: {Section of the Text}: {Chapter # in Roman Numerals}:{Verse # or range of #s}

For example: *Caraka Saṃhitā: Śārīrasthāna: VI:14-15*

In this example, the quote comes from the text, "*Caraka Saṃhitā*" in Chapter VI (6) of the Section called, "*Śārīrasthāna*", and includes Verses 14-15.