SIDDHA MEDICINE VOLUME-II Fundamentals





Tamil Valarchi Kazhagam Chennai-600 005

SIDDHA MEDICINE

VOLUME II FUNDAMENTALS

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Forevore

I am glad to note that the distinctive, dynamic contribution of the Tamil Academy to the dissemination of knowledge among the Tamils during these 65 years since its inception in the year 1946 has been widely recognized and appreciated.

We have, over these years, brought out a whole body of reference books that range from encyclopaedias to academic texts on the indigenous sciences. These publications are informed by a twofold vision of the Academy: The Tamil people must have access to developments in the principal areas of knowledge and scholarship across the world, the realization of which is reflected in our publication in Tamil of a General Encyclopaedia and a Children's Encyclopaedia each in ten volumes, besides works on medicine and technology all in Tamil; the other objective of the Academy is to identify the distinct fields of contribution of the Tamil mind to the creativity and scholarship of humanity, and to present them in English for the benefit of the non-Tamils.

One such contribution of the Tamils relates to the sphere of medical science. It is the siddha medicine, the ancient, indigenous medical system that has flourished on the Tamil soil over a span of more than fifteen hundred years. This system of medicine is a complex of spirituality and healing technology that exploits herbal/metal/mineral substances, standing of course on tested theoretical foundations.

As far back as two thousand years ago, the monumental Tamil composition *Thirukkural* gives a synoptic account of the bases of medical theory and practice in ten extremely condensed two-line verses. Look at these couplets:

Diagnose the illness, seek out its cause, Study the way of cure and treat it right. (948)

Patient's condition, severity of illness and its duration known for sure Let the physician versed in his lore prescribe the remedy. (949)

Patient, physician, medicine and nurse Are the four factors bearing on the art of healing. (950)

This chapter on medicine apart, *Thirukkural* on the whole has the words $n\bar{o}y$ and pini (disease) referred to in as many as 50 places. Besides, causes of diseases, mental illness, allergy, environmental pollution, burns, scars, wounds, ulcers, pustules, etc., have contexts of occurrence in this work, along with an implicit emphasis on a healthy mind in a healthy body.

It is this ancient tradition of health-consciousness and healing technology that has, in the hands of the Tamil siddhars, grown into a well-developed system of medicine, with beneficial consequences to the theory and practice of this all-important discipline.

The siddhars were a disparate band of poet-philosophers with wide-ranging interests and capabilities. Their compositions are replete with philosophies of life which are unorthodox and radical in nature. Nevertheless, they are essentially men of medicine, and their philosophy is the philosophy of medicine. Their compositions comprise profound insights into securing the health of human body and mind as well. Their knowledge of the medical uses of a whole body of herbs, metals and minerals should indeed be a gift to modern medicine. So comprehensive and eclectic are their conceptions of medicine that they should not only make for a rewarding complement to allopathic system of medicine but give a new perspective to our philosophy of healing.

The book on hand, Siddha Medicine Volume II, looks into the fundamentals of siddha medical theory and practice over an extended span of centuries, which include the environmental factors bearing on the incidence of diseases.

The publication of these eight volumes has been made possible through the generous financial assistance extended by the Department of Ayush, Ministry of Health and Family Welfare, Government of India, under the Central Sector Scheme for 'Acquisition, Cataloguing, Digitization and Publication of Textbooks/ Manuscripts'. Tamil Valarchi Kazhagam is appreciative of and grateful to the Government of India for their considered gesture in this regard.

I should, on behalf of the Tamil Academy, record my appreciation and gratitude to the authors, translators and editors of this volume who have done an excellent job with dedication and commitment. The Tamil Academy also owes its gratitude to Dr V. Murugan who has edited the language. Dr P. Arthanareeswaran who edited the script, The Tamil Academy also acknowledges the services of Thiru K. Selladurai who has done the typesetting and formatting and Messrs Pavai Printers Private Limited who have printed this work.

Dr V.C. Kulandaiswamy
President
Tamil Valarchi Kazhagam

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This book on the fundamentals of siddha medicine should mark an eye-opener for the common people and for those in the siddha medical field as well. It is an introduction to the siddha philosophy of human health as much as to the principles and practice of the siddha science of healing.

The twenty chapters included in this book have been written by scholars who are eminent teachers of siddha medicine at the advanced level and who are practitioners of siddha medicine as well. As such, the contents of this book carry a critical authority that should add a heightened credibility to this indigenous system of medicine of this land.

The larger issues that are being addressed in this book include the relationship between humans and the five primordial elements on the one hand, and on the other the relationship between human living and the specific divisions of land which they live on. These relationships have been studied from the standpoint of the dynamics of human health and the occurrence of diseases and their healing. We have, basing ourselves on the siddha conceptualizations, discussed the relationship between science and religion as it bears on the philosophy of siddha medicine. The principles of *vātham*, *pittham* and *kabam* and the way they define the constitution and the individual characteristics of the human body with reference to biological predilections, food habits, social conduct and propensity to illnesses of the individuals have been dealt with in detail in this book. Our authors have gone into the vast body of siddha literature and have explicitly shown how the siddha system of

medicine has evolved from the minute observation of human living by the siddhars, how these siddhars had had a deep-rooted, scientifically valid understanding of the workings of the human body and how they discovered the curing processes and drugs from the world of nature around them. The vast body of herbs, metals and minerals they have brought in to bear on the practice of medicine should indeed be a contribution of critical importance to the science of medicine. The elements of religion that run through aspects of siddha medicine need to be seen as part of the prevailing social environment in which these siddhars lived and practised.

The making of this book owes to the opportunity and encouragement given by the President of Tamil Valarchi Kazhagam, the great educationist, scholar and former Vice Chancellor of three renowned universities Dr V.C. Kulandaiswamy. It gives me immense happiness to express my sincere thanks to him.

I also wish to record my thanks to the Vice-President Dr M. Ponnavaikko and the Secretary and Treasurer Dr P.R. Nakkeeran for their cooperation in bringing out this book.

I personally thank my colleagues and senior scholars of siddha medicine, Dr G. Ganapathy, Dr K. Natarajan, Dr J. R. Krishnamurthi, Dr V. Subramaniyan, Dr K. Rajeswari, Dr V. Nataraja Chokkalingam, Dr M. Padmapriya, and Dr P. Thenmozhi for their valuable service in writing this volume.

On this occasion I wish to congratulate my students on their immense assistance in the making of this work.

My thanks are also due to Dr P. Arthanareeswaran, Editor, Dr V. Murugan, Language Editor, and the computer operator Mr K. Selladurai for their immense help in bringing out this work in a beautiful form.

I hope that this book will serve as a valuable introduction to siddha medical system.

Dr P. Jayaprakash Narayanan Coordinator

System of Transliteration of Tamil

		Vowels					
Sh	nort	Long	5	Diphtho	ongs		
அ	a	ஆ	ā	器	ai		
@	i	FF	ī	ஒள	au		
ഉ	u	<u>ഉണ</u>	ũ				
ត	e	ब्र	ē				
ନ୍ତ	o		ō				

Consonants

	Hard		Soft		Medial	
க்		k	ங்	'n	ய்	у
ச்		c,s	ஞ்	gn, ñ	ġ	r
Ŀ		ţ	ळंग	n, ņ	ல்	1
த்		t, th, dh	ந்	n	வ்	v
ů		p,b,bh	ம்	m	តាំ	l, <u>İ</u>
ற்		r	6ठेंग	n	ģ	zh

 $\bar{A}ytam$

∴ k

Man and the Cosmos

Introduction

One of the basic concepts of siddha is that human body (microcosm) and the cosmos (macrocosm) are identical. To put it in the words of Sattamuni,

anṭatthil uḷḷathē pinṭam
pinṭatthil uḷḷathē anṭam
anṭamum pinṭamum onrē
arinthu thān pārkkum pōthē

-Sattamuni Gnānam

The manifestation of five primordial elements (pancha bhūthas)

The cosmos is composed of five primordial elements, i.e. pancha bhūthas. All matter which arises, exists and disappears, and reappears, exists and disappears will get absorbed in the great Infinite, known as super-consciousness (parabhramam).

Thi (fire) manifests in nir (water), nir manifests in vāyu the activated wind, which manifests in man (earth). Man and kāṭru (wind) are interchangeable. These five primordial elements constitute the basis of everything. The cosmos is composed of their conglomeration. With open-mindedness, one gets things materialized through the aid of these primordial elements.

āmenī appuvilē thēyu thōnī i uthithamenī athēyuvilē vāyvu thōnī i thēmenī vāyuvilē yunthi thōnī i thiṭamāna piruthiviyum vāyu vāccuk kāmenī panchakartthā! pancha būtham kanamākak kūṭiyallō ulaka māccut thāmenī ānavatthaip pōkki mainthā sāthakamāy ainthainthā thonī thākkē.

-Bhrama Gnānam 2

Again, the body is composed of man (earth), nīr (water), thī (fire), kātru (wind), and veli (space).

pārappā būtha mainthu man nir thēyu
parivāyu ākāyam ainthinālē
sērappā saṭa māccu.

-Sathakanāți

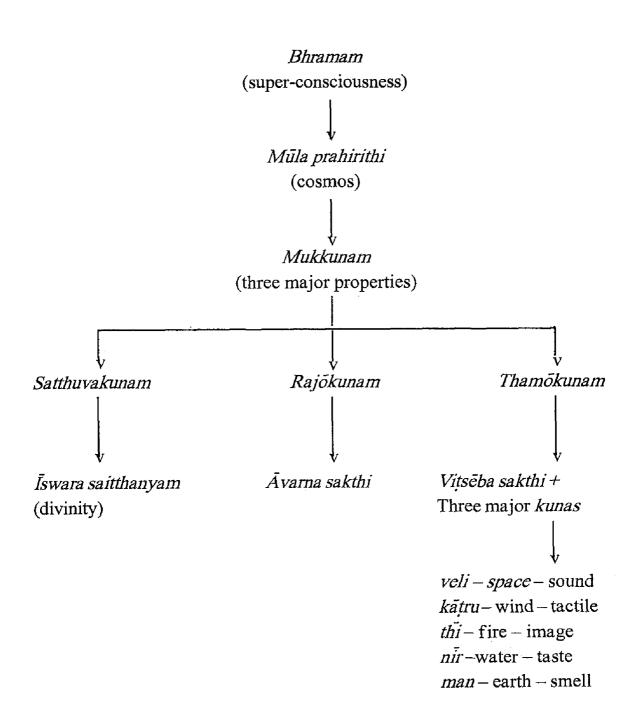
In man manifest minerals, plants, animals and human beings.

The diagram (p.3) represents these facts.

Combination of five primordial elements in the formation of foetus

The uterus represents the space (vin), ovum (nātham) represents the earth (man), semen (vinthu) represents the fire and wind, and fluid represents the water.

unniya karppak kuzhiyām veļiyilē
panniya nātham pakarntha pirithivi
vanniyum vāyuvum māyurum sukkilam
panniyum samanāy vaļarkkum uthakamē.



Uterus (*karuppai*) provides space for the development of the foetus. Ovum (*nātham*) - (*man*) provides for fertilization and growth. Semen (*vinthu*) provides the inherent heat, and the wind (*kāṭru*) helps the movement. Water ever nourishes the foetus. Blood *thāthu* and other *thāthus* are produced from the water-like rasa thāthu.

kānmai yanrith thinamonru ithazh thānonronru karuvāna karukkuzhitthān innāṭkuḷḷē pānmai enra vinthaṅkē ūrumpōthu pāyumappā vanni yoṭu vāyuthānē

- Agatthiyar Vaitthiya Vallāthi 800

Formation of embryo from ovum and sperm

When sperm reaches the ovum, they become united to form embryo with the inherent heat and wind from the sperm. It is protected by the wind as a fence. In other words, it can be interpreted as follows:

Abanan protects the path.

Prānan divides the karu (embryo) into segments.

Uthānan promotes its development.

At this stage, anavam (ego), kanmam (good and bad deeds of the past) and mayai (material cause of impure universe) join the karu (embryo). The body develops according to the balance of vatham, pittham and kabam of the parents.

Five primordial elements produce mukkuṭram

vātham - wind + space

pittham - fire

kabam - earth + water

Body is composed of five primordial element	Body	is	composed	of	five	primordial	elements
---	------	----	----------	----	------	------------	----------

Earth	Water	Fire	Wind	Space
Bone	Muscle	Skin	Channels	Hair
Brain	Urine	Fat	Semen	Blood
Coitus	Lethargy	Sleep	Ego	Fear
Lying at rest	Sitting	Walking	Running	Jumping
Difference of	Arrogance	Libido	Miserliness	Perversion
opinion				

Six tastes and the combination of five primordial elements:

sweetness - earth + water
sourness - earth + fire
saltishness - water + fire
bitterness - wind + space
pungency - wind + fire
astringency - wind + earth

Seven thathus and mukkutrams and their relationship

Vātham resides in the bone. It resides in other thāthus also but predominantly in the bone. Pittham resides in the blood. Kabam resides in other thāthus.

Thirumular says that seven *thāthus* which constitute the body are developed by the conglomeration of perceptible forms of the five primordial elements.

iratham uthiram iraicci thol methai maruviya atthi azhum potu maccai paraviya sukkilam pāzhām upāthi uruvama lālutal onrenalāmē [Lymph, blood, flesh, skin, and tendons, Bones, marrow, fat, brain and semen,
- Of these into one shape made
Is the body gross,
By sorrow harassed.]

Yūki observes in acquiescence:

senma mār sarīram thonnūgru āgankulamām seykinga avaravarkaļ kaiyālē thān thannamām rasam irattham māmsamum mēthai thasai maccaiyoṭu sukkilanthāthu ēzhāki unnamām uruvennum sarīramāki uyir saṭṭai rasam sērnthu rōmamāki vannamām vāthapittha sēṭpa māki varukinga saṭaththiniṭa vanmai kēļē

-Yūki Vaidhya Sinthāmani-800

In the light of the authorities above, it is clear that human beings, all minerals, herbs and animals are made up of five primordial elements. They believed that the energy in the individual is constantly interacting with the cosmic force which contains the vibrations of the planets and the stars. Each planet has a specific attraction towards a particular important organ:

-	sun
-	moon
-	mars
-	venus
-	mercury
-	jupiter
	- - -

Man and the Cosmos 7

spleen - saturn

Precious stones are said to have influence on certain organs:

1. bone	-	diamond	-	venus
2. teeth	-	pearl	-	moon
3. blood	-	ruby	-	sun
4. hair	-	cat's eye	-	kēthu
5. muscle	-	coral	-	mars
6. eyes	-	sapphire	-	saturn
7. pittham	-	emerald	-	mercury
8. <i>kabam</i>	-	topaz	-	jupiter
9. fat	-	sardonyx	-	rāgu

The ancient cosmic theory holds that whatever is present in the cosmos is present in human beings also. When a particular organ is functionally deficient, the gem related to it may be made into *parpam* (calx of the gem) and administered to the patient.

If the planets like the sun and the others are well placed in the horizon, during a new birth, the individual will have a healthy and wealthy career. Similarly, the gem related to the organ also emits lustre which would improve a particular organ.

The relation of planets and stars to human organs

The stars and planets in the cosmic space exercise specific influences on certain organs. It is evident that there is a relationship between the manifestation of the diseases and the vibrating rays from the stars and planets. The relationship between the constellations and organs is as follows:

Aswini - lateral leg

Bharani - mid sole

Kārtthigai - head

Rōhini - frontal head

Mirugasiridam - eyebrows

Thiruvāthirai - eyes

Punarpūsam - nose

Pūsam - face

Āyilyam - ears

Maham - chin

Pūram - right hand

Utthiram - left hand

Astham - fingers of the hand

Chitthirai - neck

Swāthy - chest

Visāgam - brain

Anusam - abdomen

Kēṭṭai - right pectoral region

Mūlam - left pectoral region

Pürādam - back

Utthiradam - waist

Thiruvonam - genitals

Avittam - anus

Sathaiyam - right thigh

Pūrattāthi - left thigh

Utthirattāthi - knee

Rēvathi - ankle of the leg

All the twenty-seven constellations influence the structure and function of the organs. The birth star of the individual is the constellation through which the moon transits at the time of birth of the individual. That star has an influence on a particular organ; that organ is considered the seat of soul in the particular individual.

Influence of planets on certain organs

sun - right eye, heart, forehead

moon - chest, shoulder, nose, left eye

mars - head, hand, thigh, bone, blood

mercury - lips, neck, subtle channels, fingers, ears

jupiter - abdomen, small intestine, large intestine, bronchus,

bone marrow

venus - face, sperm, cells, kidney

saturn - nerve, skin, nail, liver, teeth, joints

rāgu - esophagus, knee joint, gall bladder

kēthu - blood, nape of the neck, forehead

Planets and diseases

Certain diseases are caused by the adverse influence of planets on the body. They are as follows:

sun - diminished vision, headache, inadequate blood

supply, thinning of bone, palpitation, fever

moon - uterine disorders, coryza, anaemia, menstrual

disorders, mental retardation, etc.

blood disorders, fever, burns, hypertension, cancer,
etc.
psychiatric disorders, deafness, neurosis, vitiligo,
impotence, respiratory disorders, etc.
abdominal disorders, jaundice, oedema, neoplastic
disorders, etc.
diabetes, sexual disorders, corbuncle, urogenital
disorders, eye diseases
neuromuscular disorders, hemiplegia, bone disorders,
dental diseases, coryza, elephantiasis, endocrine
disorders, etc.
cough, intestinal disorders, ulcer in the digestive
tract, spleen disorders
deafness, dumbness, intestinal worms, low blood
pressure, etc.

Seasonal hygiene

The earth rotates on its axis and revolves around the sun taking twelve months for each rotation. Seasons are the result of this rotation:

kārkālam -	autumn (Aug-Nov) -	Āvani & Puraṭṭāsi
kūthirkālam -	autumn (Aug-Nov) -	Aippasi & Kārtthigai
munpanikālam -	winter (Nov-Jan) -	Mārkazhi & Thai
pinpanikālam -	spring (Feb-March) -	Māsi & Panguni
ilavēnilkālam -	spring (April – May) -	Chitthirai & Vaikāsi
muthuvēnilkālam-	summer (June-Aug) -	Āni & Ādi

Man and the Cosmos

The sun journeys towards the north pole for six months. This is known as *utthirayanam* (from *Thai* to *Āni* i.e. from January to June). During this period, the earth is exposed very close to the sun and thereby to excessive heat. As per the concept that the microcosm (human being) and macrocosm (universe) are identical, the inherent heat of the human body also increases. In this time, the tastes of bitterness, astringency and pungency become stronger in the seasons, viz., *pinpani*, *ilavēnil* and *muthuvēnil* respectively. This phenomenon increases the inherent heat of the body and lowers its strength. This is known as prohibited period or power-losing period.

The sun travels towards the south pole for six months. This is known as that sin a yanam (from Adi to Markazhi, July to December). During this period, since the exposed area of the earth is away from the sun, it becomes cool, and the inherent strength of living beings increases. So this period is known as the period of release.

Vātham is activated during Ādi, Āvani, Puraṭṭāsi and Aippasi (July to October). Pittham is activated during Panguni, Chitthirai, Vaikāsi and Āni (March to June). Ayyam is activated during Kārtthikai, Mārkazhi, Thai and Māsi.

The changes in the environment occur in the human body also. In summer (*Chitthirai*, *Vaikāsi* and $\bar{A}ni$), due to the scorching sun, the body heat increases and activates the *pittham*. If rain comes during this period, it results in an imbalance in the humoural phenomena of the body, that is, it affects *pittham* and *kabam* and produces eruptive fevers.

The earth is a small part of the universe. The various planets in the cosmos revolve around the sun. The natural gravitational force of the sun makes the earth revolve around it. So day, night, month and year are calculated based on the transit of the earth.

The moon cools the earth. There is a close relationship between the moon and the water. So the force of the moon activates tidal elevation.

Five primordial elements and six stations of the soul

1. Mūlāthāram

The *mūlāthāram* is located in the *kuyyam* which is the point where the two hip bones unite. The *kundalini* or prānic force lies in this area as a circle. *Omkāram* illuminates in this area as a ruby. In the normal state, the *kundalini* is dormant. The testicles in the male and ovaries in the female are linked to *mūlāthāram*. The prānic force spreads to cerebral hemispheres and the spinal cord also.

2. Swāthiṭṭānam (umblical region)

It reflects the earth. It is golden in colour. It is at a distance of two finger's breadth from the *mūlāthāram*. There is a square in which a flower blooms with six petals. Its letter is '*na*'. Brahma and Saraswathi dwell there. Urinary tract is linked to this area.

3. Manipūrakam (epigastrium)

It is the manifestation of water, green in colour. It is located in the epigastrium. It is above the *swāthiṭṭānam* at a distance of eight finger breadths. 1008 channels keep focusing in this area. It appears like a flower with 10 petals in a circle. '*ma*' is the letter, in which are seated Mahalakshmi and Mahavishnu. This is linked to pancreas, stomach, liver, etc.

4. Anāgatham (cardiac region)

It reflects fire. Its colour is red. It is at a distance of 10 finger breadths above the *manipūrakam*. It is like a triangle. In the middle, it blooms like a round flower with 12 petals. 'ci' is the letter, in which are seated Rudran and Parvathi. Heart and lungs are linked to this āthāram.

5. Visuddhi (throat region)

It reflects wind, black in colour. It is at a distance of 10 finger breadths above anagatham. It is located in the neck. It is in the form of a triangle inverted in another triangle. It is like a round flower with 16 petals. The letter is 'va', in which are seated Maheswaran and Maheswari.

6. Akkinai (midpoint of the eyebrows)

It reflects space, is of crystalline colour. It is otherwise known as lalāṭadhānam. It is at a distance of 12 finger breadths above visuddhi. In the space above through eyebrows, it appears like a flower with 3 petals. The letter is 'ya'in which are seated Sadasivam and Manonmani. Pituitary is linked to this āthāram. As such, if one practises breathing exercise and arouses the kundalini force in the mūlāthāram, one will live without illness.

theļitharum intha sivanīr parukil oļitharu mōrānțil ūnamon rillai valiyurum eṭṭin manamum otuṅkum kalitharuṅ kāyaṅ kanakama thāmē.

-Thirumanthiram -846

[If this divine water clear is inside taken
The body glows in a year;
No harm befalls it;
Prana control will realised be;
The mind will centre in letter "A" (prana)
And will uplifted be
And the body into gold will be turned.]

As Thirumular says, if one activates these glands regularly, there is no room for death. So these endocrine glands are very much essential to keep the body in good health.

mūlanāṭi thannilē muļaitthezhuntha sōthiyai nālunāzhi ummuļļē nāṭiyē yirunthapin pālanāki vāzhalām parappirammam ākalām ālamunta kantarānai annaiyānai unmaiyē. Sivavākkiyar here concurs with the view of Thirumūlar. Life manifests in the conglomeration of five primordial elements. By this action, a biomaterial appears with the watery quality of acid and movement.

Evolution of life

Scientists reckon that an environment for the existence of life on this earth should have come into being 50 crore years ago. Researchers say that the first living creature had appeared in the ocean. This is revealed in the ancient texts of Tamil literature.

- 1. Machāvathāram (fish) creatures living only in water
- 2. Kūrmāvathāram (tortoise) creatures which can live both on land and in water
- 3. Varāka avathāram (pig) creatures living on earth alone
- 4. Narasimha avathāram creatures with human body and lion's face
- 5. Vāmana avathāram—dwarf man (slender loris called lemur)
- 6. Parasurāma avathāram physically strong man
- 7. Rāma avathāram strong man with good character
- 8. Balarāma avathāram man skilled in agriculture using the plough
- 9. Krishnāvathāram man refined in body, mind and soul
- 10. *Kalki avathāram* The future incarnation of Vishnu, the form of a horse.

These ten avathārs depict the evolution of living creatures on the earth.

The zodiac and the body

Like constellations and planets, the signs of the zodiac also have links with the human organs. They are:

- *mēsam* (Aries) head, brain, face (excluding nose)
- risabam (Taurus) neck, throat, uvula

mithunam (Gemini) - shoulder, hand, fingers, nose, lungs, chest

katagam (Cancer) - abdomen and chest

simmam(Leo) - heart and spinal cord

kanni (Virgo) - small intestine and large intestine

thulām (Libra) - kidney, skin

viruchikam (Scorpio) - genitalia, blood, ears

thanusu (Sagittarius) - hip

makaram (Capricorn) - teeth, bone, joint, skin

kumpam (Aquarius) - lower leg, blood circulation

minam (Pisces) - sole, toes, lungs, voice, urine

and other excreta.

There exists a relationship between planets and mukkuṭrams (vātham, pittham and kabam). The diseases manifesting in the distorted functions of these three humours have a link with the planetary positions. The mercury, the jupiter and the saturn are associated with vātha diseases. The sun, the mars, the rāgu and the kēthu are associated with pittha diseases. The moon and the venus are associated with kaba diseases.

Conclusion

It is the assertion of siddhars that what exist in the cosmos do exist in the human body also. On this basis, an understanding of the cosmic structures and their relationship with the human body and its functions will be useful for a better understanding of the diseases and their management.

Dr P. Jayaprakash Narayanan

Principles of Five Primordial Elements (pancha bhūthas)

Introduction

The universe is made up of five primordial elements (pancha bhūthas). The things which are formed, preserved and destroyed are again found to be formed, preserved and destroyed. These things will get compressed into a single entity. The world too is made up of five primordial elements which function on the basis of three energies, viz., production, protection and destruction during its origin. Likewise, the human body is informed by principles of pancha bhūthas. These five primordial elements constitute the basis of the making of the body.

These five primordial elements are the basic source of the universe (the celestial sphere), the soul, the constitution of the body, human characteristics, tastes, diseases and their treatment as well. Let us see it in detail.

Characteristics and functions of the five primordial elements

Soil:

Character: bigness, endurance, thickness, odour

Function: weighing heavy, enduring, growth, rotundity

Water:

Character: denseness, flexibility, coldness, fluidity, sluggishness,

rigidity, taste.

Function: fluidity, helping thriving, making lymph juice,

controlling, causing happiness.

Fire:

Character: dryness, sharpness, heat, purity, light.

Function: burning, emitting light, blazing, making colour,

digestion.

Wind:

Character: lightness, purity, dryness, harming.

Function: making light, causing fatigue, emaciating, causing

sorrow, parching.

Space:

Character: minuteness, purity, lightness, sound.

Function: making minute interspaces, causing lightness.

Origin of the universe

Firstly, the space was formed,

From this, the wind was formed,

From the wind, the fire was formed,

From the fire, the water was formed,

From the water, the soil was formed,

caused as they had been by the fivefold activities of creation, preservation, destruction, concealment and nurturing.

Formation of the five primordial elements

The process of five primordial elements getting transformed from nano particles to macro particles is called *pancha bhūtha panchīkaranam* by

siddhars, which a classical Tamil poem (*Puranānūru* verse 2) describes beautifully

mantinintha nilanum nilamēnthiya visumpum visumputhaivaru vaļiyum vaļitthalaiiya thiyum thimuraniya niru menrānku aimperum pūthat thiyarkaipōla

[Like the earth kept whole by its clay and the sky raised up on the earth and the wind that glides across the sky and the fire sweeping up on the wind or water that encounters fire, your nature is that of the five great elements.]

Space

Two billion years ago, the universe came into being, caused as it had been by the unceasing revolution of the stars and the planets in the open space that had then remained enveloped in complete darkness.

Wind

Wind molecules were formed by the action of the atomic particles in the space. These particles went through a process of collision, blending, splitting, etc., which gave rise to the birth of sound.

Fire

The density of gaseous particles in the centre of the space is higher than that of the surrounding area. These particles combined all together producing a gravitational force in the centre. Then the gas in the upper space was drawn inside, causing compression of the sphere that produced heat and light. This was witnessed in all gaseous spheres, protecting them against stiffening. The

heat and energy thrown up from these spheres turned into the sun.

Water

Gases enveloping the earth became light by the sun's heat and went upwards. Later the steam cooled down and changed into water. By the gravitational force, it was pulled downwards as rain that caused the formation of rivers and seas.

Soil

The earth was originally a fiery mass descending from the space, and it formed into a sphere of myriad gases, metals and minerals before it turned into the element of earth which we have been living on. It is therefore obvious that the five primordial elements constitute the basic sources of our body and soul. The following *Puranānūru* poem (18) vividly pictures this reality:

niringu amaiyā yākkaikku ellām unți koțutthār uyir koțutthārē unți muthagrē unavin pințam unavenappațuvathu nilaththoțu nirē nirum nilanum punariyõr ințu utampum uyirum pataitthisi nörē

[No bodies woven of their parts can subsist without water Those who give these bodies food give them life The body massed together of food has food as its source. That which men call food comes from water mingled with earth. Those who bring together earth and water in union create the means for bodies to exist in this world, for life to be!]

Origin of living species

The five primordial elements lying in the space interacting with one another, living and non-living things have come into existence. Animals and plants comprise living things. Non-living things include space, wind, fire, water and soil.

The soul which has no shape and form enters into an inanimate thing and endows it with life and movement.

Union of the five primordial elements in embryo development

 $V\bar{a}yu$ (gas) divides the shapeless embryo into body constituent and $th\bar{o}dam$ from the day of conception. Fire $(th\bar{e}yu)$ is the $th\bar{a}thu$ separated by $v\bar{a}yu$ which produces $th\bar{o}dams$. Water (appu) cools down the heat formed by the $th\bar{e}yu$ and $v\bar{a}yu$ by its moisture content and protects it. Soil (prithvi) protects it from the damage of moisture content. Space $(\bar{a}k\bar{a}yam)$ gives enough place for the embryo to develop in the uterus. A siddhar puts it thus:

unniya karppak kuzhiyām veļiyilē
panniya nātham pakarnthu pruthivi
vanniyum vāyuvum māyurum sukkilam
manniya samanāy vaļarkkumuthakamē

uthaka muthira murunkanal väyuväl sithakuru mankankal seythu mutitthitum

It means that

The uterus is the sky providing the space
The ovum is the soil giving nutrition
The sperm is the fire facilitating movements
The amniotic fluid changes into blood and forms the organs by the action of the fire and the gas.

Hence, the seven body constituents develop respectively, through *rasam* changing into blood, and other *thāthus* developing thereon.

According to the 96 principles, the following are the natural qualities of sense organs, senses and the five primordial elements:

Sense organs	Primordial elements	Senses
Eye	Fire	Vision
Ear	Space	Hearing
Mouth	Water	Taste
Nose	Soil	Smell
Skin	Air	Sensation

Macro and micro stages

The five primordial elements, sense organs and senses combine together into a state which is clear and visible in the macro stage. When they stand apart and are invisible, it is called the micro stage.

Formation of the five primordial elements in micro stage

The essence (satthuvāmsam) of the five primordial elements divided into four parts, three parts go into the making of anthakaranas and one part goes into the making of sense organs.

Anthakaranam

The other bhūthas combining with the space, the following are created:

Mind (manam) - Neck
Knowledge (buddhi) - Eye
Wisdom (siddham) - Navel
Ego (akankāram) - Heart.

Sense organs

The rasō vāmsam quality of the five primordial elements is divided into 4 parts. By using 3 parts, the five primary vāyus and five secondary vāyus are formed. With 1 part, kanmēndhiriyam organs and their functions are formed.

Primary vāyus - 5

The other *bhūthas* combining with the $v\bar{a}yu(gas)$, we have the following and their sites:

- *Prānan* Heart
- Abānan Anus
- Vyānan Sarvāngam
- Samānan Navel
- Uthānan Neck

The other *bhūthas* combining with the fire, we have the following senses and their sites:

- Hearing Ear
- Touch Skin
- Taste Tongue
- Smell Nose
- Vision Eye

Sense organs – 5

The other *bhūthas* combining with the water, we have the following senses and their sites:

- Sound Ear
- Touch Skin
- Vision Eye
- Smell Nose
- Taste Tongue

Kanmēndhiriyam - 5

The other *bhūthas* combining with the soil, we have the following and their sites:

- Mouth Vasanam Hand Thānam Kamanam Leg Visarkkam
- Genitals Ānantham

The thamo quality of five primordial elements is divided into 2 parts. Keeping one part stable, the other part is divided further into four parts. Each part is given into the other four bhūthas. In this way were the primordial elements transformed into micro stage.

Anus

Nādi

The nādis are ten, among which the first three are important.

They are:

Idakalai

Pingalai

Suzhumunai

Formation of vatham, pittham and kabam

- + abānan - vātham Idakalai
- + prānan pittham Pingalai
- kabam + samānan Suzhumunai

Bases (atharam-nerve-plexuses) - 6

`	-	Colour	Primordial element
•	Mūlāthāram	Ruby	-
•	Swāthiṭṭānam	Gold	Soil
•	Manipūrakam	Green	Water

•	Anāgatham	Fire	Fire
•	Visuddhi	Black	Air
•	Ā kķina i	Alum	Space

Thodam (disorder of the humours) – 3

Yumam Vigoui of all (all 'space)	•	Vātham	-	vigour of air (air + space)
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• Pittham - vigour of fire

• Kabam - vigour of water (water + soil)

The initiation of these three causes diseases in human beings. A detailed study of the 96 principles and the soul in it reveals that the basis of body and mind is the harmonious blending of the five primordial elements.

Added to this, they are found in the body in the following ways:

- Space as mind
- Air as respiration and body gas
- Fire as body heat
- Water as body fluids
- Soil as bone, muscle and nerves.

We have the following equations in *Thirumanthiram*, seventh thanthiram:

•	Feet	-	soil
•	From feet to navel	-	water
•	From navel to chest	-	fire
•	From chest to shoulder	-	air
•	Above neck	-	space

Primordial elements in lifespan

The first 20 years of our lifespan is ruled by soil, upto 40 years it is by water, upto 60 years by fire, upto 80 years by air and then upto 100 years it is controlled by space.

Movement of breath in the five primordial elements

Saram is the movement of breath. It makes its entry and exit through the two nostrils. The left nostril is called *idakalai* and the right nostril is called *pingalai* (*vadakalai*). Breathing takes place through these two alternatively. Despite this, we should know the respiration taking place in the five *bhūthas*.

We should feel that the air in the soil (*prithvi*) stays in the nostrils and nasal bridge for about $1\frac{1}{2}$ $n\bar{a}zhigai$ (36 minutes).

In water (appu), it flows down for about 11/4 nāzhigai (30 minutes).

In fire (thēyu), it flows upwards for 1 nāzhigai (24 minutes).

In air (vāyu), it stays near to nasal bridge for ¾ nāzhigai (18 minutes).

In space $(\bar{a}k\bar{a}yam)$, it flows straight without touching any part for $\frac{1}{2}n\bar{a}zhigai$ (12 minutes).

Thus we see that our body is made up of the five primordial elements as in the case of the universe.

The above-said principles of the five primordial elements are external instruments for the body. Among these, the three $th\bar{a}thus$ made up of three $b\bar{u}thas$ are important functional parts of the body. They are,

Air – *vātham*

Fire – pittham

Water - kabam.

Divisions of vātham (vali)

- 1. Prānan (respiratory air)
- 2. Abānan (downward air)
- 3. Vyānan (paravukāl)
- 4. *Udhānan* (upward flow of air)
- 5. Samānan (nadukkāl)
- 6. Nagan
- 7. Kürman
- 8. Kirugaran
- 9. Dē vathatthan
- 10. Dhananjeyan

Secondary vāyus

Divisions of pittham (azhal)

- 1. Anarpittham (gastric juice)
- 2. Ranjakam (haemoglobin)
- 3. Sādhagam (life energy)
- 4. $\bar{A}l\bar{o}sakam$ (aqueous humour)
- 5. *Prāsakam* (bile)

Divisions of kabam (ayyam)

- 1. Avalambakam(serum)
- 2. *Kilē dham* (saliva)
- 3. *Pō dhagam* (lymph)
- 4. Tharpagam (cerebrospinal fluid)
- 5. Sandhigam (synovial fluid).

The above-said *mukkuṭrams* constitute the primary reason for the formation of body. Increase in *vali* is called *vātha* body, increase in *azhal* is called *pittha* body, and increase in *ayyam* is called *kaba* body. These three combine together in a body to form the mixed type.

Evolution of five primordial elements

All the things in this world are made up of these primordial elements. They fall into two classes, viz., living and non-living things. Living things are classified into human beings and non-human beings. Non-living things are classified into flora and minerals. These mineral and plant kingdoms are found in medicines and dietary regimen. Sense organs are the only tools through which to know about the mineral and plant kingdoms. Our ancient people have described these two classes by using the taste sense alone. Hence, let us examine the sense of taste.

Each taste is made up of two *bhūthas*. It is taste through which is revealed the constitution of *bhūthas* in things.

- l. Sweet $-\sin t + \text{water}$
- 2. Sour soil + fire
- 3. Saltish water + fire
- 4. Bitter -air + space
- 5. Pungent -air + fire
- 6. Astringent soil + air.

Virulence

Things made of primordial elements are characterized by either heat or cold. Hence, each and every thing comes under heat or cold virulence. Things with increased fire $(th\bar{e}yu)$ have heating effect and things without fire have cooling effect.

Relation between diseases and five primordial elements

In the body of pancha bhūthas, vātham is present as air, pittham as fire and kabam as water. It means that the primordial elements support the body.

Body is mostly made up of soil (prithvi). Hence it is sluggish in nature, and it therefore needs three other bhūthas for its action. The seven body constituents (saptha thāthus) get strengthened by water (appu) which utilizes kabam from food, by fire (thēyu) which utilizes pittham from food, and by air (vāyu) which utilizes vātham from food contents. Because the three bhūthas suit correctly with three thāthus, they are considered as three types of energy. As noted earlier, vātham, pittham and kabam are formed by the combination of principal nādis, idakalai, pingalai and suzhumunai along with abānan, prānan and samānan.

A disease is caused by the changes in *uyir thāthu* and seven body constituents (*udal thāthu*) through food habits.

Treatment

Just as body is made up of five primordial elements, uyir thāthus and udal thāthus are made up of these elements. Diseases therefore have a cause-

and-effect relationship with these elements. So medicines and treatment should be on the basis of the *pancha bhūthas* (primordial elements). It is for this reason that our forebears say that:

virēcchanatthāl vātham thāzhum vamanatthāl pittham thāzhum kalikka nasiyatthāl kabam thāzhum

[Vātham descends by enema (virēcchanam)
Pittham descends by vomit (vamanam)

Kabam descends by eyedrops (kalikkam) and nasal drops (nasiyam).]

Tastes which increase *vātham*: bitterness, pungency and astringency Tastes which increase *pittham*: sourness, pungency and saltishness Tastes which increase *kabam*: sweetness, sourness and saltishness.

Tastes which equalize mutthodam

Vātham: sweetness, sourness and saltishness

Pittham: sweetness, bitterness and astringency

Kabam: bitterness, pungency, astringency.

A disease is treated by using the taste which equalizes the increased thodam.

Kunmam (ulcer) is treated by using the taste which equalizes vātham. Sukku (zingiber officinalis), milagu (piper nigrum), thippili (piper longum) used for treating respiratory disorders are characterized by pungent taste.

Through this, it is clear that the primordial elements are the basis for not only diseases but also their treatment. It is these elements which are the cause of the world's formation and destruction. Because the universe comprises all matter, we can understand that all things in the celestial sphere are made up of five primordial elements. They are formed, preserved and destroyed in this universe. Look at the verse from $B\bar{o}gar\ 3000$:

vāthatthil veṭiyuppum panchabhūtham vanmaiyām savukkāram panchabhūtham sithaṛṛa seynirum panchabhūtham seyamāna kuruvukkum panchabhūtham kōthaṛṛa saṭatthukkum panchabhūtham kuriyākap paluppathaṛkum panchabhūtham kāriyamām vāthamellām panchabhūtham.

It means that in the same way as *muppu* is the combination of three *bhūthas* (elements), all things in the universe are sustained by the five elements.

Dr G. Ganapathy

On the Principles (thatthuva ārāyechi)

Introduction

An understanding of the origin of the universe is the first step towards the study of the reals called *tatthuvas*. On the basis of *thatthuvam* only have the air, space, fire, water, and earth originated in this universe. The basis of every movement in the universe has a *thatthuvam* running through it.

A study of the thatthuvas comprises the following things:

- ◆ The basic thoughts about the *pancha bhūthas* (five primordial elements)
- ♦ Panchīkaranam
- ◆ Explanation of *thatthuvam*
- ◆ Difference between science and spiritual knowledge, and 96 thatthuvas and basic thatthuvas needed for a siddha doctor.

Space

Two hundred crore years ago, before the formation of planets like the earth and the sun, there had existed a vast dark open space. In this space only all planets and stars were formed in the sky in a round shape. On seeing the planets and the stars existing in round shape in the space, our scientists concluded the earth is round in shape. All planets and stars revolve in the outer space. They revolve around each other without colliding with others. They revolve

continuously without staying in a place even for a moment. This open space where all these planets and stars revolve is known as space, sky, etc. All the things present in the space together is called universe. It is also called celestial sphere.

This sphere is present even in the atom which cannot be seen through our naked eyes. Protons (pasu) and neutrons (pathi) are present in the nucleus. Electrons (pāsam) revolve around the nucleus with their own attractive force. There is a free space between proton, neutron and electron. This space is called a small open space.

In celestial body and in atomic body, these fine atoms floating in the sky perform certain actions like hitting, linking, combining and separating among each other continuously. Because of these actions, sound is produced. Similarly, light energy, fire energy, etc are formed.

Air

Owing to the actions of space atoms, these gaseous atomic globules are formed. Gaseous atomic masses are not always stable. They are in continuous action. Light is produced by hitting, linking, combining and separating of the gaseous atoms among each other. Collections of light form the stars which are floating in the space. These stars form the galaxy. Sun is one of the stars. Many planets keep revolving around the sun. Similarly, there are crores and crores of galaxies. They have a certain space between each other. Stars are present in these spaces. So the sun and stars are present in the space and they are also revolving there.

By the collection of light, the sun stands like a burning liquid in this vast open space. From this burning liquid, the earth where we live and other planets originated.

Fire (Heat)

In the gaseous planets, the density is more at the centre, and less in the surrounding areas. When these gaseous planets collect in large quantities, an attractive force is formed at the centre. Because of this force, the gases present

in the upper surface of the gaseous planets are pulled towards the inside. Later, the given planet starts shrinking. During shrinking, light and heat are produced. At the same time, these actions take place among the gaseous planets. These planets get scattered without hardening.

These scattered pieces, which are present in the outer space at a long distance, become hardened and start illuminating. Now also this heat keeps increasing manifold beyond reckoning. Due to the heat, the atoms in the planets get destructed, and destructed atoms combine to form new gaseous atoms. During that time, heat energy and light energy are thrown out into the space from the planets. The sun is formed by this process.

Water

Water particles were present among the vapour particles. Vapour particles went inside the round-shaped melting dense particles. Though lighter particles were settled above, the low temperature from the outer space affected the earth constantly. Due to this chillness, the upper surface got hardened and became a solid mass. Denser particles existed in liquid state because of the tension caused by hardening, and gases and heat.

Even after many thousand years of the earth's origin, it was still being heated up by the sun. At the same time, the cool temperature from the outer space has hardened it.

Earth absorbed a small amount of heat to bear the chillness, and the extra heat was thrown out to the outer space. As the heat was absorbed continuously from the sun, the centre region of the earth was getting hotter and hotter. Also gases were dumped under the earth. These gases expanded due to the internal heat and started to press the earth from inside. The external surface was softer than the internal region. Gases broke out through this soft surface and were thrown out. Along with this, the melted rocks and metals were thrown out from under the earth. Because of this, a gaseous atmosphere has formed around the earth.

The gaseous particles present in the earth became light due to heat from the sun and went up. The upward moving vapour got cooled and became water. Due to the gravitational force of the earth, the water particles were pulled down and they fell as rain. As soon as the rain water fell, due to the earth's heat, it again became vapour and went up. They got cooled and again fell as rain. Thus there was continuous rainfall.

In the course of time, the particles of the space joined with the gaseous region and formed a huge atmosphere around the earth. At this stage, the external surface of the earth started cooling. Rainwater fell on the earth's surface, and they flowed as rivers. As time passed, the waters stagnated in the valleys turned into oceans.

Earth (Soil)

The earth was like a round-shaped burning liquid earlier. As time passed, thanks to the gaseous and the atmospheric regions in the sky, it became a spherical mass containing in itself four types of metals, minerals and salts, and keeps rotating itself and also revolving around the sun. This is the earth which we live on .

Modification of five primordial elements

Whichever *bhūtha* among the five *bhūthas* (primordial elements) changes from potential energy to kinetic energy, it develops from an atomic size and transforms to a bigger shape. During this process, the other ninety-six *thatthuvams* stand embodied in those atoms invisibly.

Invisible primordial elements change from potential energy to kinetic energy, and according to the nature of these elements, they increase like atomic globules and multiply manyfold and transform into a visible matter.

Siddhars say this transformation of five primordial elements from invisible to visible matter is known as *pancha bhūtha panchīkaranam*.

Explanation of thatthuvam

Thatthuvam means truth. So knowledge of thatthuvam is to know the truth. Truth means existence. That is, it exists for ever. The things we see including our body do not exist for ever. Is there any matter that exists for ever? If there is one, what is it? What are its properties? A study of these is known as the knowledge of thatthuvam.

Spiritual knowledge and scientific knowledge

To study the truth of ever-present things is known as spiritual knowledge and scientific knowledge is to know about things that are perishable or those that get split into parts. Explorations of the realm of spiritualism have had a finality long ago in our country and their results have been published. The later studies were merely intended to interpret them in the right perspectives.

Spiritual studies are not a matter of pleasurable diversion. The seers of this land undertook such studies on seeing the sufferings of living things and the unequalities existing among them.

Spiritualism is significantly related to the life of people. Spiritual quests and human living are closely related to each other. It is for this reason that religion and philosophy are not kept separately. They remain intertwined with one another.

The spiritual scientists and the philosophers were involved not only in the study of the roots of origin but also in the examination of the tools required for that study. These tools are a means to gain knowledge. Philosophers call them *pramānas* (means of acquiring knowledge). Every sense, every book is a means unto itself. These *pramānas* are considered to be a special feature of philosophy. The conclusions of philosophical studies have been recorded in the *āgamas* and *vedas*.

The different ways of interpreting these conclusions gave rise to the advent of several sects and divisions in the later periods.

Indian philosophers are usually classified into two broad divisions. One group accepts the contents of *āgamas* and the other group acquiesces in the contents of *vedas* and the *upanishads*.

Adherents and non-adherents of vedic dogmas

They are classified as under:

Adherents	Non-adherents
Sāngiyas	Materialists
Yoga religionists	Jains
Naiyāyikas	Buddhists
Mīmāmsakas	
Vēdānthikas	
Siddhānthis	

Fundamentals of logic: pramanas

Even as *āgamic* tools (*pramānas*) as means of knowledge are considered preferable to logical tools, both are essential to know the *thatthuvas*.

Pramānas are the tools that lead to knowledge. These are the standards. Before measuring a matter we must know the instruments. Philosophical knowledge implies study of the universe. A knowledge of the instruments is essential when we set out to study the cosmic phenomena. The science of logic provides for an understanding of the means of knowledge.

Thatthuvas (Reals) 96

Thirumular gives us to understand that there are 4,00,48,500 particles present in an atom. The present lifespan is not enough for humans like us to learn and understand these particles of cosmic reality.

vēthanūr pirāyam nūru
manisar thām pukuvarēlum
pāthiyum urankip pōkum
ninrathil pathinai yāntu
pēthai pālakana thākum
pinipasi mūpput thunpam
āthalāl piravi vēntēn
arankamā nakaru lānē!

As human life is filled with joys and sorrows, it is difficult for us to know the above mentioned particles.

None but the siddhas can reckon these particles. The ninety-six thatthuvas mentioned above are present in the atom which cannot be seen through our naked eyes. But the atom which consists of these 96 thatthuvas manifests in the body, which in proportion to its size is made up of many such atoms intertwined with one another and they function collectively.

Humans must understand that the blending of these 96 thatthuvas gives rise to life, which is housed in a body, the body keeps growing, performs its functions, grows old, perishes and turns into the 96 thatthuvas in a cyclic manner.

Thatthuvam means tool. This life experiences both joys and sorrows. Thatthuvas serve as tools facilitating these experiences. A study of these tools is an aid to acquisition of knowledge and empirical wisdom. A branch of this study is the principle of the soul which will enrich our knowledge, while the other branch, saiva siddhanta, will lead to experiential wisdom.

Practising medicine is also considered to be a religious discipline. The reason why a man born on this earth must learn is that with the help of this learning, he must help people to be relieved of their afflictions of birth and death and must find the way to attain the everlasting happiness, which is called Heaven.

One must have the aim to free the soul as soon as one takes birth in this world. There are many ways given for the liberation of soul. We must follow one of the ways. This is our first duty. The body must be fit for this. Diseases are a distress to the mind and the body which prevent our body from being fit and healthy. It is essential to keep the body free from diseases to attain *mōksha*. This is also a function of *thatthuva*.

The Ninety-six Principles

Introduction

The science that explains how the organs in our body are controlled and made to function by the nervous system, endocrine system. etc., is called physiology.

The physiology of siddha medicine has 96 thatthuvas.

The soul (ānmā) is the base for both modern and siddha physiology. Without the soul, there will be no function in the body. Hence the 96 thatthuvas which nature has created are for the proper functioning of the soul.

Among the 96 thatthuvas, the five bhūthas are the first. The pancha būtha theory was prevalent in the days of Tholkāppiyar. A Tholkāppiyam verse speaks about the five bhūthas. Farly Sangam literary works like Puranānūru refer to the theory of pancha bhūtham. We have educidated this theory in the chapter "Principles of Five Primordial Elements".

We have to look at the siddhars' thatthuvas about the body and the soul on the premise that every object in the world is made up of the five bhūthas.

There are several schools of thought about the *thatthuvas*. Anyhow, we may continue our investigation by adopting the 96 *thatthuvas* described by Siddhar Yūkimuni.

The 96 thatthuvas of Siddhar Yūkimuni:

1.	Bhūtham	· -	5
2.	Pori	-	5
3.	Pulan	-	5
4.	Gnānēndhiriyam	-	5
5.	Kanmēndhiriyam	· -	5
6.	Karanam	-	4
7.	Arivu	-	1
8.	Nādi	-	10
9.	Vāyu	-	10
10.	Vidayam	-	5
11.	Kōsam	-	5
12.	Āthāram	<u>-</u>	6
13.	Mandilam	-	3
14.	Malam	-	3
15.	Thōdam	-	3
16.	Ēdanai	-	3
17.	Kunam	-	3
18.	Vina i	-	2
19.	Rāgam	-	8
20.	Avatthai	-	5

The word *thatthuvam* in Tamil means truth. The truths about the principles governing the body are 96 in number. The soul functioning in each body can function not only with the help of organs in the body, but also on the basis of the 96 *thatthuvas*. When these 96 *thatthuvas* function naturally, no disease will come to afflict the body.

Both the body and soul are affected due to intrinsic as well as extrinsic factors.

It appears that the 96 principles (thatthuvas) enunciated by Yūkimuni have been altered in the course of time. These thatthuvas have been created for the wellbeing of the soul and the body. We observe that the soul (ānmā) or arivuhas been included in the 96 thatthuvas which seems to be inappropriate. The siddhars might not have committed this mistake. Hereditarily, their observations have been copied in palm leaves. In the medieval period, some alterations night have been caused while being copied. Hence, this is one of the mistakes, now seen in the printed versions of Yūkimuni.

Both the terms *pori* and *gnānēndhiriyās* have the same meaning. And the functions of *kanmēndhiriyās* known as *kanma vaidyam* have been left out in the poem. This is the second mistake.

As already said, if the *thatthuvam*, *arivu*, is left out, the total number of the *thatthuvas* will come to 95 only. There arises the question then, "What about the other *thatthuvam* with which to make the total 96?" Besides, the *thatthuvas* namely *karanās* are referred to as four. But they should be five in number as under:

1.	<i>Ullam</i>	-	ākāyam	-	space
2.	Manam	-	väyu	-	wind
3.	Buddhi		thī	-	fire
4.	Siddham	-	nir	-	fluidity
5.	Akankāram	-	maņ	-	mass

Taking these into account, the *thatthuvas* become 96 in number. That all objects in this world are made up of the combinations of the five *bhūthas* is the concept of the siddhars. Now we can analyse the 96 *thatthuvas* individually.

The five bhūthas

Vin - ākāyam - the space

In the body of human beings as well as in other physical bodies, there are spaces. These spaces are considered $\bar{a}k\bar{a}yam$. The air inhaled and exhaled from birth onwards is moving in the spaces by going in and coming out.

Thi - fire - heat - light

The normal body temperature of 98.4°F is maintained due to the continuous process of oxidation in the body. Apart from this, the heat produced during digestion in the stomach and the intestines due to biochemical changes is also prevalent which is called *sadarākkini*.

Nir - liquid - water

In our body, fluidity and moisture are prevalent in blood, muscles, bladder, in the sac of semen and in the sweat glands. The physical body, which has been composed of muscles, tendons, nerves and blood vessels, can be divided as follows as the basis of the five *bhūthas*.

- 1. Man bones, muscles, nerves, skin, hair
- 2. Nir urine, blood, semen, bone marrow, fat
- 3. Thi egotism, sleep, fear, sexual union, idleness
- 4. Vāyu running, walking, standing, sitting and lying
- 5. Vin lust, internal grudge, miserliness, infatuation and haughtiness.

The characteristics of man bhūtham

The word man will indicate mass or bulkiness. Bones, muscles, nerves and skin are spread throughout the body. Hair is seen on the outer part of the body and the nose. If anything goes wrong with them, it should be corrected by proper medication.

The qualities of the thi principle

The reason for egotism of the soul is the principle called *pittham* ($th\bar{i}$). All traits like haughtiness, sleep, fear, sexual desire, idleness, etc., are due to the mental and physical conditions of the parents at the time of conception, and also the atmosphere in which the baby is fed, the manner in which the baby is brought up, etc. If these things mark aberration, it can be corrected by medication to some extent. If $y\bar{o}ga$ practice is combined with medication, it will give good results. Apart from the above, astrologers will predict that everything depends upon the position of the nine planets at the time of conception.

The characteristics of the nir principle

Since urine, blood, semen, bone marrow and fat have fluidity and moisture, they are considered as having the qualities of the *nīr bhūtham*. If anything wrong happens, it can be corrected by medication.

The characteristics of vayu

The principle of vali or vātham is the combination of ākāyam and vāyu. When vāyu travels through the spaces in the body, it becomes the principle of vātham and is the cause for functions like running, walking, standing, sitting and lying. If the principle of vātham is affected, the functions of the body will come to a standstill in the affected part. The reasons for the condition should be elicited and medicines administered to make the principle of vātham function properly.

The qualities of the vin principle

The characteristics of the principle of vin are lust, internal grudge, miserliness, infatuation, and haughtiness. Mostly, these traits are formed at the time of conception due to the mental and physical conditions of the parents, due to the previous births, and also due to the manner and the environment in

which the baby is brought up. According to the above conditions, traits like the ones given above will be formed either in excess or in the optimum level or below the optimum level.

It is possible to keep them under control by regularly listening to the speeches of *yōgis* and scholars, and by reading books on moral conduct like *Thirukkural*, Avvaiyār's works, etc., and by conducting ourselves accordingly.

Pori or gnānendhiriyas

Since the body, mouth, eyes, nose and ears are instrumental in perceiving the feelings of touch, taste, sight, smell and sound respectively, they are called *gnānēndhiriyas*. It is said that they possess the qualities of $v\bar{a}yu$ (air), $n\bar{i}r$ (water), $th\bar{i}$ (fire), man (mass) and $\bar{a}k\bar{a}yam$ (space) respectively.

Mei - body

The body which is the cause of the feeling of touch is said to have the qualities of man. The sense of touch is felt by the nerves and nerve endings. Hence it may be appropriate to consider that the body has the qualities of man, instead of vāyu.

Vay - mouth

The mouth is considered to have the qualities of $n\bar{i}r$, since saliva is secreted in the mouth, and the tongue in the mouth feels taste.

Kan - eyes

Since the eyes possess the power of seeing light and the power of perceiving things with the help of sunlight as well as fire, they are considered to be having the qualities of *thi*(fire).

Mūkku - nose

There may be some smell in the mud. The organ which perceives smell is the nose. But if the nose has to feel smell, air should enter the nose. The nose which is capable of inhaling the air can only feel smell.

Hence it will be appropriate to say that the nose which inhales air and feels smell through air can be considered to have the characteristics of the principle of *vāyu*.

Sevi - ears

It is considered that the ears possess the qualities of $\bar{a}k\bar{a}yam$. Sound comes from the sky ($\bar{a}k\bar{a}yam$). The ears alone can hear sound. Since the ears can hear sound which is carried by the wind through the sky ($\bar{a}k\bar{a}yam$), ears are considered to be having the characteristics of $\bar{a}k\bar{a}yam$.

Pulan

The functions of the five senses, namely body, mouth, eyes, nose and ears, are called *pulan*.

Gnānēndhiriyam

It has already been noted that the five senses are the gnanendhiriyas.

Kanmendhiriyam

Kanmēndhiriyās are the hands, legs, outh, anus and cervix uterus. Kanmam means function. Since these five organs are functional organs, they are called kanmēndhiriyās.

The gnanendhiriyas feel things, whereas the kanmendhiriyas perform functions.

Kai - hands

The hands will give and take. They can do whatever they are able to do.

Kāl - legs

It has already been mentioned that the legs are used for running, walking, standing, etc.

Vay - mouth

The mouth is an organ for speech as also for feeling taste. Speech and its sound are created with the help of the tongue, the throat and with the help of the air coming out.

Eruvay - anus and ureter

It helps the downward movements in the body, for excreting faecal matter and urine.

Karuvāy - cervix uterus and penis

It helps in ejaculating semen in males and to expel the foetus from the uterus in females.

The basis of the five bhūthas in kanmēndhiriyās

Since the hands and legs are the functional organs, they may be considered as having the qualities of $v\bar{a}yu$, the principal phenomenon in $v\bar{a}tham$.

Since the mouth feels taste by secreting saliva, it may be considered to be having the qualities of $n\bar{i}r$. Since the mouth does the function of speech by seizing the air from the space, it can be considered as having the qualities of $\bar{a}k\bar{a}yam$, because the air seized and inhaled is from the space which enters into the throat and creates sound.

Since the anus and uterus excrete faecal matter and urine respectively, they may be considered as having the qualities of $n\bar{i}r$.

Since the *karuvāy* is utilized to ejaculate semen in males and to expel the foetus in females, it is considered as having the qualities of *nīr*. But, *karuvāy* and *eruvāy* do these jobs with the help of *kīzh nōkkukkāl* (abāna vāyu functioning in downward movements).

Karanam

Ullam, manam, buddhi, siddham and akankāram are the five karanās.

Ullam

It possesses the qualities of $\bar{a}k\bar{a}yam$. It is the abode of the other four *karanās*. That is to say, *ullam* is the root cause of the other four *karanās*. It pervades the whole of the body. It is soul itself.

Buddhi

Buddhi, a part of ullam, identifies any object by seeing it. Just like the fire which is able to show things clearly, the principle of buddhi also identifies things. Hence it is considered to be having the qualities of thi (fire).

The principle of *buddhi*, when it perceives a pen, will know it is a pen. But the principle of *siddham* will specifically identify whether the pen is an ink pen or a ball pen, and also the company which manufactured it.

Siddham

Siddham, a division of ullam, will minutely identify the objects seen, and will gather all facts pertaining to it. When it perceives a plant, it will know what kind of plant it is and what the other features of it are.

Akankāram

The principle of *akankāram* can be compared to a mountain or a hill. It will stand still without any movement or deviation. That means *akankāram* will firmly stick to the facts known by *siddham*. That is why it is considered to have the qualities of *maṇ*.

Nādi

The ten *nādis* indicate the nerve plexuses in our body. They are

1. Idakalai 2. Pingalai 3. Suzhumunai 4. Sikuvai 5. Purudan 6. Kānthāri 7. Atthi 8. Alampudai 9. Sangini 10. Kugu.

Idakalai

It starts from the toe of the right leg and touches the left nostril across the body like the scissors. It indicates the nerve plexuses starting from the right toe and going up to the left nostril.

Pingalai

It starts from the toe of the left leg and touches the right nostril, across the body like the scissors.

Suzhumunai

It starts from $m\bar{u}l\bar{a}th\bar{a}ram$ and touches the head. It is said to be the centre of and the basis for other $n\bar{a}dis$. That is to say, the nerves starting from $m\bar{u}l\bar{a}th\bar{a}ram$ finally touch the brain which is the headquarters of the nervous system.

Sikuvai

It helps in swallowing food and water. It is seated in the uvula. It is the base for the nerves, muscles and tendons which support the downward functions.

Purudan

It is seated in the right eye. It facilitates sight, winking of the eye, and closing and opening it.

Kānthāri

It is seated in the left eye, helping it as does purudan to the right eye.

Atthi

It is nerve plexus seated in the right ear. It is the sole cause of all the functions of the right ear.

Alampudai

The abode of *alampudai* is the left ear. It is the nerve plexus responsible for all the functions of the left ear.

Sangini

Its abode is the penis in males and vulva in females. The nerve plexus, the muscles and tendons responsible for all the functions of the penis and the vulva are called by the term *sangini*.

Kugu

It is seated in the anus. Anus is the doorway for the downward functions through the intestines. It is given to dilating and shrinking. The nerve plexus, the muscles and tendons which help excrete faecal matter and pass urine through the penis and vagina are called by the term *kugu*.

During childbirth, it helps in expelling the foetus and during intercourse, it helps in ejaculating semen.

Vāyu

Vayu or air enters through the mouth of a baby while it cries after coming out from the uterus. This vayu is the initial cause starting the first function of a newborn baby. The air inhaled by the baby will function all round within the body and throughout its span of life.

The inhaled air, by moving through the spaces in the body, enters into all the organs and makes them function. According to the place and mode of function of this $v\bar{a}yu$, ten names have been assigned to them. They are:

1. Prānan (oxygen)

Since this *vāyu* is the initial cause for the soul to function in a body, it is called *uyirkkāl*, meaning 'life-sustaining air'. It is the initial cause for the first function of a baby.

This vāyu facilitates inhalation and exhalation. It is said that during respiration, air at a distance of twelve inches enters inside, of which air at a distance of eight inches is utilized and the remaining four inches wasted.

A normal, healthy person can inhale air present in the atmosphere, up to twelve inches from the tip of his nose. It is the concept of the siddhars that the inhaled air measuring 12 inches is not fully utilized. Two thirds of this air is oxygen and is utilized while the one third, which is carbon dioxide, is exhaled.

2. Abānan (kīzh nōkkukkāl)

Abānan is the cause for all the downward functions in the body. Swallowing food, pushing down the digested food to the intestines, separating the faecal matter and urine, ejaculating the semen, expelling the foetus etc., are some of the functions attributed to abānan. If there is any hindrance to these functions, it will indicate the violation of abānan.

3. Vyānan (paravu kāl)

It is given to spreading throughout the body. It dwells in movable and immovable organs and helps in stretching and bending the organs. It also helps in the sense of touch. It protects the body by carrying the essence of food to various organs in the body.

The food taken through the mouth is pushed down to the stomach by abānan. Vyānan helps in the digestion of food and after digestion it takes the essence of the food through the blood to every cell where oxidation process

takes place. By this process, the body gets heat and energy. Hence, *vyānan* helps in spreading the essence of food throughout the body.

4. Uthānan (mēl nokkukkāl)

This *vāyu* induces secretion of the digestive fluids in the stomach. It also helps in digestion and makes the food fit into the system. It separates the essence of food and causes the essence to settle in various places within the body.

It facilitates the upward functions like sneezing, coughing, vomiting and exhalation of air through the nostrils.

5. Samānam (nadukkāl)

This $v\bar{a}yu$ starts from the umbilicus and ends in the legs. It controls and corrects the other $v\bar{a}yus$. It equalises the six tastes, food and water taken and helps in the assimilation of the same.

6. Nagan

This is the $v\bar{a}yu$ responsible for raising the wisdom level, thereby making the individual learn all the arts. It helps in singing. It facilitates winking and opening of the eyes. It makes the hairs bristle up. Hence it is considered that this $v\bar{a}yu$ has some connection with certain nerve centres in the brain.

7. Kūrman

It starts from the mind and makes the eyes wink. It makes a person yawn. It helps in closing the mouth. It improves strength. It aids in opening and closing the eyes. It promotes seeing everything in this world. It stimulates tearing of the eyes.

When we deeply go into its functions, it is understood that it has a strong connection with the mind. The principle of manam is a thatthuvam of the soul

created with the help of brain and heart. Hence, it can be presumed that this kūrman is linked with brain and heart.

8. Kirukaran

It dwells in the tongue and helps forming of moisture in the tongue and in the nose. It causes hunger. It promotes memory. It helps in walking and causes sneezing and coughing.

This $v\bar{a}yu$ is connected with the organs in the head and also with the mind. It has got the upward functions also. Since it stimulates the tongue and the nose, moisture is produced. Due to the production of moisture in the tongue, appetite is induced. Since it is connected with the mind, it promotes thinking.

9. Dēvadhatthan

It is the cause of dispositions like quarrelling, arguing etc., and aids perseverance. It also induces anger. It dwells in the anus and *kuyyam* (a centre in between the anus and the penis).

During sleeping, this $v\bar{a}yu$ dwells in the anus and kuyyam. After one wakes up from sleep, it spreads throughout the body and causes idleness and twisting of the body due to idleness. It also creates weariness by spreading throughout the body. This $v\bar{a}yu$ is stimulated at the time of fighting, arguing and during anger and also at the time of necessity to bear anything.

10. Dhananjeyan

This *vāyu* at the time of death will become larger and will spread throughout the body, making the body swell. At that time there will be an uproar in the ears like the sea tides. On the third day of death, it will come out after breaking the skull.

That is to say, even though this $v\bar{a}yu$ is one entity, it functions throughout the body by inducing all the organs in the body and comes out in the end.

Vidayam

- 1. Iraikkudal amarvāsayam a place where the digested food settles
- 2. Serikudal pakirvāsayam a place where the food is separated
- 3. Nirkkudal salavāsayam the bladder
- 4. Malakkudal -malavāsayam the large intestines
- 5. Vennīrk kudal sukkila vāsayam the place where the semen is produced

The above are the five *vidayam* of *vāsayam*. Now, we can go in detail about them.

Amarvāsayam

The place where the ingested food settles is the stomach. After the food settles, digestive fluids like acids, enzymes and harmones are secreted. These digestive fluids make the food get digested in several ways. Till the digestion of food, the place for the food to settle down is the stomach.

Pakirvāsayam

Finally, the digested food is pushed down to the small intestines for the digestion of fat. The bile, which is produced in the gall bladder, comes to the small intestines and digests the fat in the food. Then, the food is pushed down to the large intestines.

In the intestines, the water content and the refuse are separated. Since the digested food is separated, it is named *pakirvāsayam*. The essence of food mingles with the blood.

Salavāsayam

The separated content comes to the bladder through the kidneys.

Malavāsayam

The separated faecal matter (refuse) settles in the large intestines and is excreted once or twice in a day. Anyhow, there should be some residual faecal matter in the large intestines.

Sukkilavāsayam

The essence of food separated is carried to all the cells and tissues in the body through blood circulation. At that time, oxidation process takes place in each tissue. Due to that, the body generates heat and energy, promoting the growth of all the tissues in the body.

According to the siddha concept, there are seven *udal kattugal (saptha thāthu*). They are

- l. Rasam (chyle)
- 2. Kuruthi (blood)
- 3. Thasai (muscles)
- 4. Kozhuppu (lipid)
- 5. Enbu (bones)
- 6. *Mūlai* (bone marrow)
- 7. Sukkilam (semen)

It is the concept of Siddhar Therar that the food taken on the first day will be converted into blood on the second day. Gradually, on the seventh day, it will be converted into semen.

It is the concept of Parāsarar that the essence of food will become rasam (chyle) on the second day, blood on the third day, flesh on the fourth day, lipid on the fifth day, bone on the sixth day, bone marrow on the seventh day and semen on the eighth day.

There is also a concept that certain siddha medicines are capable of producing semen immediately. It is because *parpam* and *chendūram* are assimilated within one hour and 24 minutes (3½ nāzhigai) as per the siddha concept.

According to the hygienic principles of the siddhars, one should have sex union only two times in a month. Once in seven days, semen is produced. In fifteen days, two times the quantity of semen will be produced. If we have sex union once in 15 days, half the quantity of semen will remain. Hence our strength will not decrease.

Kosam (body)

1. Annamayak kosam (physical body)

The physical body built up by food is called *annamayak kōsam*. It is made up of seven *udal kattugal (thāthus)*. That is why the body is called the wall built up with food.

2. Prānamayak kōsam (body of vāyu)

The air which is inhaled at the time of birth keeps circulating through the body until death. This air is spread in every cell in the body. Hence, the siddhars considered this as a body of air.

3. Manomayak kosam (mind as body)

Every soul is characterized by the principle of manam (mind). Since it is considered a thatthuvam, just like the soul, the principle of manam (mind) is spread throughout the body. Hence, the siddhars considered manam subtle body.

4. Vignānamayak kosam (body of biochemistry)

In our body, several chemical fluids are secreted like saliva, bile etc., which help digestion. Due to that, several biochemical changes take place continuously in our body without a break.

The blood circulating through every tissue gives heat and energy to the body by oxidation process. New cells are created. Old cells and unwanted materials are excreted continuously. Since these biochemical changes take place throughout the body, the siddhars considered this also as a separate subtle body.

5. Anandhamayak kosam (body of pleasure and sorrow)

Euphemistically, the body is described as an *ānandhamayak kōsam* (body of pleasure). But this subtle body experiences both pleasure and sorrow. When taking sweets, the body experiences pleasure. When bitter things are taken, the effect of bitterness makes the mind feel uneasy. This subtle body, composed of the soul, the body and the mind, experiences both pleasure and sorrow. The siddhars considered the subtle state as a separate body.

Āthāram

The six *āthārams* are

- 1. Mūlāthāram
- 2. Swāthittānam
- 3. Manipūrakam
- 4. Anagatham
- 5. Visuddhi
- 6. Ākkinai

1. Mūlāthāram

It appears like a circle called *kundali*, situated between the anus and the penis. In the middle of the circle, a triangle will be there. In the middle of the triangle, it will appear like a *cadamba* (adina cordifobia) flower with four petals. It is said that the letters $\bar{O}m$ (Qi) will be there in the middle.

It is said that the *kundalini sakthi* (serpent power) will be like a snake circling its entire body around its head. The spot called *mūlāthāram* is a spot of nervous plexus. It is an important nervous plexus. By *yōga* practice, if this serpent power (*kundalini*) is made to rise up and to touch each *āthāram*, finally it will be in touch with the centre of the nervous system, the brain. Due to that, the entire nervous system is purified and strengthened. Consequently, the sixth sense of human beings will get strengthened manifold. The increased power of the sixth sense of human beings is considered equivalent to that of *pathi* (universal wisdom).

A person can attain eight kinds of *siddhi* if the eightfold *yōga* practices are successfully completed. In him, it is said, a nectar called *mārutha mathi* amudham will be secreted. By this nectar, one can attain the power of doing anything and the body will achieve the imperishable state true to its designation by the term *mei*. According to the will of such a person, his soul can be migrated from the body at any time.

But it is said that only that soul which is capable of realizing *pathi* can succeed in attaining the eight *siddhi*. It may be due to the above reason that siddhars, *nāyanmārs* and *ālwārs* are only a few in number. Anybody can undertake the eightfold *yōga* practice. But all of them cannot attain the eight *siddhis*, because they stop with the two *yōgas*, viz., *iyamam* and *niyamam*.

Swāthiţţānam

It is situated approximately two inches above *mūlāthāram*. It is said that it will be in the form of a square, with a six-petalled flower in the middle, in the middle of which will be a platform in the shape of a *lingam* having a base like the body of the lute (*veenai*) and in the middle of which the Tamil letter "**b**" (*na*) will stand. This *swāthiṭṭānam* also constitutes nervous plexus.

Manipūrakam

It is found eight inches above swāthiṭṭānam. It is like an egg with 1008 nerves and vessels around and seems to be the root of the nervous plexus. It is also called unthikkamalam. It is said to correspond to ēzhāmpirai (the moon seen on the 7th day after the new moon day). In its middle, there is a round eight-petalled flower. In the middle of the flower, the Tamil letter "in" (ma) will be seen. This is also one of the nervous plexuses.

Anāgatham

It is situated ten inches beyond $manip\bar{u}rakam$. This is also called idayakkamalam. It appears like a triangle. In its middle, there is a round flower with twelve petals. In the middle of the flower, the Tamil letter "f" f" f" f" f" is seen. This $\bar{a}th\bar{a}ram$ includes heart, lungs and the nerves and vessels in them.

Visuddhi

It is situated ten inches after anagatham. It appears like a hexagon in kandatthanam (the throat). In the middle of the hexagon, there will be seen a round flower with sixteen petals. In the round flower, the Tamil letter "ou" (va) will be seen.

Ākkinai

It is situated twelve inches after *visuddhi* and has the form of a horse shoe. Looking like the head of the lute (*veenai*), it has the Tamil letter "ш" (*ya*) in the middle of a flower having twelve petals.

The above-said spots seem to be the combination of nerves, vessels and functional organs. When the great energy which lies idle is made to rise up gradually to each *āthāram* and brought to the centre in between the eyebrows, the energy of the soul will increase manifold. This is a finding of the siddhars.

Mandilam

Thi mandilam

It dwells two inches above mūlāthāram. Since it is near to the heat energy called kundali, it is called thī mandilam.

Gnāyiru mandilam

It is four inches above the umbilicus. It is like the flower of a banana with eight petals and will be looking downward. It indicates the heart itself. Just like the sun spreading heat by its rays all over the world, the heart, through thousands of blood vessels, circulates the blood through which it gives heat and energy to the body. That is why the heart is called *gnāyiru mandilam*.

Thingal mandilam

It dwells in the centre of the head. It is also called *amudhakkalai*. The *amudham* will be looking up and the *akkini* will be looking down. If the downward looking *kundalini* power is made to rise up to the *thingal mandilam*, the *amudham*, which keeps standing still, will melt and drop inside. Those who have taken this *amudham* are the siddhars. This is what is called in Tamil *mārutha mathi amudham*.

This is what is meant by "Fate can be conquered by wisdom". He who consumes this manna can conquer the fate of a reduced span of life and live longer.

Malam (defects of the soul)

Three defects are attributed to the soul. They are l. anavam, 2. kanmam and 3. māyai.

1. Ānavam

This is the principle which conceals the real state of the soul and obscures wisdom, making the soul stray into avarice and lust.

2. Kanmam

It comprises the activities pursued by the soul, as it is driven by avarice and lust. It is the concept of the siddhars that souls are prone to committing evil deeds instead of virtuous things, by which they are susceptible to be born again and again in this world.

3. Māyai

Māyai is the physical frame of the soil. All beings, according to Mānikkavācakar, are assigned the body in proportion to the virtuous and the evil deeds they perform.

Thōdam

The meaning of the word thodam is "defect", which is classified into three. They are 1. vali (vātham), 2. azhal (pittham) and 3. ayyam (kabam).

Except in the siddhars, sages and wise men, the proportion of vali, azhal and ayyam will not be in the natural ratio of 1:½:¼ among people from infants to the aged: It is due to the pursuit of evil deeds by them and by their parents. Such people suffer from ailments.

The affliction of ailments and the formation of vali, azhal and ayyam are the result of parents' physical characteristics and character traits, as also their mental and physical states at the time of their physical union and at the time of conception.

Hence, the siddhars considered these three principles as *mukkutram* (three defects) since they are the cause of illnesses of the body. These illnesses afflict a person when *vali*, *azhal* and *ayyam* either increase or decrease in his body.

Due to internal or external causes, when vali, azhal and ayyam vary from the normal state, symptoms manifest on the body by which illnesses are diagnosed.

Vali

According to Siddhar Therar, it is also called *vātham*. He observes:

Created as *vātham*, protected as *pittham* and eliminated as *kabam*... thus functions the soul.

On the basis of the five *bhūthas*, the principle of vali is a combination of $\bar{a}k\bar{a}yam$ and $v\bar{a}yu$. The $v\bar{a}yu$ (air) is prevalent in the space ($\bar{a}k\bar{a}yam$). The modern scientific concept is that the air contains several gases in it. According to modern science, the four $v\bar{a}yus$, namely oxygen, hydrogen, nitrogen and carbon dioxide are absolutely necessary for the formation of even the one-celled amoeba.

Hence, it is proved that the siddha principle of *vātham*, being a combination of *ākāyam* and *vāyu*, is the cause of creation.

In the human body, the air inhaled by a newborn baby passes through the spaces in the body and functions as the *vātham* principle. The blood carries the essence of food eaten along with oxygen to every tissue and creates new cells. This is what is known as *padaitthal* (creation).

Azha1

According to Siddhar Therar, by giving continuous heat and maintaining the temperature of the body, azhal protects the body.

The essence of food circulated by the blood through the body is oxidized and due to the process of oxidation, it gives energy to the body and protects the body by maintaining the temperature at 98.4°F.

Either the increase or the decrease of the body temperature will indicate the state of illness. If there is no temperature in the body, the soul functioning inside it will become defunct.

This is what is called death. The body cannot tolerate unnatural increase of heat. The soul may become defunct due to this also. Thiruvalluvar says, any increase or decrease within may become the cause of illness (941).

Ayyam

It is also known as *kabam*. *Kabam* will also indicate phlegm, fluidity, etc. It is necessary that optimum fluid and optimum moisture should be there in the body. There is fluidity in the blood also. The brain also has moisture. There is moisture in the lungs, throat, mouth, etc. If things either increase or decrease, it may lead to illness.

If the reign of the principle of *kabam* abnormally increases, the principle of *pittham* will subside. If the principle of *pittham* becomes defunct, the soul will also become defunct. Hence, death may take place. *Nādi Nūl* (Book of Pulse) says, "If *pittham* becomes defunct, don't treat the patient."

Siddhar Therar speaks of eliminating ayyam that becomes the cause of destruction. Then what is the function of ayyam during lifetime?

In tune with the dictum setpa sithamayt thudaitthu (to sweep like kabam), this principle as fluid sweeps off and excretes unwanted materials from the body. Hence, it may be considered that the excretory process in the body can be taken as the function of the principle of kabam. It is the proper function of the principle of kabam or ayyam to regularly excrete the unwanted materials from the body and to keep the faecal matter, the urine, perspiration, the three malas and the six nirs at the optimum level in the body.

If any defect is caused regarding the above, the filthy unwanted materials may be staying in several parts of the body causing illnesses. If the process of excretion in the body is abnormal, it may lead to illness. For example, look at the saying: "If faecal matter is excessively excreted, the strength of the individual will diminish." Hence it is necessary that there should be some residual faecal matter in the large intestines. If the entire faecal matter is excreted, the strength of the body will be lost.

The major cause of the non-functioning of the soul is the reign of the *kabam* principle. Since this principle prevents the normal functioning of the principle of *pittham*, there are chances of danger to the soul.

To keep them in optimum proportion, the siddhars have commended several medicines, hygienic principles, *yōga* practices, etc.

Muppatrugal – mūvēdanai

According to Siddhar Yūkimuni, the *ēdanais* are three in number. They are 1) porulpaṭru (artha ēdanai) 2) makkalpaṭru (putthira ēdanai), and 3) ulagappaṭru (ulaga ēdanai).

Porulpaţru

An essential thing for all living beings in the world is food. Each living being strives hard to gather food and eat it. Human beings also belong to this category. But human beings fall to avarice and seek to earn beyond their needs.

Makkalpatru

All living beings in this world love their offspring. Human beings are no exception. But they go about earning more and more of wealth for their children.

Ulagappatru

Living beings which are not endowed with the sixth sense live for some time and disappear. Human beings who are able to think independently by their sixth sense always desire to live long.

Siddhars, sages and wisemen desire to live long, because they have the doubt whether it is possible for them to unite with *pathi* to attain the supreme knowledge within their lifespan already sanctioned to them. Hence they adopt ways and means to prolong their lifespan. But ordinary men want to live long for the sake of enjoying the pleasures of the world.

Kunam

For all living beings, three characteristics are a natural endowment. They are

1) Satthuva kunam 2) Rāsatha kunam and 3) Thāmasa kunam.

These *kunas* are naturally formed, based on certain things, namely the virtues or sins committed by the soul in the previous births, the virtues or sins committed by the parents and the mental and physical conditions of the parents at the time of their physical union and when conception takes place.

Satthuvam

Those who are bestowed with serenity or composure of mind will be very calm. They will always be thinking about virtuous things and will conduct themselves in the virtuous path.

Rāsatham

People with this *kunam* will be mentally and physically virulent in action. They will be swift in all their activities.

Thāmasam

People having this *kunam* will always be in delusion and confusion. They will always be idle. They are not capable of fulfilling anything. Hence their thoughts, speech and activities will not be pure.

Vinai

One's deeds (vinai) are classified into two. Deeds that will end in goodness and deeds that will end in sin.

Siddhāntha philosophy says that the burden of sins committed by a person in the previous births will diminish, if he takes to virtuous deeds for the benefit of others. Those who do only virtuous deeds are considered as

being on a par with siddhars and sages. Hence, if they happen to be born again, they will be born in noble families as persons of good conduct. Just like this, if a person performs only virtuous deeds in each birth, he will be liberated from rebirth.

Siddhāntha doctrines hold that when one commits but sins again and again, one cannot escape rebirth.

Rāgam

These eight *rāgas* will be formed on the basis of the sins and virtues committed in the previous births, according to the character of the parents and according to the mental and physical states of the parents at the time of conception.

During birth, each human being will have the following eight rāgas.

l. Kāmam - sexual passion

2. Kurōdham - malice

3. *Ulōpam* - miserliness

4. *Mōkam* - infatuation

5. Madham - craziness

6. Mārchariyam - internal enmity

7. *Idumbai* - distress

8. Akankāram - ego

We can now go into details of them.

1. Kāmam

Though it means 'desire' in general, it specifically refers to sexual passion. It is common to all living beings.

2. Kurodham

It signifies discord or disagreement. It is natural that one person can have difference of opinion with another person. This trait will be mild in some persons and wild in others.

3. Ulopam

The meaning of the word is stinginess. Several people are not given to be benevolent. Miserliness is the character that aims at selfish motives. In certain people, this trait may be lesser in intensity. Certain people are capable of deciding whom they can help and whom they should not help.

4. Mōkam

The meaning of this word is infatuation. Kāmam is the desire that one should have for one's wife only. But mōkam is being attracted to women other than one's wife. Several people have this undue desire. There are people who do not covet any woman other than their wives.

5. Madham

The meaning attributed to this word is craziness. Certain people will be frenzied in their thoughts, activities, and speech. The word *madham* also indicates religion. It is a fact that certain people following religions are frantically firm about the superiority of their religion. Hence, the word craziness will aptly go with *madham*.

6. Mārchariyam

The meaning of this word is 'unrevealed enmity'. When a person has difference of opinion with another person, he may develop dislike which will grow into enmity, become envious. But he may not reveal his anger and will wait until a suitable time comes for him to retaliate. This kind of trait is called intrinsic hatred.

7. Idumbai

The word *idumbai* means distress. There are people who will be always worried about even very trivial matters. This kind of character trait is called *idumbai*.

One may also fall to distress when one is oblivious of one's own faults and turns angry at the faults of others.

8. Akankāram

Imagining oneself to be of a superior standing and starting to look down upon others is what *akankāram* signifies. This character trait is marked in most of the people. The cause of this trait is self-conceit, which is one of the three defects governing the soul. Several people fail in their life due to this character trait.

But people who succeed in several ways do also have this trait of akankāram.

It is quite natural that the above-said eight character traits are prevalent among human beings. But man should try to shun the unwanted ones. The siddha way of life will guide us in this respect.

Avatthai (state of mind)

The soul is subjected to five conditions called avatthai. They are

1. Nanavu - conscious state

2. Kanavu - state of dreaming

3. *Urakkam* - state of sleeping

4. *Pērurakkam* - coma stage

5. *Uyirppadakkam* - insensibility to surroundings - the soul ceasing its functions

Nanavu

Human beings with their sixth sense are in the state of consciousness. To be wakeful with the sixth sense being alert is called *nanavu*.

Kanavu

When man sleeps, he dreams. The soul functioning in the body only can experience this state.

Urakkam

When a man sleeps without any hindrance, he is in the state of *urakkam*.

Pērurakkam

When a man goes into the coma stage during acute illness, the soul is subjected to the state of *pērurakkam*. Besides, when *yōgis* practise *aṭṭānga* yōgam, their state before the state of samādhi is called pērurakkam.

A person gone to the state of *pērurakkam* due to illness may gradually come to the state of *urakkam*, *kanavu*, and *nanavu*, by proper treatment.

Uyirppadakkam

If the treatment given to a sick person becomes futile, the soul may go to the state of *uyirppadakkam*.

When the siddhars, sages and wise men succeed in the practice of attanka yōgam, their soul will go to the state of samādhi (the final stage of meditation). This state may also be considered as uyirppadakkam. The soul of the siddhars and sages can return to the state of nanavu from uyirppadakkam. But ordinary human beings cannot return to the state of nanavu, if the soul has gone to the state of uyirppadakkam.

In normal conditions, human beings can be said to be in the state of nanavu. Animals and other living beings having lesser senses (five) can be said to be in the state of kanavu. Other living beings having lesser senses than five may be said to be in the state of urakkam. Things like mud, sand, stone, etc., can be said to be in the state of uyirppadakkam.

Logic (alavai)

Introduction

Alavai is to measure things. It is done by practical knowledge. It is to see, to understand and realize things, seen as well as unseen, like God, soul and soul's bond. To know undoubtedly about these things, this practical knowledge is useful. To put it in detail, the seen object is realized by its numbers, weight, volume and by length. Unseen objects are realized by the sacred writings of ancient scholars. This knowledge enables us to understand scientific and medical concepts with ease.

Let us have a look at the following verse from Sivagnāna Sitthiyār, a logical treatise on Saivism:

Alavai kāndal, karuthalurai
abāvam poruloppār enbar
Alavai mēlum mozhi punmai
aiythigatthōdiyalpena nāngu
Alavai kānparavaiyirrin
mēlu maraiva ravai yellām
Alavai kāndal karuthalurai
enrin mūnrinadaingidumē!

The means of logic as seen here are:

- 1. Kāndal kātchi observation
- 2. Karuthal anumānam inference
- 3. $Urai \bar{a}gamam -$ authoritative literature
- 4. Apā vam inmai illathu perception
- 5. Porul arutthā patthi presumption
- 6. Oppu uvamānam comparison
- 7. Ozhipu pakuttharithal inference by elimination
- 8. *Unmai sampavam –* probability
- 9. Aithīgam vazhakku tradition
- 10. Iyalpu natural inference

Even though there are ten means, observation, inference and textual authority cover all the types.

An explanation of alavai

We keep using means of logic unconsciously in our lives. Among them, inference (karuthal), presumption (porul/arutthāpatthi) and tradition (iyalpu/vazhakku) are more commonly used than others.

For example, the guess that marriage days, summer holidays and festive occasions would witness large crowds is inference (karuthal/anumānam).

The things secretive in our day-to-day discourses may come under presumption (porul/arutthāpatthi).

Tradition (aithīgam/vazhakku) consists of our beliefs relating to religion, such as the belief that heavenly bliss is possible through sacred bath during mahāmagam or fasting during ēkāthasi or sivarātthiri.

Let us have a look at the means of logic individually.

1. Kāndal (observation)

Among sensory organs, eye and its functions are related to *kāndal* (observation). But siddhars have used both the physical eyes and the faculty of clairvoyance. *Kāndal* is classified into four types:

- 1. Savikarpam
- 2. Niruvikarpam
- 3. Aiyam
- 4. Viparītham
- l. Savikarpam: It is by direct vision, i.e, realizing all the characteristic features of the object seen, such as the name, quality, types, functions, etc., of things known. If we happen to see them again, we would be able to describe them through this faculty.

In medicine, by observation, we understand the signs and symptoms, etiology, the sufferings of the patient, etc. which we explain at a later instance. This is also called *vindalillāk kāṭchi*.

- 2. Niruvikarpam: It is unproductive vision by which we merely see things without understanding their characteristics, and without being able to describe them.
- 3. Aiyak kāndal: This observation is assailed by doubts and uncertainties, resulting in perplexity of mind. In medicine, it manifests in getting confused about diseases having similar characteristics.
- 4. *Vipanthak kāṭchi:* It is understanding one thing for another. In medicine, it is mistaking the symptoms of one disease for the symptoms of another disease. For example, bluish discolouration in heart disease is seen as jaundice in liver disorder.

Apart from the above, $k\bar{a}ndal$ (observation) can also be classified as follows:

- 1. Poriyāl arithal
- 2. Manatthāl arithal
- 3. Than vē thanaik kā tchi
- 4. Yōgak kāṭchi

2. Karuthal (inference)

Karuthal is conjecture. It is making a guess about something on the basis of another thing. It consists in inferring the effect from the cause or the cause from the effect. It is divided into three types:

- I. Sapakkam: Describing the nature of something on the basis of the incident or the causal factor.
- 2. Vipakkam: Leaving the nature of something unexplained.
- 3. Pakkam: Providing a definitive explanation of the given thing.

In medicine, *sapakkam* (provisional diagnosis) refers to explaining the signs and symptoms of the disease and identifying the disease.

Pakkam (confirmative diagnosis) is the definitive identification of the disease on the basis 'of the symptoms of the disease.

3. Urai (textual authority)

The textual authority comprises āgamas, vēdas, upanishads and purānas. These works are classified into three types: (1) manthiram, (2) thanthiram, and (3) upadēsam.

In medicine, siddhars' writings constitute the authoritative literature. These writings dealing with drugs, their efficacy, the characteristic features of the herbs, and signs and symptoms of diseases are the basis.

Ajiranaminri suramum varāthu (Indigestion causes fever)

Ā trai adaikkumām athividaiyam (Athividaiyam blocks the path)

Pittham adankinā l pē sā thē pō yvidu (Pittham stopped, speak not, but go out)

Such of these statements are the bases to diagnose and treat diseases.

4. Abā vam (perception)

It refers to non-existence. That is, when a particular characteristic is found to be non-existent, we conclude that the other characteristic is also absent.

- E.g. (1) Since there is no sun on the sky now, it is not daytime. It is night.
 - (2) Since there is no moon, there is no light and it is night.

In medicine, it is to conclude that a particular disease the patient does not suffer from, because the signs and symptoms of that disease are not manifest on the patient.

For example, since there mark no cyanosis, swelling in the ankles, regular veins' pulsation and changes in heart beat, the patient does not suffer from heart disease.

5. Porul (presumption)

Presumption seeks to discern the hidden phenomenon in a thing. In medicine, it refers to identifying the disease from the patient's description of the symptoms of his disease.

For example, when a patient says he suffers from no indigestion and no loss of appetite, but his body feels hot, it can be presumed that he has no fever, because "incidence of fever is not possible without indigestion" and "incidence of fever is not possible without loss of appetite", as the relevant literature makes it clear.

6. Oppu (comparison)

Comparison comes in when two obviously comparable things exhibit a measure of contrast.

For example, we can say koel is comparable to crow.

7. Ozhipu (inference by elimination)

It is assessing the residual character of something by the process of eliminating what it does not possess.

For example, when we say Bharathan and Sathrugnan ruled the country it implies that Rāman and Lakshmanan were away in the forest.

8. Unmai (probability)

Unmai is what exists without change. Physiology comes under this category. For our bodily functions go on without any change in the normal circumstances.

9. Aithigam (tradition)

Aithīgam refers to our traditional beliefs and convictions.

10. Iyalpu (natural inference)

Iyalpu are the occurrences in nature, such as the rotation of the earth and the sun's rise.

As such, understanding of logic has a great bearing on the principles and practice of medicine. Siddha medicine demonstrates this truth by its logical orientation.

Dr G. Ganapathy

Eight Yögic Methods (attānga vögam)

Introduction

Yõga is combining a thing with another or with many other things. Every human being in this world has obviously four anthakarnams, namely manam, buddhi, siddham and akankāram. One should achieve victory by directing and exercising siddham towards the ideals conceived by buddhi. This is called siddhi. The high-minded persons who achieved victory by these methods are called siddhars. The siddhars were therefore the people who had the ability to unite manam, buddhi and siddham. They were the ones who were completely free from akankāram.

Siddhars sought after *siddhi* of body and soul through affection, *yōga* methods, through the help of mercurial beads, medicine and *mantras* and they were said to have achieved deathlessness. The *mantra* used in relation to them denotes the eight yogic methods (*attānga yōgam*). They are:

- 1. Iyamam
- Good habits
- 2. Niyamam
- Good activities
- 3. Āsanam
- Posture
- 4. Pranāyāmam
- Breathing exercise

5. Prathiyākāram - Control of senses

6. Dhāranai - Control of mind

7. *Dhyānam* - Control of oneself

8. Samāthi - One with the Supreme

Thirumanthiram (552) speaks of attānga yōgam or ahatthuvam eight in the following terms:

iyama niyamamē ennilā āthanam nayamuru pirānā yāmampirat thiyākāram sayamiku dhāranai dhyānam samāthi ayamurum attāṅka māvathu māmē.

[Iyama, Niyama, and Asana numberless Pranayama wholesome and Pratyahara alike, Dharana, Dhyana and Samadhi to triumph -These eight are the steely limbs of Yoga.]

The eight limbs are: l) *iyama*, 2) *niyama*, 3) *āsana*, 4) *panāyāma*, 5) *pratyāhāra*, 6) *dhārana*, 7) *dhyāna*, and 8) *samāthi*. Each step is a preparation for the next. *Yōga* holds the key to the attainment of *samāthi* or the unitive trance)

Iyama niyamam

māvum mākkaļum aiyari vinavē makkaļ thāmē ārarivuyirē

-Tolkāppiyam-1523, 1524

[Beasts and humans sans discrimination

Are creatures with five senses.

Humans have six senses.]

From this, it is clear that man is superior in intellect to other living things. He is capable of differentiating the good from the bad by his extra sense and living

with discipline. Our ancestors considered discipline more important than life itself. Says Thiruvalluvar in his *Thirukkural* (131).

ozhukkam vizhuppan tharalan ozhukkam uyirinum ompap paṭum.

[Propriety of conduct invests one with lofty worth It should therefore be cherished more dear than life itself.]

This propriety of conduct is obtained only by virtuous mind and virtuous activities. Mind's purity is *iyamam* and purity of action is *niyamam*. Man is not affected by sorrows when mind and action are pure. Siddhars believed that such men can live without greying of hair, wrinkles, and diseases. Thinking is the function of the mind, and thought begets action. These two are therefore related to each other.

Doing good activities and having a good mind constitute *karpam*. The man who does bad deeds becomes fatigued and unhappy through his thoughts and deeds. Evil activities that it does keep haunting the mind. Look at the saying "One would be scorched by one's own mind." Bad habits bring unhappiness, and sorrow brings grey hair and aging. These things ultimately lead to diseases and death. If a man does good activities it makes him live for many years without grey hair, wrinkles, aging and diseases. It can even prevent death. Here is what Thiruvalluvar says:

vīzhnāļ paṭāmai nangāggin akhthoruvan vāzhnāl vazhiyaṭaikkun kal.

-Thirukkural 38

[Do deeds of virtue with no day passing in vain Which will be a rock deterrent against births beyond.]

Bad activities bring two types of evils. One is, body gets affected because of these bad activities. Another is, mind gets affected. Hurt to the mind comes under *iyamam*. Here are the impairments to the body:

- Irregular dietary regimen and improper habits produce disease.
- Reduced amount of food, increased amount of food, and untimely food are called irregular foods.
- Body gets diseases when food is irregular.
- Breach of daily cores such as brushing of teeth and bathing would cause diseases.
- Bad habits such as alcohol affect the body.
- Lustful sexual desire causes more expenses, diseases, quarrels and weakening of the body.
- All such undesirable things are harmful and reduce the lifespan.
- They affect both body and mind.

Now before speaking about mind, first we must know what mind is. Mind is designated differently by different words such as *ullam, akam, nenju* and *manam*. There are four *karanams* among the ninety-six principles. They are *manam, buddhi, siddham, akankāram*. Knowledge, sense organs, their senses, and functional organs stand supportive to *karanam*. They are basic to knowing and doing things. Thoughts arise from the mind (*manam*). Knowledge (*buddhi*) investigates those thoughts. *Siddham* (wisdom) takes the decision. *Akankāram* (ego) makes it stable. Though they are assigned distinctive functions, all the four work in harmony.

Mind is compared to a monkey. Just as monkey keeps jumping from one branch to another, mind keeps oscillating. If mind is left to go its own way, it will leave us in a difficult situation. So it is imperative to control the mind. That's why the Greek philosopher Socrates calls mind a good servant but a bad master. The things we do in our country such as meditation, penance, etc., are intended to control the mind.

Mind depends upon the nervous sensations which have a bearing upon each and every organ of the body. When one gets intensely angry, there is seen redness of eyes and body becomes hot. When anger gets reduced, body becomes tired and fatigued. When changes occur in the mind, they are reflected on the body. Similarly, changes in the body trigger changes in the mind. From this, we can know the close relationship between the mind and the body.

When the mind is pure, it does not affect the body. So purity of mind is essential to keep the body in good condition. Look at Tiruvalluvar's words:

mananalam mannuyirk kākkam

-Thirukkural-457

[Purity of mind is a secure protection for the wellness of the world.]

Here Thiruvalluvar stresses the importance of *iyamam*. Further, lust, anger, perplexity, desire and sorrow which are produced from the mind must be avoided to secure the body against diseases. Observes Tiruvalluvar:

kāmam vekuļi mayakkam ivai mūngan nāman ketakketum nōy.

-Thirukkural-360

[Live's evils will find their doom
As the triad – lust, anger and delusion – goes extinct past recognition.]

ārā iyarkai avāthērppin annilaiyē pērā iyarkai tharum.

-Thirukkural-370

[Desire insatiate by nature abandoned, There ensues perpetuity of bliss.]

Siddhar Agatthiyar says that mind's purity alone is enough:

manamathu semmai yānāl manthiram sepikka vēnṭā manamathu semmai yānāl vāyuvai uyarttha vēnṭā manamathu semmai yānāl vāsiyai niɪuttha vēnṭā manamathu semmai yānāl manthiram semmaiyāmē. To remove the impurities attaching to the mind, the associated ones like the sense organs, senses, and functional organs must be controlled. Ego which is the deciding force of the mind must be controlled, and senses must be held in check to attain the joy of immortality. Yearns a siddhar:

ānkāram uļļaṭakki aimpulanais suṭṭarutthu thūnkāmal thūnki sukam peruva thekkālam!

Āsanam

Generally, āsanas (postures) are like exercises. Nevertheless, they are different from the general exercises in their utility and function. General exercises strengthen only the external body constituents. But yōga postures strengthen the inner organs of the body. Siddhars observed certain postures, achieved knowledge of breath, aroused the kundalini power (serpent power lying dormant at the base of spinal column), tasted the elixir of knowledge and attained the bliss. Their body too attained immortality. That is why it is said that siddhars had God-knowledge and their followers were seekers of God-knowledge.

Types of asanas

Āsanas are several in number. Thirumūlar refers to 'many āsanas', and 'numberless āsanas'. While doing sivayōgam or rajayōgam, siddhāsanam is the best āsana. For those who are in family life, while doing breathing exercise (pranāyāmam), padmāsanam is the best posture. Āsanas essential for the spirituality are of five types. They are patthiram, vīram, padumam, kōmugam, and kukkudam.

Uses (advantages)

Yōgāsana strengthens the internal body organs. Unnecessary muscular cramps will not occur. Body grows stronger and becomes more beautiful without any disease. Yōgāsana increases the blood circulation in all parts of

the body. Yōgāsana stimulates activeness, knowledge, clarity, memory power etc. Those who do yōgāsana live without grey hair, wrinkles, aging, and diseases. Yōgāsana not only keeps the body in good condition but also secures the body against diseases. Even when diseases occur, they can be easily cured. Also by this practice, mind gets purified and remains in a state of zest and vigour.

Rules and regulations

Skin of deer and tiger, painted carpet, white cloth, and dharba grass are best for doing \bar{a} sanas. \bar{A} sanas must be done on a level surface, in a straight posture. \bar{A} sanas must be done patiently. \bar{A} sanas must not be done with a full stomach, and must be done a few hours after eating food. Similarly, urine and faeces must not be there in the body. They must be evacuated and then \bar{a} sanas must be done. \bar{A} sanas must be done in an airy place. During practice, respiration must be through the nose and not by mouth. $Y\bar{o}$ $g\bar{a}$ sanam must be done with the help of a learned teacher or else it will create many problems.

The art of *yōga* is discussed in detail in Siddha Medicine Volume III: Special Areas (Chennai: Tamil Valarchi Kazhagam, 2010).

Prānā yā mam (breathing exercise)

Uyirkkāl or prānavāyu (oxygen) is very essential for all living organisms. It is so named because it is considered to be the basic need for life. The action of this uyirkkal is called breath (saram). This takes place through the two nostrils of the nose by moving in and out. Left nostril is known as idakalai and right nostril is known as pingalai. The movement through both the nostrils is called suzhumunai. Look at Thirumūlar's verse in this regard:

veļļi ventinkaļ viļankum puthan itam olliya mantham ravisev vāyvalam ponnēy valarum piraiyitam theļļiya thēypirai thānvala māme [On Fridays, Mondays and Wednesdays,
Prana dominates in the nadi that is to left
On Saturdays, Sundays and Tuesdays
It courses high in the right;
On Thursdays
Prana flows in the left
In the waxing moon's fortnight;
And in the right in the waning moon's fortnight.]

That is, in each nostril respiration takes place for 120 minutes (5 nāzhigai) only. On Monday, Wednesday, and Friday, respiration starts at 4 o'clock in the morning in the left nostril and goes on for 2 hours (5 nāzhigai) alternately in both the nostrils. On Tuesday, Saturday and Sunday, respiration starts in the right nostril and occurs alternatively in both the nostrils. On Thursdays, if it is the bright half of the lunar month, respiration starts in the left nostril. If it is the dark half of the lunar month, respiration starts in the right nostril.

If respiration does not occur as above, the person is said to be diseased. That is, if there is any change in the respiration between the left and right nostrils, it will cause diseases. It can be corrected by practice. It is good when $pr\bar{a}n\bar{a}y\bar{a}mam$ or controlling of breath is done when air passes through both the nostrils (suzhumunai).

Principles of prānā yā mam

It is said that the movement of *prānavāyu* (oxygen) is the movement of *siddham* (wisdom) and that if *prānavāyu* (oxygen) movement is controlled, wisdom can be attained.

Breathing in of oxygen is said to be *pūragam*, to stabilize it inside is *kumbagam*, and breathing out is *rē sagam*. The time duration of the three is:

pūragam 16 mātthirai kumbagam 64 mātthirai rēsagam 32 mātthirai.

So the ratio of pūragam, kumbagam and rēsagam is 1:4:2. The measure of air taken in is of 12 finger length space, of which only 8 finger length measure is used and the remaining 4 finger length measure is wasted, leading to the wasting of lifespan. When this 4 finger length measure is also used by the body, the body is rejuvenated.

Some important rules

 $S\bar{a}thv\bar{i}ga$ kuna is needed for doing $pr\bar{a}n\bar{a}y\bar{a}mam$. The principles of the threefold $n\bar{a}di$ and $v\bar{a}yus$ must be well understood before doing this exercise. It must be done in an airy place. The floor must be without moisture. When there is no cold or chill climate, $pr\bar{a}n\bar{a}y\bar{a}mam$ can be done on the bank of a river, or lake, garden, or a hill station.

Prānāyāmam must be learnt daily by following the *iyama* (good habits) and *niyama* (good activities) and bringing the mind to total concentration. Persons doing prānāyāmam can take rice, wheat, ghee, milk, curd or buttermilk. Food must be taken for half of the stomach, with ¼ of it for water and the remaining ¼ empty. Sour, sweet, saltish, and pungent foods must be avoided. Alcohol and meat are better kept off.

Both family men and ascetics can do this, as follows:

Early morning 3 nāzhigai (72 mins),

Noon

Evening starting before sunset and ending after sunset 4 nāzhigai (96 mins) (2 nāzhigai each)

Midnight

So totally 4 times it can be done. Each time 20 to 30 *prānāyāmam* can be done.

Inspiration and expiration must be done slowly and patiently. Expiration must not be done in the same nostril wherein inspiration took place; if done so, sweating and shivering will occur. Fast expiration will reduce the body strength. Expiration must take place in the opposite nostril of inspiration, but inspiration can take place in the same nostril where expiration occurred. Some experienced persons say *prānāyāmam* is best if practised in the right nostril.

As regards persons who practise *prānāyāmam*, when they eat, sleep, have sexual intercourse, eat greens and vegetables and at all times, they must take in the air through the right nostril (16 *mātthirai*), keep it stable inside (32 *mātthirai*), then breathe out (16 *mātthirai*). It must be repeated through the left nostril. By daily practice and by holding the breath fully within, one can live for many years. Those who practise *prānāyāmam* must chant the *mantra* "Om".

Method

Left nostril is closed with the left thumb and air is inhaled through the right nostril. Then right nostril is closed with the ring finger and little finger and the air is kept stable inside. Holding the breath need not be a strained exercise. Next, release the left thumb and breathe out the air slowly through the nostrils.

Similarly, inhale the air through the left nostril, keep it stable within, then exhale it through the right nostril. This is one *prānāyāmam*. This should be done continuously in the same way. In the beginning, practise it slowly, later it can be increased.

It is said that if observed minutely, inhaling will mark the *hum* sound and exhaling *sam* sound.

Uses of prānāyāmam

Siddhar Sundarānandhar lists the following uses of prānāyāmam:

• Doing *prānā yā mam* brings many good things.

- Control of breath, and thereby the control of mind.
- Sense organs and their senses will not get distracted, and remain controlled by the mind.
- Knowledge gets developed.
- Here knowledge refers to human soul realizing Godhead.
- · Control of anger,
- The 3 malams, ānavam, kanmam and māyai, will get removed.
- It facilitates meditation.
- Can live the desired life.
- Attānga yōgam and attamāsiddhi can be attained.
- Can attain immortality
- Prosperity can be attained, there is no poverty.

The person who teaches how to bind knowledge is said to be the *guru* or teacher. This must be done practically and gain the knowledge by experience.

Pratthiyā kā ram

Pratthiyākāram is disciplining the five senses and focusing the mind on the given object. Then only can one accurately diagnose the disease of a patient. As said already, purity of mind can be achieved by controlling the senses. Liberation from the cycles of births and deaths can be attained through subduing the senses and the ego.

Dhā rana i

Dhāranai means focusing and concentrating the thought on a particular thing. In medicine, this will enable us to arrive at a definitive understanding of the patient and the illness.

Dyānam (meditation)

 $Dy\bar{a}nam$ is undistracted, continuous thinking about a particular thing holding the five senses under control.

Samāthi

Samāthi is a state of tranquillity. It may be extended to identifying oneself with the patient and diagnosing his illness. Samāthi is also the state where one identifies oneself with God.

If *dhāranai*, *dyānam* (meditation), and *samāthi* work in unison and concentrate on a particular thing, then it can be said that one has succeeded in keeping one's mind in one's control.

When these eight yōgic methods are acquired successfully, then one is considered to have achieved siddhahood. The *siddhi* must be kept undistracted and focused on the chosen object. This will go a long way in helping the patient get over his illness.

Furthermore, the eightfold *yōgic* practice enables one to approach human body through cause-and-effect process, to analyze the growth and decay of the body in terms of the contributory factors, to realize that human body is no illusory thing but a concrete reality and to acquire such powers as *animā*, *makimā*, *lahimā*, *karimā*, *prātthi*, *prakāmiyam*, *vasitthuvam* and *īsatthuvam*.

Dr G. Ganapathy

Attamā Siddhis

Introduction

Siddhars, the spiritual scientists, founded and established siddha science. Siddhi means high achievement. Some call it supernatural. Those who have attained a fulfilment of this stage are called siddhars.

The great saint Vadalūr Rāmalinga Adikal observes:.

mūvakai siddhiyin muṭipukaļ muzhuvathum āvakai enakkaruļ aruṭperum sōthi.

He states that there are three types of *siddhis*. They are *karma siddhi* (attaining a supreme state by rendering service without attachment), *yōga siddhi* (achieved by practising *yōga*), and *gnāna siddhi* (attaining the supreme wisdom that all are one).

Karma siddhi

Conventional type of eight kinds of attainment. They are

Animā – becoming as thin as an atom

Mahimā – attaining an extremely big size

Lahimā – attaining an extremely small size

Prātthi - attaining ability to roam anywhere

Karimā - the power of making oneself heavy at will

Prakāmiyam – attaining anything one desires

Isatthuvam – ability to create anything one likes

Vasitthuvam -ability to attract anyone.

The power to attain all the above is dormant being embedded in *kundalini*. The persistent physical, psychic and spiritual exercises are called *yōga* methods. *Uyirppu* or *prānavāyu* is the fuel to elevate this *kundalini* towards a vibrating stage. *Kundalini*, the life force, lies dormant in the triangle between the hip and the sacrum and the genitals. During the above exercises, it vibrates and elevates through six *chakras* which extend from *mūlāthāram* to *ākkinai* at the centre of the head. During this practice, the *kundalini* will stay in *āthārams*. At such a stage, the practitioners achieve powers. This is the result of persistent practice. This is called *siddhi*.

Yõga siddhi

The soul liberated from all the bonds attains all *siddhis*. This is unequivocal. It bestows on one the power to revive a buried body before its deterioration. The period of such a practice ranges between twelve years and a hundred and eight years.

Gnāna siddhi

The attainment of unpolluted wisdom. It is the awareness that one's identity is not the body or mind but the infinite super consciousness. Among the three types of *siddhis*, *gnāna siddhi* is considered the supreme one and it is classified into six types:

- l. Karma gnāna siddhi
- 2. Yōga gnāna siddhi
- 3. Thatthuva gnāna siddhi
- 4. Ānma gnāna siddhi
- 5. Suddha gnāna siddhi
- 6. Samarasa gnāna siddhi

Thiruvilaiyādalpurānam written by Saint Paranjōthi contains a chapter titled "Aṭṭamā Siddhi Upathēsittha Paṭalam." It describes the siddhis as follows:

animā, makimā, ilakimā, ariya karimāp pirātthi, malap pinimā suṭaiyōrkku aṭaivariya pirakāmīyam, īsatthuvam mey thunimā yōkarkku eliya vasitthuvam, enreṭṭām ivai yuḷakkan manimā sarutthōr viḷaiyāttin vakaiyām ivarrin marapuraippām.

1. Animā

If a person is capable of changing *chandra kalai* and *sūriaya kalai* and fix them in the *suzhumuna*i without wasting semen, he will attain *pranava dēkam*. He will attain liberty and this stage empowers him to perform *siddhis* like *animā*.

aravum siriya uyirthorumthan parama kattai anuva ac cenru uraiyum sirumai animavam.

Those who aspire to achieve *animā* siddhi have to practise the yōgas prescribed without indulging in sexual activity. When animā is accomplished, one will become thin and soft as cotton. Such a person cannot be overcome by anybody.

He can convert a large matter into a small particle. Having attained this power, Saint Pirunki, according to *Thirumanthiram*, roamed around the Trinities, Siva, Brahma and Vishnu, by assuming the form of a beetle.

2. Lahimā

Animā siddhi could be achieved in one year. If the practitioner persists in his yōgic practices for more years, he will attain the lahimā siddhi. He will develop the divine vision. He will shine like divine light. Since he is capable of seeing the divine light, he is deemed to have attained paranjōthi state.

ilaku mēru pārampōl irukkum yōki thanai eṭutthāl ilaku vāna para anuppōl iruppathu ilakimā ākum.

(Thiruvilaiyādal Purānam, Attamāsiddhi Upathēsittha Paṭalam-24)

In the *lahimā* state, weighty things are made weightless. The best example of this phenomenon is Thirunāvukkarasar. On account of religious enmity, he was tied to a big stone and thrown into the sea. He converted his body and the stone weightless and floated. This is evident from the following verse of the *Tēvāram*:

sorrunai vēthiyan sōthi vānavan
porrunai thirunthaṭi porunthak kai thozha
karrunai pūṭṭiyōr kaṭalil pāyccinum
narrunai yāvathu namac civāyamē.

3. Prātthi

The cosmic power of Parāsakthi saw the gross material things reduced into subtle forces. If one meditates over this cosmic light activating the *kundalini* force, one can accomplish anything one likes.

Prātthi is a mutated form of the word peruthal meaning 'obtaining'. One who achieves this prātthi stage can roam anywhere in the cosmic arch. This is described by Saint Paranjōthi in his Thiruvilaiyādal Purānam (25) as follows:

pilatthilirunthon ayanulakil pukuthal minṭum pilamaṭaithal palatthin mikuntha pirātthiyathām.

The visit of Vali to the underworld, the roaming of Ravanan and Suran to the various places of their choice and the appearance of Lord Siva in four different places at one given moment are the examples of *pratthi*.

4. Mahimā

Those who have achieved *lahimā* can ascend to the state of *mahimā* within a year.

ākinī kāl oļi yāvathu kanṭapin pōkinī kālankaļ pōvathum illaiyām mēl ninī kālam veļiyuī ninī pin thān ninī kālankaļ than vazhi ākumē [Having seen breath transformed into light No more does Time move; it stops; While the Past merged into space Of the Future He becomes the Lord.]

When *suzhumunai* ascends to the head, one can see the light there. Those who visually experience this light will not be affected by death. They transcend the phenomena of time and space.

uraiyum sivāntham ārārum uļļum puranum akalāthē niraiyum perumai thanaiyanrō makimā ennum nirampiyanūl (Thiruvilaiyādal Purānam, Attamāsiddhi Upathēsittha Paṭalam-23)

Those who attain the *mahimā* stage transcend the time factor. They will attract the cosmos. This stage is known as *nāthāntham* since it involves the divine light of Sakthi and the divine sound of Sivam. Those who attain this stage can expand their size to any extent.

When Lord Murugan entered into a war with Sūran, the brother of Sūran, Singamugan, expanded his body up to the sky with a thousand heads and attempted to swallow all the five bhūthas (five primordial elements). When Sita was in confinement in Lanka, Hanumān met her and showed this viswarūpam. Similarly, in vāmana incarnation, Thirumāl took so huge a form as to measure all the worlds by his two steps. And, Krishnan showed his large form to Arjuna and convinced him that he comprised everything within him.

5. Karimā

This is defined in *Thiruvilaiyādal Purānam Aṭṭamā siddhi Upathēsittha* Paṭalam – 24) as follows:

ilakuvāna para anuppōl irukkum yōgi thanai eṭutthāl ilaku mēru pāram ena iruppathu anrō karimāvām. After realising the divine light following activation and achievement of *prātthi*, one can see the whole cosmos in *sagasthra*. Those who get the vision of divine light need not go anywhere. They can see everything from their own place:

põvathu onrillai varuvathu thānillai sāvathu onrillai thazhaippathu thānillai thāmatha millai thamarakatthu innoļi āvathum illai arinthu koļvārkkē

- Thirumanthiram -681

[No going; No coming;
No death; No ageing
No delay in seeing Light of Breath (Nada)
Nothing desired in particular,
Thus it is with Siddhas
Who attained this Siddhi.]

6. Prakāmiyam

Kāmam means desire. Kāmiyam means the thing desired. Prakāmiyam means getting everything one desires. Such a person can do anything without hindrance.

parakāyatthil nannuthal vān pulatthil iyaṅkal iccittha pōkam anaitthum thānirukkum thalatthil iruntha paṭivaruthal pirakāmiyamām thavakkoṭiyīr.

(Thiruvilaiyādal Purānam, Attamāsiddhi Upathēsittha Paṭalam-25)

Those who are capable of activating the *kundalini* force can realize the divine light over their heads early. They can easily attain liberation.

vinnil iravi thannuṭampin veyilāl anaitthum viļaṅkuthalpōl mannil uļavām poruļpalavum kālam mūnrum vānatthin kannil uļavām poruļumthan kāyatthu oļiyāl irunthu arithal ennil ithuvum arai orusār pirakāmiyam enru iyampumāl (Thiruviļaiyādal Purānam, Aṭṭamāsiddhi Upathēsittha Paṭalam-26)

The attainment of ageing in her youth by Avvaiyār, the conversion of Kāraikkāl Ammaiyār into the form of a devil, the conversion of an old lady into a young person by Thirumazhisai Ālwār, the entering of Sivayōgi Mūlan into the dead body of a shepherd are examples of *prakāmiyam*.

7. Īsatthuvam

Sivasakthi is in the form of light. If the light in the body is unified with Sivasakthi and if this is practised for one year, one will attain the state of sadhasivam. If the light of the moon is perceived in the middle of the forehead, the practitioner will also shine like that light. If this chandrakalai is perfected, the body will become cool, the mind calm as the deep sea.

isan ena muzhutthozhilum than iccai vazhiseythu ezhupuravitthu thësan mutharkol pani këtpath thikazhvathu isatthuvam akum.

(Thiruvilaiyādal Purānam, Attamāsiddhi Upathēsittha Patalam -27)

Those who attain *Isatthuvam* can perform creation. They can protect and destroy anything. They are unequivocal.

If one is able to see the light in *chandrakalai*, if one can see the atoms of *pancha bhūtha* in blue colour, one can find the light of truth in the head.

Īsan means God. *Īsatthuvam* means divinity. Attaining the power of divinity one can perform the five actions, viz., creation, protection, destruction, hiding and blessing.

The action of Thirugnānasambanthar in resurrecting Pūmpāvai and the action of Sivan in giving life to a stone elephant are examples of this.

8. Vasitthuvam

pūsal avunar pul vilanku bhūtham manithar muthalumē vāsan āthiyen marutthan vasamāk koļkai vasitthuvamām

(Thiruviḷaiyādal Purānam, Aṭṭamāsiddhi Upathēsittha Paṭalam -27)

Vasitthuvam implies attraction of angels, men, devils, animals, birds, reptiles and trees towards an individual.

If the siddhas attained this stage of *vasitthuvam*, they would attain a glowing body through realization of $\bar{a}nm\bar{a}$. They would be relieved from sensual attachment. They would have the vision of cosmic mother. They would attain divinity and they would be capable of moving around any world.

Appar stopped the elephant which came to kill him; Rāman signalled the noises of the birds on the banyan tree to stop. Sundarar sent God himself as his messenger. These are examples of *vasitthuvam*.

Rāmalinga Adikal shared his experiences in attaining siddhi.

Pattinatthar describes the characteristics of a person who has attained perfection as follows:

maruvānaip pennākki orukanatthil kanvizhitthu vayankumappen uruvānai uruvākki iranthavarai ezhuppukinra uruvaļenuk karuvānai uravirankāthuyirumpaik katinthunnum karuthithanēl en kuruvānai yeythu sivakkozhunthānai gnāni enak kūronāthē.

pēypōl thirinthu pinampōl kiṭanthu iṭṭapiccai yellām nāypōl arunthi naripōl uzhanru than maṅkaiyaraith thāypōl karuth thamarpōl anaivarkkum thāzhmai sollic cēypōl iruppar kantīr unmai gnānam therinthōrē.

The *nirōthinikalai* is located in the *suzhumunai*. The soul is associated with this point comprising five hundred and thirteen channels. For the biotransformation of *amudham* (elixir) three hundred and five channels are there.

Breathing exercise

If breathing is regulated in a particular manner, it brings many benefits to us. This is described in Thirumular's *Thirumanthiram* and other works which throw light on *yoga*.

ēruthal pūrakam īreṭṭu vāmatthāl āruthal kumbham arupatthu nālathil ūruthal muppatthu iranṭu athu rēsakam māruthal onrinkan vañcakam āmē

- Thirumanthiram - 568

[Pūrakam is to inhale by left nostril matras six and ten Kumbhakam is to retain that breath for matras four and sixty Rēchakam is to exhale thereafter for matras two and thirty Thus alternate from left to right and right to left With Kumbhakam in between.]

The air is inhaled through the left nostril at a rate of sixteen *mātthirai*. This process is *pūrakam*. The inhaled air is retained for a period of sixty-four *mātthirai*. This is known as *kumbhakam*.

The air retained is released over a period of thirty-two *mātthirai*. This process is known as *rēsakam*. Any change in this process results in error.

The process of this type of exercise should be started with the inhalation of air through the left nostril. If so, there is no harm to the body.

enkē irukkinum pūri iṭatthilē ankē athu ceyya ākkaikku azhivillai [Wherever you be, there control breath The body then will perish not.]

ē<u>rr</u>i irakki irukālum pūrikkum kā<u>r</u>raip piṭikkum kanakku arivārillai kā<u>r</u>raip piṭikkum kanakku arivāļarkkuk kūrrai uthaikkum kuriyathu vāmē

- Thirumanthiram -571

[Inhalation, Exhalation, and Retention both ways
The Science of Breath thus consisting
They know not;
They who know the Science of Breath
Are destined to spurn the God of Death.]

People are not aware how the air has to be inhaled through the left nostril and how the air retained has to be released. Those who know the art of regulating breath can kick the *Yama*, the Lord of death.

Thirumular says that one can accomplish this feat if one correctly adopts this procedure.

The unification of mind, body and *ānma* is called *yōgam*. When one succeeds in practising this process, the *kundalini* or life force which is lying dormant awakens and rises.

thannai ariyath thanakkoru kēṭillai thannai ariyāmal thānē keṭukinrān thannai ariyum arivai arinthapin thannaiyē arccikkath thān irunthānē

- Thirumanthiram-2355

[With knowledge of Self

No harm there be;

Without knowledge of Self

Himself His (Jiva) harm be;

When knowledge

That knows the Self dawns,

Yourself Siva become,

Worshipped high.]

This achievement manifests in siddhars. One's awareness of the relationship between the cosmos and the individual is the first step towards *siddhi*.

If one realises one's self, then there is no decline. Decline comes only by ignorance. If one is aware of the pure consciousness, then one realises that one rises to the state of being worshipped.

Dr P. Jayaprakash Narayanan

Siddha Medical Astrology

Introduction

Our ancients have left many arts as their gift for future generations. One of those arts is astrology. This art has been in practice in Tamilnadu for more than two thousand years. This is evident from the Tamil epic *Silappathikāram*. The great Chera king Senkuṭṭuvan discussed his plan of declaring a war against the northern states with the inner cabinet. An astrologer was a member of that inner cabinet. The astrologer suggested a particular date as an auspicious day to declare war which would bring laurels to the king. Senkuṭṭuvan rejected this date since he was preoccupied with some other programme. Since the proposed date was considered very auspicious to bring victory, the white umbrella and the sword of the king were sent on that date to the warfield.

nōynāṭi nōymuthal nāṭi athuthanikkum vāynāṭi vāyppac ceyal

- Thirukkural -948

This is a guideline given by Thiruvalluvar. It is that a disease could be well treated only when the cause of the disease and its diagnosis are well assessed.

The following poems show the several aspects which have to be followed in the investigation of a disease.

kūrpāru thāthu laṭsanamum pāru
kōļpāru nāļpāru gunamum pāru
nēr pāru thēkapēthaṅkaļ pāru
nilaipāru kirakavucca niccampāru
pērpāru kaiyaini piraku pāru
perrathilē kirakatthin thanmai pāru
vērpāru thazhaipāru mincinākkāl
mellamellap parpa senthūram pārē.

pārkkinga sōthiṭamē pirāyakālam
pakarum vivakāramoṭu pirāyaccittham
ērkkum vayitthiyam intha nānkum vallōr
ithan vazhiyē sikiccairaṭcai seyvārākil
ārkkumē thōṭamillai ivaikaļ yāvum
ariyāthār sātthiram vallavarkaļ pōlath
thirkkamaṭi piṭiyākac ceyvārākil
sivapiramatthi vathai sērvāranrē.

-Agatthiyar Sillaraik Kovai

In the above poems it is expressly stated that the physician should consider the influence of stars and planets on the individual at the time of his birth.

Cosmos and the individual

Our ancients called the cosmos andam and the human body pindam.

The cosmic influence makes an impact on the structure and functioning of the body from birth. According to this influence, one's structure, communicative ability, sharpness of mind, courage, decision-making ability, self-confidence, vulnerability to diseases, sexuality, inclination towards the righteous path, food habits and blessings of nature are formed. The physicians

are supposed to learn certain branches of this science. They are described in the following poem, Astrology is the foremost discipline to be learnt by the physician.

sõthiṭam pancapaṭci
thulaṅkiya saranālmārkkam
kōtharu vakāravinthai
kurumuni ōthupāṭal
thithilāk kakkiṣaṅkaḍ
seppiya kanmakānṭam
ithellām karrunarnthōr
ivarkalē vaithyarāvār

-Pathinen Siddhar Sillaraik Kōvai

Astrological texts in Tamil

Many texts are available in Tamil on astrology. But only certain texts throw light on the manifestation of diseases. They are:

- ♦ Pulippāni Sōthidam 300
- ♦ Chandralangāram
- ♦ Kumāraswāmiyam
- ♦ Idaikkādar Varuda Palan
- ♦ Manimanthira Vaidya Sēkaram

The conditions where medicine fails

- l. If pittha diseases develop during the period when the presiding planet of the eighth house of the horoscope of the individual reigns, the diseases will not respond to treatment.
- 2. If *kaba* diseases develop during the period of the presiding planet's stay in the sixth house in the horoscope, the treatment fails.
- 3. If *vātha* diseases develop during the period or sub-period of the influence of the presiding planet of the twelfth house of the horoscope, the treatment fails.

Death due to poison

If the mars is positioned in the eighth house in the horoscope of the individual and $r\bar{a}gu$ or $k\bar{e}thu$ is seen in conjunction with the sun, the individual's death will be due to poison. Similarly, if the lagna lord and the lord of the sixth house are associated with $r\bar{a}gu$, the same will happen.

When the lord of the eighth house is in reign, it will bring many troubles to the individual like imprisonment, death, falling from a height, exile, enmity, wound by a sword, unmanagable problems, trouble from poison, eruptive fever, diarrhoea, disease of the testicle, infant diseases, hanging in a public place, drowning, trouble from lightning, etc.

Suicidal tendency

If the saturn is positioned in the eighth house to the moon, the individual develops suicidal tendencies. There will be loss of money and land. Royal enmity will result. If *lagna* lord is positioned in a *kendhra* this will not happen.

Blind by birth

If *lagna* lord and the lord of the second house are combined in a horoscope with the venus, the individual will suffer from impairment of vision. If *mānthi* also joins this combination he is blind at birth.

Degenerative disorders

If the ruling planet of the *lagna* and the lord of the sixth house are combined with a malefic planet and positioned in the sixth, eighth and twelfth houses in the horoscope, the individual will be suffering from degenerative disorders.

Physically handicapped

If the mercury, the venus and the mars are combined in any house of the horoscope, the individual will be physically handicapped, and more so in the event of their position in sixth, eighth and twelfth houses. If the saturn and *rāgu* are positioned in *lagna*, he will be a diseased person from birth.

If the saturn and the mercury are positioned in *lagna*, he will be suffering from kyphosis.

Deaf

In a horoscope, if the saturn and the jupiter are behind the sun, the individual will be deaf.

Infertility

If the lords of the fifth house and the sixth house are combined, the children of the individual will suffer from chronic ailments.

If this occurs in the third house, the individual suffers from infertility. But if these combinations are accepted by the jupiter, the adverse effects will be nullified.

Delayed progeny

If rāgu is positioned in the fifth house, it indicates delayed progeny.

Sixth house

By analyzing the sixth house in a horoscope, one can assess the nature of a disease, struggle in career, loss of wealth in the profession or by theft, trouble from women, , water and fire, and imprisonment in life.

Position of jupiter

If the jupiter is positioned in the eighth house it is the indication of sexual perversion. He may face troubles from bad wife and enemies. Royal enmity will manifest. It will bring damage to wealth, health and fame of the individual.

If the jupiter is positioned in the sixth house, it will bring royal enmity and disease.

If the jupiter is positioned in the twelfth house, the same will result in but if it is the own house of the jupiter, it will give good results.

Position of venus

If the venus is positioned in the third, sixth or twelfth house, it will shorten the lifespan of the individual. The individual suffers from testicular diseases, abdominal swellings, anaemia, peptic ulcer, tuberculosis, edema, etc. but if the twelfth house is the own house of the venus, it gives good results.

Position of the sun

If the sun is positioned in the 2, 4, 5, 7, 8, 9 and the 12th houses of a horoscope, the individual will suffer from lowered immunity. He will suffer from abnormal burning sensation of the body. He will have bad dreams. He may suffer from eye and skin diseases. He will develop the enmity of evil people.

Protection from all evil factors

If the saturn is positioned in the eleventh house or the jupiter is positioned in the seventh house or $r\bar{a}gu$ is positioned in the fourth house or the mars is in the sixth house or the sun in the third house, it will nullify all bad effects caused by other positions.

Horoscope

The horoscope is the map which depicts the influence of the cosmos on the individual at the time of birth which shapes his career. During travel by the roads, there are sign boards at accident zones, some guide to speed limits, some are warning not to overtake others in certain areas.

Similarly, the readings of the horoscope guide us as to where we should act swiftly, where we have to act patiently and where we should move cautiously. As Thiruvalluvar says, the wise know the future happenings.

Zodiac and organs

Aries - head
Taurus - neck
Gemini - shoulders
Cancer - heart
Leo - thorax

Virgo - epigastrium

Libra - middle of the abdomen

Scorpio - pubic region, lower abdomen

Sagittarius - thigh

Capricorn - knee joint

Aquarius - leg Pisces - sole

The position of the planets in the horoscope of a patient will give a strong clue as to the direction where investigation has to be focused on.

Planets and the organs

Similarly, planets exercise their influence on the organs as follows:

Sun - heart, spinal cord

Moon - thorax, abdomen, pancreas, intestine, etc.

Mars - blood, genitals

Mercury - brain, nervous system, respiratory organs

Jupiter - liver, fat

Venus - urogenital tract, hip

Saturn - spleen, skin, bones

Rāgu - skin, lymphatic channel

Kēthu - uterus

Conclusion

Astrology is a perfect science. Otherwise, siddhars would not have acknowledged it as a branch of siddha medicine. Nowadays, it suffers serious setback in the hands of incompetent persons of vested interests. A minimum knowledge of astrology will help the individual know his personality and plan his career. It should not affect the self-will of the individual. By proper survey of the revelations of ancient scripts on astrology and proper fieldwork, the utility of astrology can be brought home to the modern world. At the same time, we should not forget the words of Thiruvalluvar, the great poet of the Tamil land, that even if God fails, hard work of an individual bestows all benefits on him.

Scientific Facis in Religion

Introduction

It is not possible to arrive at a conclusive date of the creation of things in the cosmos and on the earth. But the approximate period when human beings and other living things have appeared on the earth has been established by scientists.

Though it is not possible to exactly determine how primitive men lived in those periods, it may be inferred that in the course of time they might have firmly settled in their lives by learning to live with the furies and cyclical rhythms in nature.

Man might have thought about the nature of the world, the creation and the destruction of things in the world after this process of adjustment with nature. He might have formed a society and could have become self-sufficient. He might have propounded several theories about the existential realities, which ultimately might have grown into religions.

What is religion?

The word samayam in Tamil means 'tradition' and 'religion'. Tradition signifies the established truths of living arrived at from the empirical realities through extended spans of time in a given society. These established truths have been organized and systematized into what have come to be known as religions.

The word samayam (religion) in Tamil might have been a changed form of samaiyam. Siddhar Thirumular in his treatise *Thirumanthiram* has used the word samaiyam. In Tamil, samai means 'to make fit'. The word samaiyal means 'cooked food'. It will be appropriate to take this word samaiyam as indicating a set of doctrines meant to purify the mind.

The word *gnānam* indicates a higher state of the soul. The soul, by its natural wisdom and by experience and training, can come to the higher state of *manam*. The soul makes sense of the creation and the developments in the cosmos and on the earth. This knowledge in its systematized form has become religion.

The doctrines of agamas

Researchers say that the doctrines of agamas were in vogue in the beginning, which hold that atoms (anu) lie at the root of the creation, preservation and destruction of things in the world.

They have propounded the doctrine that there exist three primordial entities namely pathi, pasu, and pāsam, in an atom, which they called pērarivu (universal wisdom), citrarivu (soul) and sadapporul (matter) respectively. These principles in the course of time evolved into theological doctrines.

Pathi

Pathi, which is considered as one of the primordial entities, is pērarivu (universal wisdom).

Pasu

The synonyms of pasu (soul) are arivu, ānmā, uyir etc. The soul is considered citrarivu (faulty wisdom). It is attracted to and bound by pāsam (matter) which ever lies in the proximity of pasu in the atom.

Pāsam

 $P\bar{a}sam$ (matter) is devoid of sense. But it is endowed with the power of attraction. By this attraction, pasu (soul) remains bound in the atom stage itself. Hence, the soul loses its natural quality of wisdom.

Pathi, the universal wisdom, pervades and transcends everyone of the atoms and remains unaffected by the attraction of pāsam.

Siddhantham

Siddhāntham denotes the end result of wisdom. It is the existential state of $\bar{a}nm\bar{a}$ (soul) as willed by pathi (universal wisdom).

Considering the low state of $\bar{a}nm\bar{a}$, pathi makes it function in a body in order to free it from the bonds of $p\bar{a}sam$. That is, pathi makes the soul to function by forming a physical body with $p\bar{a}sam$ (matter) itself. The aim and object of birth is to get rid of the bonds of $p\bar{a}sam$ and to attain bliss. This is the essence of $siddh\bar{a}ntham$.

Padaippu (creation)

Pathi, pasu and pāsam are in an abstract state. The existence of the three is revealed during creation, that is birth.

Living and non-living beings are being created. These beings, including humans, lead their life by giving preference to pāsam. Pasu and pāsam are in the atomic state of existence before creation. Living beings, which are bound by pāsam, are not controlled or directed by anybody. Human beings are not responsible for creation, protection and elimination. Hence, it may be presumed that a being which cannot be perceived by the five senses may be the cause for all the activities.

Why can't such a systematised body of knowledge called *siddhāntham* be accepted as a science? It is obvious that these principles, propounded scientifically in the past, are now considered as religious doctrines.

Sivan

Sivan is considered to be the first among the siddhars. It is believed Sivan has shown that the soul is capable of uniting with the universal wisdom, pathi. It can be presumed that since Sivan succeeded in attaining the powers equivalent to that of the universal wisdom, the principles enunciated by Sivan have been named Saiva Siddhāntham.

The word *sivam* in Tamil has been derived from the word *semmai* which means perfection, uprightness, greatness, etc. In the later days, the word *sivam* has been changed to *saivan*.

Several people have studied the process of creation of this world. The *siddhānthis* are one among them. The principles formulated by them is known as *siddhāntha* philosophy. These *siddhānthis* talked about the atomic principles that accord with the present-day theories of science. For example, take a poem by Thirumūlar:

pathipasu pāsam eṇappakar mūṇṛil pathiyiṇaip pōlpasu pāsam aṇāthi pathiyiṇaic ceṇṛaṇu kāppasu pāsam pathiyaṇukil pasupāsam nillāvē.

Thirumanthiram- 115

[They speak of the Three-Pati, Pasu and Pasa; Beginningless as Pati, Pasu and Pasa are: But the Pasu-Pasa nears not the Pati supreme: Let but Pati touch! the Pasu-Pasa is as naught.]

He says that among the three primordial entities, viz., pathi, pasu and pāsam, pasu and pāsam also exist from time immemorial, whose origin cannot be ascertained. The pasu is in such a state that it cannot approach pathi, because pasu is bound by the principle called pāsam, in the atom state itself. But when pathi, the universal wisdom, approaches pasu, the pāsam, which is binding it, will leave pasu. This is the essence of siddhāntham.

Sīvan (soul)

Siddhar Thirumular, in his treatise *Thirumanthiram*, explains the minuteness of *sīvan* (soul):

mēviya sīvan vaṭivathu solliṭil kōvin mayirongu nūruṭan kūriṭṭu mēviya kūrathu āyira māyiṇāl āviyin kūru nūrāyiratthonrē [To speak of the size of Jiva
It is like this:
Split a cow's hair soft
Into a hundred tiny parts;
And each part into a thousand parts divide;
The size of Jiva is that one part
Of the one hundred thousand.]

Udambu (physical body)

udampār aliyil uyirār alivar thidampaṭa meygnāṇam sēravu māṭṭār udampai vaļarkkum upāyam arintē udampai vaļarttēn uyir vaļartthēnē.

Thirumanthiram-724

[If the body perishes, Prana departs
Nor will the Light of Truth be reached;
I learned the way of preserving my body
And so doing, my Prana too.]

Here Thirumular describes the physical body. When the physical body, which is composed of *pāsam*, is destroyed, the soul which functions in that body, will cease to function. But it is not the destruction of the soul. Soul cannot be destroyed. Hence, to gain a peaceful abode for the soul, he learnt and practised the ways and means of growing his physical body already given to him, says the poet. For that, he adopted the methods of *aṭṭānga yōga* which would secure the body against deterioration for long. To grow the body means to protect the physical body from deterioration for a long time.

The above principles are systematized facts. They agree with our wisdom. Hence, these principles may be considered ways of science, though they are principles of religion.

Ever-changing world

Buddhism

Buddhists believe that this world is created from vacuum. There is no such thing called $\bar{a}nm\bar{a}$ (soul). The totality of the qualities and characteristics of an object is what comprises the physical body and the soul, according to Buddhists. There is no unchanging object in this world. Everything keeps changing. Buddhists say a ripened fruit and a tender fruit are two separate things. They don't accept that the tender fruit has grown into a ripened fruit. Such principles do not seem to agree with science.

Jainism

Jains accept atoms. But they say that atoms, everything in the world, contains only two things, viz., soul and physical body. Apart from the above two, there is no third phenomenon. Jains also believe that atoms are naturally endowed with the ability to move.

There is not much difference between the principles of *siddhāntham* and Jainism. Jainism says that atoms naturally have the quality of moving. But *siddhāntham* says that a third phenomenon, namely *pathi*, makes *pasu* and *pāsam* function.

Jainism also accepts that when the obstructive principle, pāsam, is removed, soul will come to its real nature as the manifestation of wisdom. But when we see the developments in the cosmos and the world, we are not able to accept this concept of Jainism. If it is said that atoms are intrinsically dynamic, it is not clear whether they relate to the soul or the body. If even the soul is assumed to be dynamic, it does not sound reasonable that the soul

manifests changes in itself assuming the forms of the various beings and objects. It, therefore, does not agree with science.

Sānkhya philosophy

The original phenomena are two: one is *sēthanam*, which is intellect. The other is *asēthanam*, which is non-intellect. *Sānkhya* philosophy holds that the latter creates the physical body and other objects for the sake of intellect. It does not sound logical that the senseless matter creates the world.

Vaisēdikam

Vaisēdikam accepts the theory of atoms. In the beginning, vaisēdikam held that the principle called athirstam (the fruit of deeds) was responsible for the functioning of atoms. Later, it came to the view that the Almighty is the ultimate cause of all movement.

They said that there were causeless deeds. For example, when two parts unite together and form an object, the number of objects is three, that is, the two parts plus the newly-formed object. This concept also does not agree with science.

Naiyāyikam

Naiyāyikas want to account for creation and destruction by means of logic, primarily by means of perception. But it is not possible to prove the existence of pathi, the Almighty, by means of perception. It requires the means of inference.

Mimāmsakam

Mimāmsakas do not accept the invisible atoms, but accept molecules. They say that souls are eternal and wisdom is a deed for the soul. They hold that when a deed takes place, the doer and the recipient of the deed are both affected.

While most of these religious doctrines tend to contradict the tenets of science, siddhantha philosophy is scientifically organized and scientifically acceptable, and therefore belongs to the realm of wisdom.

Tholkappiyar's concept of the soul

Tholkappiyar, the author of the oldest Tamil grammar and the forerunner of siddhantham, has given a scientific explanation of the soul two thousand years ago. Look at his classification of living beings:

Single sense organisms have the sense of touch; Two-sense organisms are endowed with touch and taste; Touch, taste and smell go with three-sense organisms; Four-sense organisms have sight added to the three; Five sense organisms are gifted with hearing in addition; Mind's faculty is the sixth sense known,	1510
Thus goes the classification by discerning men.	1518
The grass and tree are single sense organisms; Other species of the flora there are too That are limited to this faculty.	1519
The snail and shell-fish are two-sense organisms; Others of their species there are too.	1520
The termite and ant are three-sense organisms; There are others of their kind confined to these faculties.	1521
The crabs and beetles are four-sense organisms; Others of their species there are too.	1522
The beasts, and men sans discrimination Are creatures with five senses; There are co-shares among their species too.	1523
Humans have six senses; There are others too endowed with six senses.	1524

Man is capable of thinking and acting independently. *Manam* (mind) is a principle of the soul that functions with the help of the two instruments called brain and heart.

Our ancestors had the wisdom and the scientific bent of mind to classify living things on the basis of biological factors.

Thirukkūtthu (cosmic dance)

The *siddhāntha* philosophy visualizes the cosmic dance of Siva, and has caused His image to be sculptured in the dancing posture.

When Siddhar Thirumular talks about this cosmic dance, he says that the whole cosmos and everything found in the cosmos, both movable and immovable, keep dancing.

The cosmic space where Siva dances is called Chithambaram (chith+ambaram). It means the space of wisdom. In other words, Siva, the universal wisdom, combines the atoms in the space and forms several physical bodies for the sake of the soul and makes the soul function in these bodies. This is called the principle of creation.

Sivan creates everything for the created beings. He protects everything created, for a certain period. Then the created things disintegrate into atoms. This is called elimination.

Though this *pathi* is the cause for all these things, it conceals itself from the soul, as an atom within an atom.

Thus, the formation of objects by the combination of atoms, the existence of the objects, and their disintegration into atoms make a cycle which science calls atomic agglomeration.

Science in religious ceremonies

In Vishnu temples

The offerings made by the devotees in Vishnu temples are a mixture of the leaves of sacred basil, water and camphor. It has been discovered that sacred basil contains ozone. It is capable of removing phlegm and protecting the body. Camphor stimulates the heart and protects the body from chillness by giving heat to the body. We may therefore say that there is an element of science in religion.

In Siva temples

In Siva temples, devotees are offered bael leaves and sacred ashes. Sacred ashes point to the existential truth that man will ultimately become a handful of ashes. The scientific fact is that if ash is applied on the forehead and on the body, it will suck unwanted fluids from the body.

The leaves of bael tree have medicinal value. It has been proved scientifically that these leaves will strengthen the heart. It is also good for diabetes mellitus. Science operates here also.

In Māriyamman temples

A paste of turmeric and zedoary is applied on the idol of Goddess Māriyamman. Turmeric is capable of arresting the growth of certain disease-causing organisms. Zedoary is good for the skin.

Neem leaves have an important place in the temples of *Māriyamman*. Neem leaves are capable of arresting the growth of viruses and other disease-causing organisms. It is a scientific fact that disease-causing organisms will not thrive in places surrounded by neem trees.

Smallpox and other viral diseases

There is a belief in the society that smallpox is spread as an epidemic and is caused due to the anger of *Māriyamman*, a female deity. During this time, there are restrictions such as everybody in the house should be clean and hygienic. If they are untidy and unhygienic, the environment will be conducive to the growth of the disease-causing virus. These habits indicate the principles of hygiene and preventive medicine.

Since this disease in believed to be caused by *Māriyamman*, neem leaves and turmeric, which are considered sacred to *Māriyamman*, play an

important role. The mixture of turmeric and water will be sprinkled around the patient. There are restrictions that visitors should enter the house only after washing their legs and after sprinkling turmeric water on their head and body. Though these things seem to be a ceremony, it is a scientific fact that turmeric can protect one from evil organisms as also stop the growth of these organisms in the diseased part.

During the time when the smallpox blisters dry, they are highly infectious. In order to prevent the infection, a paste made by grinding neem leaves and turmeric will be put on the blisters to weaken the virility of the virus. By this application, itching will also subside and the virus will become weak.

There are chances that people may not be clean and hygienic during the spread of this disease, if one is not threatened in the name of a deity. There is a belief that things which are sacred to a god will abate the anger of that god. In this aspect also, our ancestors might have inserted science very subtly.

So far, no medicine has been discovered to cure smallpox and other viral diseases. We are following the same restrictions followed by our ancestors. Our ancestors have given the ways and means of keeping the evil organisms under control and making them come out through religion-based practices.

Vaikunda Ēkādasi (a day of festivity in honour of Vishnu)

On this day of *Vaikunda Ēkādasi*, devotees will observe complete fast and will be awake throughout the night. Next morning, they will add the greens of West Indian pea tree to their diet. The principle behind it is, for the people who are fasting and awake throughout a night, *pittham* will be in excess. To neutralize this, the leaves of this tree are added to their diet on the basis of science.

Thaip Pongal

It is a custom that during the day of *Thaip Pongal* people should be clean and hygienic when they start cooking the *pongal* dish. In the same way, raw rice used in cooking the *pongal* dish will be prepared by pounding fresh

paddy in a mortar so that it may be pure without the contact of any impurity. The principle behind it is that it will be very hygienic, and also, hand-pounded rice will not lose any vitamins. It will give strength to the body. This is also done on the basis of science.

Pillaiyar Chathurtthi

On the day of this festival in honour of God Ganesha, the things of fered to this God have medicinal as well as food value. These offerings contain fried rice, cooked bengalgram, and rice flakes.

The garlands worn on this God are made of cynodon grass and white madar, which have high medicinal value.

Sixteenth day ceremony of a dead person

If anybody dies in a family, the relatives and friends of the dead person will be on fast until the body is cremated. The next day, it is customary to add the greens of West Indian pea tree as a side dish to their diet. As already mentioned, when people are awake and fasting, *pittham* will be in excess in them. To bring down the *pittham* to its normal condition, the greens of the pea tree are added to the diet. In the same way, on the sixteenth day of death of a person, the greens of the pea tree will be added to the diet. Though these customs are followed hereditarily as a ceremony, science is involved in it.

Tharppanam

In honour of a departed soul, it is a custom to do tharppanam (libations of water) once in a year on that particular date. During this ceremony, varieties of vegetables and greens will be cooked and served. Along with them, ghee will be served liberally. Ghee and large quantities of dishes along with rice will lead to indigestion. To induce digestion and to digest excess of fat in the diet, the relish of square-stalked vine (pirandai) will be added to the food served. Though this seems to be a ceremony to add this dish, it indicates the involvement of medical science.

Tamil New Year's Day

In our day-to-day life, all the six tastes are necessary in our food in order to make the three principles, *vali*, *azhal* and *ayyam*, to function properly in our body. But we don't have the habit of taking bitter-tasting foods daily. To bring home the necessity that bitterness is also required throughout the year to make the principles, *vali*, *azhal* and *ayyam* to function properly, our ancestors have stressed the need for eating bitter-tasting flower of neem on the Tamil New Year's Day.

The basis of bitterness is the combination of air and sky, and the cause of *vātham* is air+sky. That is why neem flower relish and neem flower pepper water are taken along with food on that day.

Worshipping Pillaiyār (Lord Ganēsha)

When we worship *Pillaiyār*, we strike our heads with our fists, holding our hands crossed like scissors. The right side of the head is hit with the left fist and the left side with the right fist. By this action, we activate our brain and request *Pillaiyār* to bestow good health and real wisdom upon us.

It is science that when the right side of the brain is affected, the organs on the left side of the body will be affected, and when the left side of the brain is affected, the organs on the right side will be affected. By the same principle, siddhars say that the $n\bar{a}di$ (pulse) starts from the right toe and ends at the left nose and vice versa, like the scissors. On this basis only do we strike on our head with the fist.

Sporting tuft of hair knotted at the back

In those days, there was a custom for men to have their hair tufted at the back of the head. Still this habit is in vogue among some people. Is it just a religious practice?

We have read in newspapers that people die of sunstroke. The tuft on the back of the head can resist sunstroke to some extent. Medulla oblongata is on the back of the head. If excess heat of the sun's rays attacks this part, there are chances of coma and even death. The back tuft helps in preventing this.

If an enemy hits on the back of the head, the medulla oblongata will be affected, by which unconsciousness or even death may occur. The tuft on the back of the head can bear the blow on it. For this purpose only, they used to grow a tuft on the back of the head. But nowadays, without knowing the scientific basis of this habit, hair styling keeps changing.

Oilbath in day-to-day life

We have the habit of taking bath everyday. There is no difference between men and women in this regard. But for taking oilbath, separate days for men and women had been prescribed by our ancestors.

Why such a condition that males should take oilbath on Wednesdays and Saturdays, and females should take oilbath on Tuesdays and Fridays?

If a married couple take oilbath on the same day and have sex, they will catch cold. That is why it has been fixed that males and females should take oilbath on different days.

The Vaishnava sectarian mark on the forehead

Both men and women of the Vaishnava sect have the habit of drawing the sectarian mark on their foreheads. Whether this mark is a single line or a double line or a triple line, it conceals the centre in between the eyebrows. It thus protects one from the evil effects of the magical art of subjugating a person.

Fatigue after taking food

Even a person who is very active and service-minded would feel tired after taking food. Why?

After taking food, much of the blood in the body will come to the stomach for the secretion of the digestive fluids like enzymes, acids, hormones, etc. Hence the other organs will become weary after eating.

Pollution (thittu)

We consider certain situations as causing pollution in the house. A death or a haircut is said to cause pollution.

When a person dies, the soul in the body will become defunct and the power of immunity will be lost. Hence the microorganisms present in the atmosphere will attack dead body. That is why a dead body swells and bad odour comes from it. To avoid such occurrences people use ice bars, etc., to cover the body.

It is natural that relatives and friends will touch the body and even embrace the dead body while condoling. In that situation, the microorganisms from the dead body may affect those friends and relatives. This situation is called pollution. The religious prescription is to take bath after attending a funeral. When they take bath, the organisms will be washed off. This is a scientific fact.

Similarly, in those days, there was a custom to shave the head in certain religious ceremonies. It is also a habit to shave the face regularly. After the shave, the person should take bath compulsorily. The dresses worn at that time should also be washed.

There was no facility in those days to do self-shaving. Necessarily, people had to go to a barber. The barber would shave several people in a village with the same razor. Hence, there were chances of infection, which a bath would protect against.

Menstrual pollution

During the period of puberty or menses, women are isolated and kept in separate rooms because it is considered a pollution. At these times, some quantity of blood will be oozing out for some days, when the body of the woman will be very weak, and there are chances of easy infection to other people. Hence the custom of isolating them and feeding them with certain healthy foods like blackgram pasty pudding, eggs, sesame oil, etc., in order to improve the immunity of the woman.

Not only that. This period may aggravate the existing illness in women. In order to secure other people from their infection, they are kept in isolation.

Winter season

During the winter season, when thunder crashes in the sky, there is a custom among folks to utter some words like *Archuna* with the mouth open. According to science, when the mouth is closed at the time of crashing of thunder, there is the danger of the tearing up of the eardrum. Hence the habit of opening the mouth and filling it with air. It is really surprising to note how our ancestors have handled science in the guise of religion.

Shunning meat food

Saivites usually avoid meat food. It is considered that people taking meat diet gradually acquire the qualities of wild animals. By this, they become more arrogant, and acquire the traits of darkness that lead to sloth, lust, anger etc, at the cost of a virtuous disposition.

It is generally accepted that goodness of temper is fed on vegetarian diet. By this, both body and mind are purified. That is why Thiruvalluvar says that all living beings will worship a person who is not a killer and not a meat-eater. The blood of a person with an intemperate mind will become hotter and get poisoned too, which may also lead to blood pressure. Avoidance of meat is therefore scientifically advisable.

Mantras

Mantras, according to the learned, are the words of wisdom coming from the depths of ripe minds. These ripe minds are people who are perfect in thoughts and deeds. That is, the words and deeds of these people have the magical strength and authority. They can produce fruitful results.

Hence, it is a scientific fact that purity of mind becomes the first cause providing for the wellness of the body and the mind.

Varieties of medicine

Siddhar Thirumular has classified medicines into vira marunthu, vinnor marunthu and nāri marunthu which are meant for people engaged in family life. He has prescribed a different medicine for seers and sages. He says that this medicine is of a superior kind, the efficacy of which can be experienced only by wisdom or soul. It cannot be described by words.

Nāri marunthu

Nāri denotes a woman. Here it refers to the green-hued Goddess Sakthi, the daughter of a mountain chief. Therefore nāri marunthu are medicines prepared from green herbs and plants collected from mountains. It may also mean medicines specially made for women.

Vinnor marunthu

Those medicines are meant for celestials. It is believed that the celestials ever remain young. As such, these are *kāya kalpa* (elixir) medicines, capable of preserving youthfulness.

Vira marunthu

In those days, it was enjoined upon men to be trained in warfare, take part in wars, which involved grievous wounds and injuries. Even those who did not go on wars and receive war-wounds had their bodies pierced with swords after death and before burial. As a remnant of this practice, today the ears of men are bored with a needle.

As such, *vīra marunthu* may refer to surgical treatment for serious wounds and ailments.

Branches of medicine

Siddhar Thirumular has classified the practice of medicine into four branches. They are:

- l. Medicines healing the illnesses of the physical body
- 2. Medicines for treating mental disorders

- 3. Medicines and practices for prevention of illnesses
- 4. Medicines which can lengthen lifespan and confer immortality.

The first three medicines are intended for people who are engaged in family life, providing for health until death.

The fourth medicine is intended for seers and sages. The first three medicines can lengthen the lifespan but they can't help conquer death.

Gnānam is the superior wisdom of the soul acquired through exercises and experiential knowledge. This wisdom enables one to perceive the realities of this world and the cosmos, arrive at the truths about them and hand these truths to the people of this world, by raising the level of the natural intelligence of these people to the heights of wisdom. Those who possess this wisdom are called *siddhānthis*.

When we administer medicines to a sick person, the internal organs like heart and brain and the external organs can be brought to their normal state, which is called the practice of medicine. To uplift natural intelligence through yōga practices so as to make it embrace wisdom is the task of siddhāntham. The principles of science run through both medicine and siddhāntham. Although religion holds Godhead aloft, it is undeniable that it is interlaced with science. Nevertheless, the ultimate goal of siddhāntham is to realize Godhead.

The theory of evolution

Charles Darwin, a biological scientist, has shown that human beings have evolved from the lower order of species. Today, we also have the alternative theory that the first living being might have originated in water. The religious philosophy of Vaishnavism seems to illustrate this standpoint.

The incarnations of Thirumal (Vishnu)

Vaishnavism holds that Thirumāl has taken ten avatārs (incarnations). These ten incarnations, in their order, seem to remind us of the evolution of human beings. Look at them:

Maccha avatāram (as a fish)

The fish incarnation looks like strengthening the scientific theory that the first living being appeared in water.

Kūrma avatāram (as a tortoise)

The next stage of evolution is the advent of tortoise which is able to live in water and on the earth.

Varāha avatāram (as a pig)

Pig is the third incarnation of Vishnu.

Narasimha avatāram (beast and man)

This incarnation is a combination of a beast and a man, the fourth in the order.

Vāmana avatāram (dwarf)

This represents the evolution of a short-statured human from beast-man manifestation.

Parasurāma avatāram

It is the human being with aggressive valour.

Balarama avatāram

Balarama incarnation with a plough in hand shows human beings who have understood nature by experience and who have taken to farming.

Rāma avatāram (civilised man)

The Rāma incarnation symbolizes the blend of valour, wisdom and culture, representing the advanced stage of civilization.

Krishna avatāram

A representative of the present Iron Age, endowed with intelligence, smartness, wit and retributive mindset.

Kalki avatāram

Represented in the form of a man mounted on a horse holding a sword and a shield. This incarnation shows a warlike human being, truly symbolizing the present-day realities of the conflict-ridden world.

Conclusion

The influence of religion and theology marks human culture and civilization in all its stages of development. Religion does not represent a monistic doctrine informing human life; it is a pluralistic phenomenon pervading human existence. It has as much a bearing upon the wellness of the human body as it has upon purification of the soul. For religion the soul and the body are the two sides of a coin. Without the body, the soul cannot function. As such, religion functions in human affairs as a blend of science and spirituality.

'When the body is destroyed, the soul will cease to function' and 'fostering the soul goes with fostering the body' are the articles of faith for the siddha philosophy, which is a branch of religion.

Dr K. Natarajan

Body Constitution

Introduction

It is very essential for a doctor to know about the character of the human body. By knowing the nature of the body of a person, one can define his body constitution, food, seasonal body protection, taste, etc., and thus protect him from diseases. This type of study is present only in the siddha system.

Origin of the body

During embryonic development, the formation of the body of the child is informed by the dominant presence of one or the other of the parentally transmitted threefold principles of *vātham*, *pittham* and *kabam*, as the sperm and ovum join together. Thus, if *vātha* dominates it is *vātha* body, if *pittha* dominates it is *pittha* body, and if *kabam* dominates it is *kaba* body.

	<i>Vātha</i> body	<i>Pittha</i> body	<i>Kaba</i> body
Structure	lean and tall, big thighs.	reduced muscles in bones and joints, persistently warm body, mildly bad smell, skin shrunk and wrinkled due to sweat, acne and black spots seen on the face.	evenly spread muscles covering bones & joints, good- looking body, broad fore- head, large, raised chest, hands ex- tending up to knees

	<i>Vatha</i> body	Pittha body	Kaba body
Colour	bright with blackish and white colour	bright with yel- lowish and red colour	bright like a sparkler or sword, yellow corn, lotus or gold
Eyes	round and fairly white eyes, thick-ened eyelids.	easily reddened by sunlight, anger & hunger, thin eyelids with heavy motion	broad & straight eyes, reddened at the corners of the cornea, good eyesight, thick and shiny eye- lashes
Hair	black hair with split ends	tinged with yellow colour	black and shiny hair
Speech	clear speech, sometimes stam- mering, hesitant speech	articulate	resonant like a sea, lion, drums, clouds
Walk	walking with cracking joints		elephant gait
Food habits	large intake, less energy, liking for hot food with saltish, sweet & sour tastes, dislike for cool foods	liking for cool foods with sweet, astringent & bitter tastes, less intake, impatient for hunger, thirst and heat	liking for very hot food with bitter, astringent and acrid tastes, less intake but energetic, not impatient for hunger, thirst and heat

Character		1	
Character traits	low libido towards girls, low virility, high reproductivity, unstable manliness, emotions, and knowledge, interest in games, music, massage, hunting, and derisive laughing, intellectual abilities	less sperm and low sexual passion, low libido towards girls, traits like bravery, hostility, fortitude, politeness, smartness, clear informed words, kindliness towards others	increased level of sperm and digestive juice, increased prog- eny, goodness of disposition, good memory and intelligence, traits like affec- tion, trust, truthfulness, determination, gratefulness, large- heartedness, virtuous deeds, civility of behaviour
Sleep	short sleep with half- closed eyes. getting dreams like walking in the space, forest and on the mountain	dreams in sleep with visions of blooming caung and moringa trees, lightning, sun, wind, light burning all around	good sleep, dreams like seeing lotus pond with birds and cool clouds

The table above shows the composition of each body structure, colour, eyes, hair, speech, walk, food habits, character traits and sleep. From this classification, we can know what type of a body a man possesses. But in the present, there is a mixing-up of the body composition.

People with the three fundamental qualities and body constitutions

cunning thoughts and doing bad things to others, not worshipping God and aggressively preventing others from worshipping, arrogant, ungrateful, telling lies, falsely accusing others, irritation in speech, enmitty dering agts of	Vātha body-	Pittha body-	Kaba body-
	darkened mind	passionate mind	virtuous mind
	(thamō kunam)	(rajō kunam)	(satthuva kunam)
licentiousness and committing sinful deeds everlasting fame for offerings, righteous thinking	blaming others, having cunning thoughts and doing bad things to others, not worshipping God and aggressively preventing others from worshipping, arrogant, ungrateful, telling lies, falsely accusing others, irritation in speech, enmity, daring acts of murder & robbery, licentiousness and	talking frankly, helping others, fostering dependent people, showing affection to every living being, van- quishing enemies and giving them right punishment, capable of learning many arts, doing good things and living with	polite and modest, humility, compassion, virtuous disposition, large- heartedness, worshipping God, charitableness towards all, respect to devotees, offering worship to God and providing for offerings,

A knowledge of people with these traits and body constitutions would help us befriend with the people of our choice. In the case of the physician, they go a long way in diagnosing the patient.

Foods suitable for people with the three types of body constitution

Food	Vatha body	Pittha body	Kaba body
Grains and cereals	peas, hyacinth bean, greengram, horsegram, boiled rice, common millet, ragi, bulrush millet,jowar	pigeon pea, bengalgram, cashew, ground- nut	varieties of raw rice and wheat, millet, blackgram and greengram
Salt	crystalline salt is best, rock salt can also be used	common salt is best, rock salt can also be used	rock salt is best
Vegetables	ash-gourd, brinjal, horse- radish, country- bean, tender bitter-gourd, yam, sponge- gourd, bottle- gourd, potato, radish, palmyra root, onion, garlic	cucumber, bittergourd, snakegourd, spongegourd, fieldbean, Indian nightshade, squash gourd, brinjal, horseradish, mango, carissa, emblic myrobalan, onion, plantain spadix	brinjal, wild snake-gourd, field-bean, bitter-gourd, carissa, thorny egg plant fruit, country fig fruit, jack fruit, mango, sponge-gourd, yam, plantain spadix, radish

Leaves

Indian acalypha, leaves of firebrand teak, leaves of aquatic cryptogamus plant, climbing brinjal leaves, leaves of black nightshade, leaves of the stoutstemmed yānai nerunji herb, leaves of ponnānkanni, spreading hogweed leaves, purslane, potherb, horseradish leaves, chicory leaves

yellow woodsorrel, kovai hedge-creeper leaves, horseradish leaves, purslane leaves, ponnānkanni leaves, ōrithazh thāmarai leaves. ape-flower leaves, bristly bryony creeper leaves, climbing brinjal leaves, bottle-gourd leaves, Indian pennywort leaves, potherb, black nightshade leaves

kõvai hedge creeper leaves, fire-brand teak leaves, leaves of the *cemmai* plant, cow's thorn leaves, yellow woodsorrel leaves, Indian acalypa leaves, Indian pennywort leaves, ponnānkanni leaves, bristly bryony leaves, horse-raddish leaves, pinnākkuppūntu herb leaves, mulaikkirai greens, pannakkirai greens, bind weed leaves, chowlee bean leaves, black vailay leaves, black nightshade leaves, cirupilai leaves, aloe leaves

Juices	horse-purslane, bitter-gourd, horse- radish, climbing brinjal-juice obtained by boiling	purslane species, pea-tree leaves pirami herb, climbing brinjal, chickweed leaves—juice obtained by boiling	bishop's weed, red mustard, dill, chickweed, fenugreek, coriander, climbing brinjal, dried ginger, pea-tree leaves, bitter-gourd, white dead nettle—juice
Salted and dried items	sundai berry, wild snake-gourd, climbing brinjal, emblic myrobalan, black nightshade, field-bean, Indian nightshade, squarestalked vine	Indian night- shade, wild snake-gourd, climbing brinjal, sundai berry, brinjal, black nightshade, Indian penny- wort	sundai berry, black nightshade, climbing brinjal, square-stalked vine, thorny caper, Indian nightshade, wild snake-gourd, field-bean, brinjal, emblic myrobalan tender fruit, orange tender fruit
Pickles	orange, belleric myrobalan, gall- nut, carissa, ginger	green pepper, ginger, climbing brinjal, orange, carambola, mastwood fruit, emblic my- robalan, lemon	turmeric, pepper, sundai berry, spadix of plantain tree, tender mango fruit, tender country-fig fruit, climbing brinjal fruit, bitter- gourd tender fruit

These things taken by people of the respective body constitutions would ensure their wellness and keep them without increase of their respective humours. For example, for *vātha* body the food mentioned can help easy excretion of faeces and urine and there will not be any flatulence.

For *pittha* body, the food mentioned can help easy digestion and keep the *pittha* humour in its normal state.

For *kaba* body, the food mentioned keeps the *kaba* humour in the normal state.

Tastes suitable for people with the three types of body

Tastes	<i>Vātha</i> body	Pittha body	<i>Kaba</i> body
Equalising tastes	sweet, sour, saltish	astringent, sweet,	acrid, astringent, bitter
Aggravating tastes	acrid, bitter, astringent	sour, acrid, saltish	sweet, sour, saltish

All things on this earth are the manifestations of the five primordial elements. It is through taste that we know of these manifestations. The six tastes are formed by the combination of two elements each. Among the six tastes, the taste which has air increases *vātha*; the taste which has fire increases *pittha*, the taste which has water increases *kaba*.

 $V\bar{a}tha$ -bodied people must take the food which has the taste made of two elements other than air, so that the $v\bar{a}tha$ humour is in its normal condition. [So avoid acrid (air + fire), bitter (air + space), astringent (air + soil) tasting foods.]

Pepper which has acrid taste is an exception. It equalizes the *kabam*. Usually acrid taste increases *vātham* but peper equalizes *vātham*. It is the speciality of that plant.

Pittha body must avoid the taste containing fire element-[sour (earth + fire), acrid (air + fire), saltish (water + fire)]. The other tastes will keep pittham in its normal state.

Lemon and emblica ribes are exceptions which have the capacity to equalize *pittha*. It is the speciality of these plants.

Kaba body must avoid the taste containing water element. [sweet (soil + water), sour (soil + water), saltish (water + fire)]. The other tastes will keep kabam in its normal state.

Liquorice which has a sweet taste is an exception which keeps *kabam* in its normal state. Usually sweet taste will increase *kabam* but liquorice reduces *kabam* to its normal state. It is the speciality of this plant.

Three types of body and the seasons

<i>Vātha</i> body	<i>Pittha</i> body	<i>Kaba</i> body
Summer– <i>vātha</i> in-	Rainy season – pittha	Winter-kaba increases;
creases; rainy season –	increases. Autumn –	Early summer– kaba
<i>vātha</i> spreads around.	pittha spreads out.	spreads around. Avoid
Avoid bitter, acrid,	Avoid sour, acrid,	sweet, sour, saltish-
astringent-tasting	saltish-tasting foods.	tasting foods. Take dry,
foods. Take sweet,	Take sweet, bitter,	light foods. Cuscus
liquid, oily and easily	astringent-tasting foods.	grass, sandal-soaked
digestible foods	Take light and cold	water, honey, wheat
	foods. During this	and mango are
	period, intake of rice,	advisable
	peas, sugar, emblic	
	myrobalan and honey	
	is advisable	

During the summer season, *vātha* increases in its regions. This is referred to as increased *vātha*. *Vātha* is present from hip to toe. In these places, if *vātha* increases, it is called increased *vātha*. During this period, there won't be any manifest symptoms, so people take sour, astringent-tasting foods.

During the rainy season, *vātha* moves to other places from its own place, therefore, it shows some symptoms of the *vātha* body. During that time, people take sweet, sour, saltish-tasting foods which will equalize *vātha* and increase *pittha*.

So during the rainy season, *pittha* increases without showing symptoms on its sites, viz., from hip to neck. During this season, as symptoms are not known, they take sour, salt-tasting foods.

During the autumn season, pittha moves to other places from its own site. Therefore, it shows symptoms in pittha body. During that time, they take astringent, sweet, bitter-tasting foods to equalize pittha.

In the spring season, all the three humours will be in the equalized state. So all the three bodies eat all foods containing the six tastes.

During the winter season, *kaba* increases from its place and doesn't show any symptom from head to neck.

During the cold, dewy season, *kaba* moves to other places from its own place, therefore it shows symptoms in the *kaba* body. So avoid taking sweet, sour, salt-tasting foods which will increase *kaba*, and take bitter, acrid, astringent-tasting foods which will equalize *kaba* but increase *vātha*.

For good health, people must take good food according to their body constitution and season.

General health problems

<i>Vātha</i> body	Pittha body	Kaba body
Body pain, pricking pain, gnawing pain, excruciating pain	Indigestion, salivation, nausea, bitterness in the mouth	Running nose, phlegm in throat
Tremor, tightening of nerves, degeneration of nerves, dehydration, excruciating nerve pain, emaciation	Belching, water expulsion, bile expulsion	Throat infection, cough
Numbnees and exhaustion	Burning sensation in the whole body	Diarrhoea with mucous and stomach pain

So far, we have seen the general health problems of all *vātha*, *pittha* and *kaba* bodies. But nowadays there are combinations of body constitutions. So by knowing the increased incidence of symptoms, we can identify the affected humour and give treatment accordingly.

Diseases of vātha, pittha, kaba body

<i>Vātha</i> body	Pittha body	<i>Kaba</i> body
Paralysis, gonorrhoeal arthritis, hernia, migraine, lumbar spondylosis, osteoarthritis, rheumatoid arthritis, polyarthritis vomiting, diarrhoea	Hypertension, delirium, vomiting, thirst, hiccups, cold	cough, tuberculosis, bronchial asthma, diarrhoea

The above-mentioned diseases generally affect all, but protecting the body from these diseases is the duty of the particular person. By adopting good food habits and activities according to the seasonal changes, one can protect one's body from diseases.

Order of treatment

Vātha body	Pittha body	<i>Kaba</i> body
To equalize the increased humour, laxative drugs, external medicines and oily medicines should be administered.	To equalize the increased <i>pittha</i> , emetic and laxative drugs should be administered.	To equalize the increased <i>kaba</i> , nasal medicines should be given. To expel the phlegm from the chest, emetic and laxative medicines should be administered.
Increase in vātha obstructs the excretion of urine and faeces. To be relieved of this, any one of siddhāthi oil, merugulli oil, mēganātha oil, and vāthanāsa oil can be given according to the strength of the body and the intensity of the disease.	To decrease pittha, one of the following medicines —wild sponge-gourd seed oil, emetic-nut oil, wild snake-gourd oil, Indian jalap root decoction — can be given according to the strength of the body and the intensity of the disease.	To decrease <i>kaba</i> , any one of the following can be given as nasal drops: juice of white dead nettle flower, sacred basil juice and ginger extract.

As nerves and joints are weak, external application of oil is very essential.

Vāthakēsari
oil,blackgram oil, and sāranaikkalli oil—any one of these can be applied and massage can be done. Fomentation is done using chaste tree leaves and windkiller

As the body strength is affected, gulancha oil, climbing asparagus oil or pennywort oil can be given separately or along with *parpam* and *chendūrum*.

Five- tubercled spurge, mussel-shall creeper roots can be made into a decoction and given. Vomiting and purging will occur, thus reducing the strength of the disease.

Medicines

A wax mass of mercury and sulphur, vān mezhugu, vīramezhugu, nandhimai, panchasūdha mezhugu, sērānkoṭṭai mezhugu—any one can be given according to the strength of the patient and the intensity of the disease.

Pearl calcined powder, coral calcined powder, pearl oyster calcined powder, ruby calcined powder, ruby calcined powder, silājatthu powder, dammar powder—any one can be given according to the strength of the patient.

Calcined powder of any one of the following can be given: coral, pearl, silver, oystershell, orpiment, copper or musk karuppu, orpiment karuppu, suvāsakkudōri tablet, mahāvasantha kusumāgaram tablet, pūrnachandrōdayam, sambrāni tablet.

Food		
Strained rice two times, tender brinjal, tender field beans, tender fruit of fig, goat flesh, quail, partridge, balloon vine, ponnānkanni and arukīrai leaves are very good. Sleep Sleep in a dry place or bed. Avoid sleeping in cool breeze and overventilated room.	Food prepared from manakkatthai, kuruvai and kār varieties of rice; tender brinjal, tender horse-radish, tender figs, pigeon pea, greengram, fenugreek, coriander, fennel, ghee, milk, curd, and buttermilk are good. Quail and partridge meat can be taken. Avoid fishes. Cotton bed is good to reduce the body heat.	Avoid foods that produce allergy and eat easily digestible foods. If there is decrease in body weight, take ghee, milk, meat and fruits. When there is decrease in digestion, easily digestible vegetables can be taken. Crab and rabbit meat can be given. Sleep in a dry place or bed. Don't sleep in cool breeze.
Āsanas padmāsana, pujangāsana, dhanurāsana, machāsana, mayūrāsana, and karudāsana are good for vātha body	padmāsana, mayūrāsana, machāsana, salabāsana, pujangāsana halāsana, and patchimōthāsana are good for pittha body	padmāsana, pranāyāma, machāsana, halāsana, and mayūrāsana are good for kaba body.

Body Constitution

The aim of the study made in this chapter is that a medical student or a layman who reads this chapter must know how a body is formed according to *siddha* concept, the constitution of this body and how to protect this body against seasonal changes and how to lead a healthy life.

Dr G. Ganapathy

Dr P. Thenmozhi

Diseases of the Five Lands

Introduction

It is important to have an understanding of the geographical divisions, which would help us know about the food, and the things which are used in preparing medicines. One can also know about the diseases formed or cured in the respective lands and the quality of water there which is good or bad to the body.

The nature of people depends upon the lands in which they live. So, land is the basis for everything.

Five lands

The five divisions of land are:

Kurinji - mountain and its surrounding areas

Mullai – forest and its surrounding areas

Marudham-agricultural fields and the surrounding areas

Neydhal-costal region

Pālai - desert-like arid region

The quality of land varies according to the speed and direction of wind, quantity of rain, moisture content, atmospheric pressure and sunlight. The things produced there also get the quality of that land.

Character of the five lands

Mountain (kurinji)

Settlement : sirukudi(hamlets)

Water sources : waterfalls, springs

People : poruppan, verpan, silamban, kuratthi.

kodicchi

Food : paddy, millets, bamboo seeds

Occupation : collecting honey and tubers,

hunting, millet cultivation.

Diseases of the kurinji land

Kurinji land, according to Pathārttha Kuna Chindhāmani, is the place for kabam. The herbs grown here have the quality of curing diseases. Diseases like fever and some tumours in stomach are also common among people of the kurinji tract. Ayyam, burning eyes, piercing pain, loss of taste, pittham, fever and bloating are also seen in this land.

Character of waterfalls

Waterfalls cure syphilis and bleeding disorders, and give strength to the body but produce *kabam*.

Character of spring water

It causes pneumonia, fever with cough, increased vali, vātha thōdam, tremor, psychiatric disorders, etc.

Season for kurinji land

Winter: November, December

Blowing of cold wind and cloudy sky, causing *pittham* to vary from its state and to increase.

Early dewy season: December, January

Blowing of the east wind causing dryness of hairroots and other parts. It increases the fire of appetite. Obviously, the montane region is the place for *kabam*.

Forest (mullai)

Settlement : pādi(pastoral hamlets)

Water sources : jungle rivers, ponds, springs

People : kurumborai nādan, kizhatthi, idaiyar,

idaicchiyar, āyar, āycchiyar

Food : millet varieties

Occupation : cultivation of dryland crops,

cowherding, shepherding.

Diseases of the mullai land

Pittha diseases are found dominant in this land. Animals like goat, ox, cow, and buffalo being in large numbers, there are liver disorders, leading to vātha diseases. Pathārttha Kuna Chindhāmani notes that forest tract is the home for all types of vātha disease.

This land feeds on the water of the wild streams. This tract is suitable for taking calcined powder of gold.

Season for mullai land: rainy season (August, September.)

The chill northern wind blows over this land. Water flowers like the lotus wilt and wither. The inner heat of the body, as it comes to regulate the body's temperature that is affected by the chill weather, has its fire reduced. Obviously, the inner thāthus get affected. Mullai land is, therefore, the place for pittham.

Agricultural tract (marudham)

Settlements

Pērūr, mūdhūr (town)

Water sources

rivers, wells, ponds

People

ūran, mahizhnan, kizhatthi, manaivi,

uzhavar, uzhatthiyar

Food

red rice, white rice

Occupation

agriculture

Diseases of the marudham land

Rich in water sources, *marudham* land is the home for minerals. They cure all diseases of *uyir thāthus*. The river water can cure *vātha* and *pittha* diseases, tuberculosis, etc. It increases masculinity. The field water can cure syphilis, sexually transmitted diseases, fever, coma, tuberculosis, virulent fever, etc. It cools the seven *thāthus* and strengthens the body.

Marudham land is the best place to take all kinds of medicines and to have prolonged healthy life.

This land is also the best place to consume calcined powder of gold. The juice of plumbago indica (*chitthira mūlam*), being grown in this land, is used for preparing *aya parpam* which has high potency.

Konganavar Mūvāyiratthirattu observes that no land except marudham is suitable for taking medicines.

Marudham land is blessed with all the six seasons of the year.

Seashore land

Settlement

pākkam, pattinam

Water sources

salt water well, backwaters

People

sērppan, pulamban, paratthi, nulaiyar,

paradhavar, paratthiyar

Food: things got by selling fish and salt.

Occupation : fishing, drying fish, pearlfishing

Diseases of the seashore land

Salt is produced in large quantities. Despite this, *vātha* disease is present here. Body becomes obese. Liver gets enlarged, and intestinal disorders are also common.

Though it is salty, the land is the place for *pittha vāyu*. People of this land suffer from bloating due to accumulation of *kaba* water in important places. It produces filariasis (*yānaikkāl nōy*) in hard limbs like the sole.

Character of seawater

Boiled sea water cures leprosy, ascites, *kuṭṭam*, peptic ulcer, heat disturbance in defaccation and urination, disease of *kunmam*, bleeding gum, *sanni thōdam*, etc.

Generally, the wind of this land has moisture content and speed. So there is a lot of chance for the affliction of skin diseases.

Seasons in the seashore land

This land marks all the six seasons.

The northern wind in the rainy season causes withering of water flowers like lotus. The inner heat of body comes out to protect the skin from chillness, which reduces its natural power of heat. The three *thāthus* get affected.

There are, again, the blow of cool wind, dark cloudy sky, and birds, animals and people feel the discomfort. *Pittham* is found to be increasing by varying from its state. In the early dewy season, people cultivate the red variety of paddy. The body constitution becomes hardy. The hair roots shrink and the pores close up. The late dewy season is marked by extreme chillness and there is increased *kabam*, by which the fire of hunger gets affected and produces *kaba* diseases.

The severity of heat caused by summer winds reduces moisture content and produces dryness. The consequent increase in *vātha* causes *vātha* diseases.

Desert tract (pālai)

Settlement : kurumbu

Water sources : dried springs, stagnant water

People : vidalai, kālai, eyinar, maravar, maratthiyar

Food : things got by robbery

Occupation : robbery, war.

Diseases of the desert land

This land is the place for many sorrows, causing vitiation of *uyir* thāthus like vātham, pittham and kabam in body. It is not suitable for any other activities.

A lot of dangerous diseases are formed in this land because of its high temperature. Sadness, sweat, *kabam*, appetite and *pittham* are formed. Beauty will be reduced.

Desert land: seasons

High summer and late dewy season

A summary of the features of the five lands

- Kaba diseases, in the montane tract
- Pittha diseases, in the woodlands
- Vatha diseases, in the seashore land
- The climate of the agricultural land does not produce any diseases. Herbs of this land are very useful.
- Lifespan in desert land is found to be shorter.
- The best land for people to live in is the agricultural region.

- The worst land for people to live in is the wasteland
- Others are moderate.

Seasons

Good - early and late dewy seasons

Moderate - spring and cold seasons

Worst - rainy and high summer seasons

There is a relation between seasons and lands that has a bearing on the formation and cure of diseases. Natural wealth and things produced from the five lands remove the diseases of the body and psychiatric disorders of human beings. The diseases formed in these five lands and the procedures to cure them are known through the quality of the particular land.

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Clinical Diagnosis

Introduction

Siddha medicine has its own scientific quality. Siddhars prepared 64 types of medicines, 32 internal and 32 external, for curing diseases, by using herbs and animal and mineral things that are present on and inside the earth. In diagnosis, they followed well-defined methods on the basis of clear principles. The following *Thirukkural* couplet seems to reflect the siddha philosophy of treating diseases:

Nõynāṭi nõymuthal nāṭi athuthanikkum Vāynāṭi vāyppac ceyal.

Disease, its cause, what may abate the ill; Let physician examine these, then use his skill. (948)

Diagnosis is an important stage in the work of the physician which is described in the following poem:

Mathitthiṭaṛkarumai vāyntha mānparikāramellān thuthitthiṭa vunarnthānēnun thukaḷaṛap piniyinthanmai pathitthita vunarānākir payanurā nākalānē vithitthitu pinitthiratthai viļamputhu mutharkan mannō.

-Sikiccā Rathna Dipam

Aetiology

Though all the six, namely, birth, youth, joy, disease, ageing, and death are present in the embryo, after birth a person gets affected by various environmental factors and is prone to diseases. In the same way, diseases afflicting within 3 months of age from child's birth are classified into two types. They are:

Intrinsic diseases

External factors alone do not cause diseases. Some of the diseases of children are due to parental physical condition also. Important among these diseases are indigestion, eczema, tabes mesenterica, angular stomatitis, syphilis, itch with scabby ulcers, etc.

Extrinsic causes

A child after its birth begins to grow in an environment entirely different from that of the womb. Because of this environmental change, and the stress of coming out from the uterus, the child develops a lot of diseases. Some of the disorders induced by external causes are crying loudly after birth, hiccough, indigestion, bloating of the stomach, regurgitation of milk, yawning, constipation, suppression of urine, shunning of milk, etc.

Thus man suffers from diseases from birth to death due to both external and internal causes. The primary causes for diseases are classified by Siddhar Thēraiyar. We shall look at them in detail.

Primary causes for diseases

vāthamalāthu mēniketāthu-vaļarpittha thithalāthu satthiyatāthu -sētthumatthin kōthamalāthu vikkalatāthu - kutarthannil sithamalāthu curam varāthu - thiramāmē.

manthamalāthu vāyu varāthu - anilapitthat thonthamalāthu mūlam varāthu - thoṭarvātha panthamalāthu kunmam varāthu - pakarpittha vinthaiyalāthu mēkam varāthu - thīramāmē.

asiranamingic curam varāthu - thirithōṭak kāranamingic canni varāthu - kabamāna nirathuvumingic cōpai varāthu - neṭuvāthac cārvathuvumingic cūlai varāthu - thavagāthē.

apatthiyaminric curam varāthu - thirithōṭak kāranaminri auṭathinnamu - manukāthu kabatthinaiyanrik kāsasuvāsan - kānāthu vipatthinaiyanri viyarvai kuļircci - varāthē.

These causes are being explained in the appropriate places.

No vomiting without an aggressive pittha

The process of quick upward expulsion through mouth of food we take and water we drink, whether it is digested, or undigested, is called vomiting.

Causes

Internal causes

- Vomit takes place when the ascending vital air of the body gets affected.
- Increase in *pittha* is the cause for vomit.

External causes

- Intake of cereal flour, rotten food, fatty meat, and things hard of digestion like crab, fish, etc.
- Intake of toxins like arsenic, *marukkārai* (catunaregum spinosa) and *etti* (strychnos nux vomica).
- In stomach diseases like ulcer, the food loses its digestive action and gets fermented inside the stomach and causes vomit.
- In cases of pregnancy, migraine, psychiatric diseases, and age disorders, vomit occurs.
- Circular running, sea voyage, and touching or seeing nasty things cause emesis.
- In cholera also, vomit occurs in large amounts.
- Vomit is one of the signs of various diseases like fever, cough, spasm in stomach, urinary calculi, tumours in abdomen, etc.

Primary cause

Due to irregular food and change of habits, *pittha* vitiates from its state, *ayyam* (phlegm) in the stomach increases that affects the appetite, due to which *udhānan* (ascending *vāyu*) and *abānan* (downward *vāyu*) also get affected. As a result, the food within gets fermented without proper digestion.

This kind of undigested, fermented food is cause for upward expulsion of food with belching and pain in the stomach.

To prevent this diseased condition, we have to take food with the knowledge of the variations of the body temperature.

Hence, increase of *pittha* increases upward *vāyu*(*udhānan*) and causes emesis. So *pittha* is the primary cause for emesis.

Without mantham, vayu will not manifest

- Indigestion, constipation, non-transport of food particles to tissues by remaining in the intestines cause *mantham* (indigestion).
- Increase of vali thāthu in joints causes pain in them, which is called kīlvāyu. This pain restricts the joints and so it is called mudakku vāyu (rheumatism). Indigestion in stomach causes fermentation within which increases ayyam (phlegm), so it is called āmavātham (indigestion-caused rheumatism).

Extrinsic causes of diseases

- Vāyu (wind) increases because of the increased intake of bitter, acrid, astringent and sour- tasting food, stale food, ragi and millet.
- Increased intake of ghee.
- Sleeping at daytime and remaining awake at night.
- Eating too much or fasting.

Internal factors in the affliction of diseases

- Indigestion, constipation, and food particles remaining in the intestines without going to the tissues cause *mantham*.
- Enzymatic changes of food in the intestines produce wind.
- Increase of wind in body affects paravukāl, kizhnokkumkāl, mēlnokkumkāl, and nadukkāl.
- When paravukāl gets affected, it disturbs fluids in the body.
- When kizhnökkumkāl gets affected, there is non-excretion of urine and faeces causing mantham.
- When mēlnokkumkāl is affected, belching and emesis occur.

- When *nadukkāl* gets affected, it prevents the transport of food to the respective body parts.
- Hence, increase of wind in the joints causes exhaustion, dryness and impairment of the joints.

Without impairment of both vatham and pittham, piles will not occur

That is, when vatham and pittham get affected, it causes piles.

Causes of piles

- Sitting for indefinitely long hours affects the joints and produces arthritis.
- Riding horse, elephant or camel for long hours
- Being in *yōgic* state beyond one's strength
- Stopping of breath
- Increased constipation
- Unbridled sexual intercourse
- Uncontrolled anger
- Increased mental stress.

Internal causes

kanthatthil karunaiyozhiya vēronrum pusiyōm

According to this verse, consumption of tubers except yam (amorphophallus paconifolius) affects *kīzhnōkkumkāl* and causes this disease.

- There is difficulty in stretching and folding the joints because of dryness.
- Increase in phlegm shrinks the heart because of which *vāyu* gets increased.

- Decrease in phlegm causes total reduction of synovial fluids in the joints. They get loosened and the bones of the joints are exposed more.
- Combination of *vātha* and phlegm causes swelling, accumulation of fluids and pain in the joints.
- Intake of a large quantity of food, ignoring the nature of the appetite in stomach causes indigestion and increases the wind within.
- Increased eating of acid food, suppressing appetite, and fasting immobilize the *kizhnökkumkāl*, so the anal temperature increases, which prevents faeces from being excreted. This again increases the downward heat, causing this disease.

Increased consumption of acrid-tasting food makes väyu and thēyu increase in the body, which causes anila pittha thontham and piles.

Primary causes

- Owing to food and activities, the downward circulation of heat increases in its level and stimulates the vātha kuṭram, because of which kizhnōkkumkāl gets affected.
- Unless this *kutram* is prevented, the heat is stimulated and as a result facees become dry and hard, difficult to be expelled and it leads to piles disease.
- Because of this, appetite is affected; there is loss of weight, and body fluids and blood get their efficacy lost.
- Hence, in *vātham*, *kīzhnōkkumkāl* is affected and in *pittha*, *anarpittham* is affected, which together lead to *anila pittha thontham* resulting in piles disease.

Without persistent affection of vātha, chronic dyspepsia will not occur

Ulcer is formed because of the variation of *vātha* from its normal state, which is the primary *thāthu* among the threefold *thāthus*.

Unless there is defect in *vātha*, there is no affliction of chronic dyspepsia (*kunmam*). It is called *kunmam* because it makes the patients bend forward due to pain and stress.

Causes

External causes

- Excessive consumption of astringent-tasting food and tuber varieties will increase *vātha*
- Taking too much of acrid-tasting food
- Suppression of appetite
- Caused by microorganisms
- Frequent anger, stress and grief
- Increased intake of food which causes indigestion

Internal causes

Kunmam disease is caused when vātha is affected which is one of the three thāthus of our body, The impact of the impairment of the three of the nine winds in the body, viz., abānam, udhānan, samānam causes kunmam disease.

Where abanan is affected

Improper transport of body fluids to the respective parts of the body, which leads to constipation.

Where udhanan is affected

Shows up symptoms like nausea, fermented belching, gastric reflex, vomiting and decreased body strength.

Where samanan is affected

It affects the heat which helps in the digestion of food. Body fluid and body wastes are not separated properly. Body fluids are not equally distributed. It affects the other winds.

Dyspepsia is caused more by external causes than by internal causes. Internal causes also arise due to external causes. Among the external causes, food habits take an important place.

Acrid taste + $vali(gas) + th\tilde{i}(fire)$ Astringent taste + man(earth) + vali(gas)

Vali thāthu is present in the above-mentioned two tastes. So increased intake of these tastes affects the vali thāthu in our body.

Loss of appetite due to anger, grief and stress is primarily caused by the intake of (dullness-inducing) tham \bar{o} foods like tubers which increases the $v\bar{a}yu$ in the body.

Appetite gets affected which in turn affects abanan resulting in constipation. Added to that, udhanan and samanan get affected which leads to nausea, vomiting and indigestion.

Therefore, the body does not get the required energy with the result that the body gets affected, as also the mind. The important and primary reason for this is *thodarvātham*. Hence the adage, 'kunmam (chronic dyspepsia) would not occur without the bond of thodarvātham.

Without pittham, mēkam will not manifest

Increase in azhal (pittham) causes increased dryness and withering of the body and mental stress, which leads to mēkam.

Causes

External causes

- Excessive sexual intercourse
- Laziness

- Tension
- Excessive desire for things

Internal causes

- Consumption of ghee, milk, toddy, meat, tasty fish
- Intake of sweet food
- Intake of inadequately cooked food and undried cold food
- Intake of food that one does not like
- Primarily, azhal kuṭram gets increased, vāyu is on the rise, the humours of phlegm and wind get affected and the functions of the thāthus of the body are impaired. In such a state,
- *Kizhkkāl* is affected and there is increased urination.
- Mēlkāl is affected and there is increased thirst and appetite.
- Paravukāl is affected and there is improper transport of food to the body, resulting in the thāthus of the body getting dried.
- There is the damage of *nadukkāl* which affects other *vāyus* (gases)
- Mēkam afflicts one because of the damage of semen, one of the udalkaṭṭu.

Without kabam, sobai will not manifest

Sōbai means swelling. In this diseases, the efficacy of the blood declines or is lost or it is diluted, leading to the increase of the phlegm humour. Increased water content in blood makes the whole body hydromatous and results in dropsy.

Causes

Internal causes

- Anaemia, and the body turning pallid
- Blood gets affected which stimulates mukkuṭram, and paravukāl malfunctions, causing the ailment of bloating of the body

External causes

- Consumption of poison
- Variation in food
- · Chill air
- Eating of ash, soil, flour bran, etc
- In anaemia, blood gets diluted and increases the humour of phlegm. As a result, water which is a part of *kabam* gets accumulated all over the body causing the ailment of bloating.
- The function of *paravukāl* is to protect body by filling the body parts with fluids. Damage to it further affects blood, causing accumulation of body fluids and dropsy.
- Consumption of toxins will affect primarily *kabam*, among the threefold *thāthus*. As a result, the liquid content of the body gets increased causing dropsy. Also the RBC gets destructed, and the water content of the blood gets increased which increases *kabam* causing dropsy.
- Things sweet, saltish, and sour, which are high in water content, increase *kabam* causing dropsy.
- In dropsy disease, *kizhnōkkumkāl* and *paravukāl* get affected, which causes improper excretion of faeces and urine, improper transport of body fluids to the respective parts. Because of this, water content which is the part of *kabam* gets increased and causes dropsy.

Without vitiation of the three thāthus, toxaemia (janni) will not manifest

Wind, heat and phlegm (vali, azhal and ayyam), the three kinds of pulse (nādi), get vitiated together where a person is diseased. So they produce many signs and symptoms which is called the disease of janni or mukkuṭram.

Causes

External causes

- Not following proper diet restrictions during fever
- Immoral sexual intercourse

- Taking oilbath during indigestion
- Fever after delivery of baby

Internal causes

- Consumption of food of tastes other than sweet
- Consumption of cold food.

Primary causes

- The disease occurs when there is a simultaneous increase or decrease of the three kinds of pulse, viz., wind, heat and phlegm (vali, azhal and ayyam).
- In the case of fever, vali, and azhal both get affected, following which ayyam gets affected, leading to fever lapsing into toxaemia (janni).
- In this disease, the four vāyus, mēlnokkumkāl, paravukāl, nadukkāl, and uyirkkāl get affected. As uyirkkāl gets affected, it leads to decrease of body strength.

Without vitiation of *kaba*, suffocation or wheezing will not occur Dyspnoea, difficulty in breathing, is called *suvāsakāsam*. Its primary cause is *kabam*.

Causes

External causes

- Intake of foods which increase *kabam* when the body strength is found to be low.
- Food and habits allergic to the body
- Sticky prickle of certain plants and corns like paddy, rice, ragi, grass, etc.
- Inhaling the smell of allergic substances
- No proper protection of body in rainy and dewy seasons

Internal causes

- When the phlegm humour gets deviated from its normal state
- Phlegm humour which is stimulated by vātham

Primary cause

- Increased phlegm obstructs the inner parts of respiratory organs for various reasons, which prevents the natural movement of air, causing dyspnoea suffocation.
- Vāyu tries to function along the obstructed paths. When it is not possible, it stimulates ayyam (phlegm) to function abnormally, by which the head and the throat are put to affliction.
- Because of the intake of food that increases the wind and the phlegm humours, the increased *vāyu* acts with *kabāsayam* where water is stored in vapour form; so *vāyu* can't act there. Hence it causes wheezing.

Skin will not be affected where there is no vitiation of vatha

Vātham is the primary reason for the diseases of skin, which manifest in symptoms like leprosy, shiny skin, patches, etc.

Causes

External causes

- Increased intake of rotten fish, crab, snail, shells, etc. Intake of inadequately cooked food and indigestible foods
- Close contact with the diseased persons
- Excessive or inadequate intake of food.

Internal causes

• Because of the food habits, etc., *valikkuṭram* is affected which in turn affects the body fluids and blood. Following this, the other *thāthus* also get affected.

- When body fluids are affected, it causes dryness of skin and colour changes.
- When blood is affected, it causes body sweat and dropsy.
- · Damage of muscles would cause boils.
- Damage of fat content causes bursts on the skin and inability to move hands and legs.
- Damage of bones and bone marrow affects the nasal bridge and bones and causes swelling.
- It may occur congenitally also, through the action of the sperm.
- Increase in *vātham* shows up symptoms like exhaustion, dryness of skin and weakness.
- Vātha is the primary cause of the impairment of the thāthus of the body which are responsible for the ailments of the skin.

Fever will not develop where there is no indigestion

Increase in body temperature from its normal level is called fever. The important reason for fever is the increase in $\bar{a}mam$ or $s\bar{i}dham$ (coldness) in the stomach, because of which kabam increases, which in turn affects the digestive fire making it change its pathway along the nerve route and spread to the external parts of the body.

Primary causes

- Improper food and habits cause indigestion in the stomach which results in fermentation and produces āmam, the form of ayyam(phlegm), before the onset of fever. Because of this ,vali, azhal, ayyam, the threefold kuṭram, increase individually or in the combined form and make the stomach bloat.
- Because of this, food, which gives strength to the body, is not digested properly.
- The semi-solid phlegm in the stomach expels the digestive fire and decreases *sadarākkini* to cause anorexia.

- The undigested juices obstruct the pathway of the body fluids like veins, and hair roots. This causes loss of sweat. Then the juices travel to the intestines and cause the body temperature to rise and spread throughout the body.
- Also, indigestion causes sluggishness and fermentation which increase heat, and manifest in the form of fever.

Excruciating pain will not manifest without vitiation of vatha

Sūlai is the excruciating, piercing sensation of pain, which is mainly due to vātham.

External causes

- The threefold *thāthu* gets affected because of stress, improper food and decrease in body strength. The *sūlai* ailment occurs when the first *thāthu*, *vātham*, is affected.
- Too much of running
- Too much of fighting
- Smoking
- Chasing away the poor without giving them food
- Robbery
- Cutting of productive, live trees

These actions cause mental agony and a sense of guilt leading to the affliction of *vātha*.

Internal causes

- Increased intake of astringent food
- Astringency earth (man) + wind (vali). The vali kutram in this food going beyond limits, sūlai disease occurs.
- Intake of hot food.

Primary causes

- Among the vāyus, kīzhnōkkumkāl, mēlnōkkumkāl, nadukkāl and paravukāl get affected. These vāyus are affected through increased intake of astringent foods.
- The consumption of these astringent-tasting foods causes constipation and bloating and thereby the increase of *vāyu* in body. The affected *vāyu* stays in the body and produces body ache and pain.
- When *kizhnōkkumkāl* is affected, *mēlnōkkumkāl* is also affected. Because of this, *nadukkāl* and *paravukāl* are also affected.
- As *paravukāl* is affected, *vātha* accumulates and stagnates around in the body, causing *sūlai* disease.

Without vitiation of kabam, hiccough will not manifest

This disorder arises with the sound vik, vik. The main cause is the ayyam (phlegm).

External causes

- Taking headbath in cold water, when it is not acceptable to the individual
- Excessive consumption of acrid, sweet, bitter-tasting foods
- Excessive consumption of cereals and flours
- Chronic fever causes hiccoughs.

Internal causes

- Intake of cold food increases phlegm and stimulates the *mělnokkumkāl* causing hiccough.
- Nāgan, which is one among the 10 vāyus, has two qualities, viz., heating and cooling. Because of cooling, it increases the phlegm and it melts the phlegm by its heating effect. Thanks to its natural characteristic of dryness, it dries up the inner system and produces the vik, vik sound.

Hence kabam is the primary cause in this case.

Disease caused by microorganisms

Microorganisms in our body are produced by both external and internal causes. Look at the verse below:

kirumiyāl vantha thōṭam perukavuntu
kēṭkalatthin pirivathanaik kiramamāka
porumi varum vāyuvellān kirumiyālē
puzhukkaṭi pōl kānumathu kirumiyālē
serumivarum pavutthirankaļ kirumiyālē
thēkamathil sōkaik kuṭṭan kirumiyālē
thuruvi varum surōnithan kirumiyālē
sūṭsamutanē kirisaippāl thozhil seyvirē.

Microorganisms cause bloating, *vāyu*, alopecia, fistula, dropsy, leprosy and diabetes. *Sōkai* denotes anaemia also. *Thāthus* get damaged and inflamed due to ulcer, TB, fever, anaemia, infertility, ascites, eczema, *vidanīr sūlai* and loss of semen. Microorganisms are formed in the toxic fluids which spread throughout the body and cause shallow spots all over the body. The toxic fluids from these microorganisms cause eczema and leprosy also.

Clinical diagnosis and pathological investigation are essential to understand the nature of a disease. After that only medicines should be prescribed by the doctor. So every physician must have a clear idea about clinical diagnosis acquired through learning and practice.

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Role of *Nādi* (pulse) in the Eight Types of Clinical Examination

Introduction

Diseases of mankind are classified into 4448 varieties in siddha medicine. Eight types of diagnosis are commended in this system, which consist in examination of (1) tongue, (2) colour, (3) speech, (4) eyes, (5) touch, (6) faeces, (7) urine, and (8) pulse.

Among these, pulse $(n\bar{a}di)$ is studied in blood vessels (arteries). All blood vessels are linked with heart. So variations in the function of the heart can be observed through pulse. Heart's function goes in unison with the function of the body. So illness of the body can be seen through pulse. A physician expert in pulse reading can diagnose the disease, without the assistance of the patient or his relatives. Beyond diagnosis, there is the chance to assess the prognosis of the disease through pulse.

What is nādi (pulse)?

Among the 96 thatthuvas in the body, nādi comprises 10 types. These are otherwise called dasa nādi. They are:

- 1. Idakalai
- 2. Pinkalai
- 3. Suzhumunai
- 4. Siguvai

- 5. Purudan
- 6. Kānthāri
- 7. Atthi
- 8. Alampudai
- 9. Sangini, and
- 10. Gugu

But here $n\bar{a}di$ refers to the *uyir thāthus* (life factors) which are $v\bar{a}tham$, pittham and kabam. For the $n\bar{a}dis$ or these three factors are responsible for the presence of life in the body. $N\bar{a}di$, therefore, is the life force. Look at Yūki Munivar's enunciation of this life force:

Uruporul thāngumudalum uyirum
Udarkku āthāramon pancha bhūthap
Panchīkaranap pānmaiyā menavum
Uyirkkāthāra muyirt thāthenavum
Muppiri vāgi mukkuna manugi
Udalaiyum uyiraiyum ō mpik kātthu
Varumena muthu marai vakukkum thunipē.

There is again the elucidation of nadi as the life force is Sathaganadi:

Nādi endrāl nādi alla narambil thānē
Nalamākat thudikkintra thudi thānumalla
Nādi endrāl vātha pittha silērpanamumalla
Nādi ezhupathīrāyiram thānumalla
Nādi endrāl anda rendamallām
Nādi ezhuvagai thōrratthullāy nindra
Nādiathu ārāynthu pārtthārānāl
Nādiyurum porul therintha nāduyarē.

Nādi indicates the wellness of the body and increased/decreased characteristic features of the three thāthus. It functions in three states, viz., vātham, pittham and kabam.

Vātham acts as a constructive factor, pittham as a preserver and kabam as a destructive factor. These can be measured in the pulse of the blood vessels using $m\bar{a}tthirai$ (volume) as the scale. The normal condition marks $v\bar{a}tham$ —1. $pittham - \frac{1}{2}$ and $kabam - \frac{1}{4}$ $m\bar{a}tthirai$. Due to the altered (increased or decreased) condition of these three thāthus, a disease occurs, which can be identified. There is a combination of these conditions too. The clinical picture is provided by Yūgi Munivar:

Vazhangiya vātham mātthirai ondrāgil Thazhangiya pittham thannilarai vāsi Azhangum kabanthānadangiyē kālōdil Pizangiya jī varkkup pisakondru millaiyē.

Definition of pulse volume (nādi naṭai)

The volume of pulse is felt when the blood vessel rises to the size of one wheat and then it comes back to normal.

Arainthār munivar yālavukēl thōrram Varai gōthumaiyām viyanthu.

(Kannusāmiyam)

In Agatthiya Munivar Nādināl, vātham is compared to the gait of a swan, hen and peacock, pittham is compared to the gait of a tortoise and leech, and kabam is compared to the jumping and the angry pose of a frog and a snake.

Treatises on Nādi (pulse)

The following are the eighteen treatises on pulse, spoken of collectively by the term *Pathinen Siddhar Nādi Sāttiram*:

- 1. Agatthiya Munivar Nādi
- 2. Thirumūla Nāyanār Nādi
- 3. Dhanvanthiri Nādi
- 4. Siva Vākkiyar Nādi
- 5. Viyāsa Bagavān Nādi
- 6. Yūkimuni Nādi
- 7. Thēraiyar Nādi
- 8. Punnākkīsar Nādi
- 9. Sūthamuni Nādi
- 10. Vālmīgar Nādi
- 11. Macchamuni Nādi
- 12. Pulippāni Nādi
- 13. Sattamuni Nādi
- 14. Bögar Nādi
- 15. Vararishi Nādi
- 16. Rāmadē var Nādi
- 17. Idaikkādar Nādi
- 18. Konganar Nādi

Formation of pulse movement (nadi natai)

Among all the parts of the body, heart occupies a critical position. It is only through heart that all the *thāthus* get their nutrients. This too happens through blood vessels. Changes in these cause the wellness or illness of the body. Heart works its threefold functions of creation, preservation and destruction on the *thāthus* through blood vessels, nerves and muscles. The movement of the pulse, therefore, indicates the rhythm of the body.

The treatise Kannusāmiyam shows that as the three basic nādis of idakalai, pinkalai, and suzhumunai function with the help of the three vāyus, abānan, pirānan and samānan respectively, the combination of idakalai and abānan causes vātham, the combination of pinkalai and pirānan causes pittham and the combination of suzhumunai and samānan causes kabam. Nādi gives

an indication of the sevenfold texture of the body, the efficacy of mind and the power of the three kunas. The combination of three vayūs, three nādis and the three elements of air, fire, and water in the volumes of 1, ½ and ¼ mātthirai respectively keeps the body healthy.

These apart, there are guru $n\bar{a}di$ and $bh\bar{u}tha$ $n\bar{a}di$. Siddha physicians, expert in pulse reading, duly read the pulse, understand the severity of the disease and provide effective treatment. There are also persons who identify through $n\bar{a}di$ the psychological condition of the patient. There are observes:

Ūnappā udalācchu uyirumācchu
Uyirpōnāl pinamācchu — uyir pōmunnē
Pūnappā vātha pittha sēthumatthār
Pūnṭeṭuttha thēkavalam pukaluvanē.

If the *uyir thāthus, vātham, pittham* and *kabam,* are not functioning normally, the action or the functions of the body do not happen normally. The following poem makes it clear:

vātham pittham ayyam mūndrum Van palatthudanē thattham Pētha mondrillā vannam Pēsiya thānan thannil Nīthiyāi nilaitthu nirkil Nedum pini chikkalillai Thāthuv mondrō dondru Thā vidir pinigal thanē.

Method of pulse reading

Pulse is to be read for men in the right arm and for women in the left arm. It can be felt in the blood vessel one inch below the thumb of the patient,

by softly pressing the index finger (radial artery), middle finger and ring finger over it. Experienced physicians can read the volumes of *vātha*, *pittha* and *kaba* pulses also. *Agatthiyar nādi* observes:

Kari mugan adiyai vāzhtthi kaithanil nādi pārkil Peruviral angulatthil piditthadi naduvē thoṭṭāl Oruviralōdil vātham uyar naduviralir pittham Thiruviral mūndrilōdil silēthuma nādi thanē.

Sites of pulse reading

Reading (pulse) in the hand is best. Even though Birammamuni has stated that feeling pulse at the hand is best, *Thirumūlar Nādi Nūl* states that in unavoidable circumstances (in cases of damage or physical handicap), pulse can be felt in 10 other places as follows:

- 1. Ankle joint (medial part)
- 2. Genitalia
- 3. Umbilical region
- 4. Chest
- 5. Ear
- 6. Nose
- 7. Neck
- 8. Arm (hand)
- 9. Eyebrow
- 10. Crown of the head

Kannusāmiyam speaks about the particular hands of men and women appropriate for pulse reading:

Cheppa vān makkalukkuc Chēra valakkaiyāgum Oppa arivaiyark kōthavidam. There is also the observation in Vaidhya Sārasangiragam:

Nānenum purudaruk kellām Nādi thān valakkaiyāgum Thēnnenum madavārk kellām Thidam pera idakkai siddhē.

Since nābikūrmam is upward-looking in females, and downward-looking in males, pulse must be read for males and females in the right and left hand respectively, according to literatures in this regard.

Reading of nadi (pulse)

In the case of male patients, first the physician must hold the male patient's right hand by his left hand. Then by right hand he must hold the right palm of the patient, flex, extend, pull and rub it up so as to warm up the palm. Then he must, by the three fingers of the left hand, feel the pulse in the blood vessel (radial artery) which is present above the radial bone (radius) near the thumb finger and one inch above the wrist, by pressing and relaxing softly. For female patients, the physician must change his hand and feel the pulse in the left hand of the patient.

Changes of nādi movement during illness

When changes take place in *vātham*, *pittham* and *kabam* from their normal levels, for example, when *vātham* marks two parts of its normal level, it is called excess *vātham*, heightened *vātham*, aggravated *vātham* or doubled *vātham*. When *pittham* marks two parts, it is called excess *pittham*, heightened *pittham*, aggravated *pittham* or doubled *pittham*. When *kabam* marks two parts, it is called excess *kabam*, heightened *kabam*, aggravated *kabam* or doubled *kabam*.

In diseased conditions, impairment of a single *nādi* or any two of them is natural. Impairment of two *nādis* is called *thontha nādi* (mixed).

Vätha pittha thontham

It occurs when the *vātha nādi* exceeds its two *mātthirai* and *pittha nādi* exceeds its half *mātthirai* but remains below one *mātthirai*.

Vätha kaba thontham

It occurs when *vātha nādi* marks two *mātthirai* and *kaba nādi* marks above ¼ *mātthirai* but remains below ½ *mātthirai*.

Similarly, in *pitthavātha thontham, pittha ayyat thontham, ayya vātha thontham*, and *ayyap pittha thondam*, the first *nādi* will increase twofold and the following *nādi* will be above its normal level and below its two parts.

During illness, on the basis of the extent of impairment, there are single $n\bar{a}di$, double $n\bar{a}di$, threefold $n\bar{a}di$ and prognostic $n\bar{a}di$. The treatise called Sathaga $n\bar{a}di$ refers to diseases that occur owing to the impairment of a single $n\bar{a}di$.

Diseases due to excess vatham

Vātha menum nāadiyathu thöntril
sīthamantha modu vayiru porumal thiraṭchivāy
sīamurunkirāni mahōtharam nīrāmai
thiral vāyvu sūlai vala kadupput thīrai
nīthamurum kirumigunmam andavātham
nilaiyum nīrkkiriccharangal thanthumē gam
pēthagamā mutharapini mūlarōgam
pēsa vegu pini kalumē porulathāmē.

[The diseases referred to here are dullness of stomach, borborygmus, gaseous pain, chronic dysentery, ascitis, stabbing pain, intestinal worms, gastritis, hernia, urinary infection, abdominal disorder, piles, etc.]

Diseases due to excess pittham

uruthiyulla pittha mathu thōntril veppu ushna vāyu athi curamathi chārangal marathiyudan kirukiruppu payitthiya rōgam valar sōgaiyazhaleriyu kānthal kaippu iruthayathil kalakkamadhu marappu thāgam ezhun kalai mēyanaiyu mayakka mūrchai sirithu perumbādu ratthap piramēgankal sērnthu migu pini palavun chirakkunthānē.

[The diseases referred to in this verse are fever, tuberculosis of bones, diarrhoea, dementia, giddiness, mental disorder, anaemia, burning sensation, bitter taste, palpitation, thirst, dreams, unconsciousness, blood in urine, etc.]

Diseases due to excess kabam

thānamulla sētthumanthānilakil veppu chaya mīlai irumal manthāra kāsam īna murunchanni vidathōdam vikkal irattha rōgam karappān virana thōdam mālaiyir sūlai thiral viyāthi vīkkam varunchatthi suvāsam nenchadaippu thūkkam ēnamurun kāmālai pāndu sōbai ēzhu surangal pala thukkam vidamundāmē.

[The diseases referred to here are fever, pulmonary tuberculosis, cough, seasonal dyspnoea, delirium, toxins, hiccough, blood disorder, eczema, oedema, vomiting, dyspnoea, tightness of chest, jaundice, anaemia, various types of fever etc.]

Diseases caused by vatha pittha thontha nadi

porulāna vāthatthil pittham chērnthu
porunthu gunankalāmushnavāyu satthi
cheriyāmai pulitthēppam, porumal, nīril
sivappu malam piditthalurunthāthu nattam
karupāna thēgamathil ulaicchal sõmpal
kaikāl therippu nākkasakkum annam
parivāna vūnkuraithal ruchi kēdāthal
pala nõyum varutthi laikkum pānkuthānē.

[The diseases referred to here are: vomiting, indigestion, borborygmus, blood in urine, constipation, scanty semen, eczema, body pain, laziness, bitter taste, emaciation or wasting of muscles, tastelessness, etc.]

Diseases due to vatha kaba thontha nadi

pānkāna vāthatthil chētthuma nādip
paricchitthāl thimir mē vum ulaicchalāgum
thīngāna irumaludan sanni thōdam
chērntha vidam vedi sūlai irutthōgam
vāngātha īlai manthārakāsam
valiyudanē puravīcchu ulvīcchu vīkkam
ōnkānum sura mudanē suvāsakāsam
undāgum vegu nōykkum uruthi thānē

[The diseases are: numbness, body pain, cough with delirium, toxins, heart disease, asthma, altered gait with pain, swelling, fever with dyspnoea, etc.]

Diseases due to pittha vātha thontha nādi

chirappāna pitthathil vātha nādi
chē riluru thāthu nattamuthara pīdai
uraippākach cheriyāmai gunmam sūlai
urra suram kirāni vayirriraicchal mantham
araipāna ōnkāra pura nīrkkōvai
āyāsamirakkamodu mayakkamūrcchai
muraikkāyvu vishavīkkam mūla vāyvu
muradāna nōy palavu mudugum panpē.

[The diseases referred to here are: loss of semen, abdominal disorder, indigestion, gastritis, severe pain, fever, dysentery, borborygmus, dullness, running nose, tiredness, faint, periodical fever, anasarca, piles, etc.]

Diseases due to pittha kaba thontha nādi

panpāna pitthatthil chētthuma nādi
pari sitthālatthi sura milaippu īlai
kankādhu nayana malam nīru manjal
kana vayiru porumal manjal nōy kannōvu
unpōthu marutthal rattha vippuruthi thānum
ulaimānthai pīnasamum rattha vīkkam
nanpāna kāmālai sōgai veppu
nanuki vantha pala piniyum nannunthānē.

[The diseases referred to here are: tuberculosis (bones, lungs), fever, yellowish discolouration of eyes, ears and urine, heaviness of abdomen, sinusitis, anaemia, borborygmus, jaundice, dislike of food, abscess, tuberculosis of abdomen, etc.]

Diseases due to kaba vatha thontha nadi

kandāyō chilērpanatthil vātha nādi kalanthidukil vayiru porumal kanattha vīkkam undālō ōnkāram chatthi vikkal uruthirātchai vāyvu vali sanni thōdam vindālē ilaippirumal sopai pāndu vida bāgam vida sūlai pakkavātham thindādu nāsi kāpīdan kakkal sītha nōykal palavum vanthu chikkunthānē.

[The diseases referred to here are: borborygmus, oedema, nausea, vomiting, hiccough, abdominal pain, delirium, bronchial asthma, anaemia, toxins, hemiplegia, nasal disorders, headache, etc.]

Diseases due to kaba pittha thontha nādi

idamāna chētthumatthil pittha nādi ezhunthanukil vidamudanē vīkkamundām thidamāna kulirkāycchal manjal nōvum thēgatthil ulaicchal ilaippirumal vānthi vidamāna nenchadaippu suvāsam vikkal vegu suramum nāvaratchi pāndu rōgam adamāna kuvalai rattham athichāranthān anuki vegu pala nōykkut thadankandāyē.

[The diseases referred to here are: toxic oedema, fever with rigor, jaundice, body pain, tuberculosis, vomiting, tightness of chest, bronchial congestion, hiccough, high fever, thirst, anaemia, diarrhoea, etc.]

Uttinam in vātham

chirappāna vāthatthiluttinam thānē chērnthitukil athichāramulaicchal vāyu uraippāna porumalōdu akkini mantham undāgum nīrcchiruppu piramēgangal pirappādu madhakari nīr karappān rattham piramēgam perumpādu puranīrkkōvai arappāna vāyusūlai sētthumarōgam āna pala pini kalumē vanthadarum thānē.

[The diseases referred to here are: diarrhoea, body pain, borborygmus, heartburn, scanty micturation, urinary disorder, eczema, uterine bleeding, running nose, gas, pain, kaba diseases, etc.]

Uttinam in pittham

thazhaippāna pitthatthiluttinam kondāl chayam atthi suram vedhuppu satthi gunmam kalaippāna porutthulaivu athichārankal kaduppudanē vayirru vali mūla vāyu ilaippāki ūnmarutthal nākkasappu iravil kanavudanē sankāra thōdam pizhaippāna payitthiya nōy erivu thāgam vanthanukip pala pinikkum vagaiya thāmē.

[The diseases referred to here are: tuberculosis (lungs and bones), fissure, vomiting, gastritis, tiredness, pain in joints, diarrhoea, pain in abdomen, piles, dislike of food, bitter taste, dreams, mental disorder, peripheral neuritis, thirst, etc.]

Uttinam in kabam

kathippāna chētthumatthil uttinam kūdil
kalantha gunam chayamirumal suvāsakāsam
mathippāna kōzhai rattham vippuruthi yudanē
valar nāsikā pīdamirutthōgam
kothippāna sillulaiyak kirāna vāyu
kottāvi vikkal manthāra kāsam

thuthippāna vīralatthik kāyvu rattham thōndrumigu pini palavum thonthippāmē.

[The diseases referred to here are: tuberculosis, cough, bronchial congestion, expectoration with blood, abscess, nasal disorders, heart disease, gas, yawning, hiccough, seasonal dyspnoea, bone disease (osteomyelitis), etc.]

Vāyu in vātham

adarkindra vāthatthil vāyu vanthu
anukināl valu vīcchitthimir viyāthi
surakkindra ānantha vāyu pakkasūlai
dhudaikkurukkuvali vilā pidari nenju
padarkindra narampisippu idankadōrum
paranthu kutthik kozhuvitthu nenchadaippu māgum
itaruravē sīdha mundāmkabam penthikkum
ithinālē pala pinikal vanthirukkum pārē.

[The diseases referred to here are: numbness, dancing gait, pleurisy, back pain, pain in ribs, neck and chest, twisting pain, tightness of the chest, kaba diseases, etc.]

Vayu in pittham

vagaiyāna pitthatthil vāyu kūdil
vasamānāl vali gunmam sūlai vāyvu
pakaiyāna vānthi vikkal aruvaruppu
payitthiyankal seriyāmai pulittha ēppam
thagaiyātha īralvali nenjil nōthal
thalai kirukku asathi yānthāthu nattam
thagai mūla vāyurrāl ushnam sōgai
thodarnthu varum palpinikkut thoguppukānē.

[The diseases referred to here are: gastritis, stabbing pain, gas, toxic vomiting, hiccough, hostility, mental disorder, indigestion, pain in liver, chest pain, giddiness, tiredness, loss of semen, piles, anaemia, etc.]

Vayu in kabam

thonthittha chētthumatthil vāyu kūdith thodarntha gunmam nenchadaippu suvāsakāsam vanthittha kuralthanilē urutthalīlai vazhu vazhuppu nīrūral malatthil chītham venthitthal kozhutthal kutthum thimir viyāthi vīcchudanē valiyettum thiratchi pāndu anthittha kirukiruppu mayakkam vikkal āna pala pinikalumē vanthadarunthānē.

[The diseases referred to here are: chronic gastritis, tightness of chest, dyspnoea, disturbed voice with expectoration, glassy tongue, salivation, mucoid stools, fatty body, peripheral neuritis, numbness, anaemia, giddiness, faint, hiccough, etc.]

Sithalam in vatham

irukkumantha vāthatthil sītham sērnthāl
ilaippu irumal vida sanni thōdam vīcchu
marukkindra kulir kāycchal virana thōdam
vānthi edutthidu mulaivumayakkam chōrvu
orukkinra malapandam porumal vīkkam
ul vīchu sūlaiyodu pāndu rōgam
tharukkinra thanurvātham pakkavātham
chārnthu vegu pini palavunthazhaik kumpārē.

[The diseases referred to here are: tuberculosis, toxins, delirium, fever with rigor, ulcers, vomiting, giddiness, tiredness, constipation, borborygmus, swelling, stabbing pain, anaemia, tetanus, hemiplegia, etc.]

Sīthalam in pittham

thonippāna pitthathil sīthalam kūdil thonthitthāl pasimantham iraicchal vāyu inippāna kabam vāyvuvātha gōpam ezhum mūlakkaduppudanē irumal satthi panippāna kulirkāycchal vida pārūdam pānkudanē kāmālai sōpai vīkkam kanippāna nākku vazhu vazhuppu thōdam kalanthu varum pini palavum kathikkunthānē.

[The diseases referred to here are: loss of appetite, borborygmus, gas, phlegm, anger, rectal pain, cough, vomiting, fever with rigor, toxins, jaundice, anaemia, anasarca, glassy tongue, etc.]

Sithalam in kabam

adaivāna chētthumatthil sīthalam parril anukināl suvāsamadaippu ilaippu mūrcchai dhidamāna āyāsamayakkam viyarvai chērntha vikkal sanni vidathōdam vīcchu idamāna vayiru porumal kulir nadukkal irattha suram ōnkāram peruttha vīkkam kadalāna avakuri vanthanugu menrē chārntha periyōruraittha thayavuthānē.

[The diseases referred to here are: dyspnoea, fainting, tiredness, giddiness, perspiration (sweating), hiccough, delirium, toxins, borborygmus, rigor, shivering, fever with blood pathology, nausea, anasarca, signs of bad prognosis.]

Apart from these, the diseases caused by *kabavātham* and *vāthakabam* under increased or decreased conditions of *vātham*, *pittham* and *kabam*, and bad signs of *janni* will take a longer duration to get cured.

So the $n\bar{a}di$ in a diseased person must be individually identified as *thani* $n\bar{a}di$, *thontha* $n\bar{a}di$, *mukkuṭra* $n\bar{a}di$ or prognostic *thontha* $n\bar{a}di$.

In literature on nādi, vātha, pittha and kaba nādis are referred to as vali, azhal and ayyam respectively. Kabam is also called silētpam.

Apart from these foregoing descriptions of $n\bar{a}di$, there are references to the time of $n\bar{a}di$ reading, days, season, the best or the average/ medium conditions during a week or month, causes for not being able to read the pulse, etc available in detail in literatures. Treatises on $n\bar{a}di$ emphasize that $n\bar{a}di$ reading must be done with a full understanding of all the principles relating to $n\bar{a}di$.

Effective nādi reading can be done at the following times:

- 1. In Chitthirai and Vaikāsi months—at sunrise
- 2. In Āni, Ādi, Aippasi and Kārtthikai—at noon
- 3. In Mārkazhi, Thai and Māsi- at sunset
- 4. In Panguni, Ā vani, and Puraṭṭāsi during night

Nevertheless, the exigencies of a patient's need may also be taken into account. After assessing the increased or decreased stage of *vātham*, *pittham*, and *kabam*, the treatment has to be given to set right the deranged condition of *vātham*, *pittham* or *kabam* to cure the disease, which lies at the core of *nādi* reading among the eight types of clinical examination.

Dr G. Ganapthy

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Daily Discipline

Introduction

Daily discipline refers to a person's daily routine of waking up before dawn, brushing his teeth, taking a bath, dressing up, accessorising, having his food, performing actions including virtuous deeds, sleeping, various types of bedding, etc. Let us see this one by one as described by the siddhars.

Everyday, everyone should wake up between 4 a.m. and 6 a.m. and pray to God for sometime.

The advantage of waking up early

For the people who wake up before dawn, the *shuddha* nerve (cerebrospinal fluid) which improves the clarity of the mind remains clear without laxity. Hysterical anger is eliminated. *Vali, azhal* and *ayyam* would remain properly in their respective states.

Things worthy of being seen immediately after awakening

It is good to see any one of the following things upon waking up: lotus, gold, lamp, mirror, the sun, fire, red sandal, ocean, fields, Shiva linga, cloud-covered mountains, cow along with its calf, one's own right hand, one's wife, the *miruthangam* [drum-like musical instrument), etc.

Advantages of seeing a mirror first after awakening

Increase in vigour, happiness, attractiveness and knowledge.

Things unworthy of being seen immediately after awakening

Physical disability, a person in the nude, a sinner, saffron cloth, a person affected by the ill-effects of the planetary movement, a dumb person, tonsured head, a deaf person, a sight of sorrow, locks of hair, a person who dislikes people, hunchback, dirty body, unkempt hair, a constantly sleeping person, a leper, a killer, oiled hair, a depressed person, a mad man, a poverty-stricken person, a TB patient, a filariasis- affected person, a polluted person, a sweeping person, a widow, etc., should not be seen. Also things like snake, cat, ashes, buffalo, broom, rope, pestle, winnow, etc., should not be seen. Their sight at the start of the day may lead to trouble for the person that day.

Uses of drinking clear water in the morning right after waking up

Lessening of excess *pittha*, free excretion; *vali, azhal, ayyam* (three humours) reach their respective states and cause good health.

Characteristics of excretion

It is absolutely necessary to expel urine and stools twice a day, daily. By their expulsion, the three humours *vali*, *azhal*, *ayyam* reach their respective states; secretion of digestive juice is increased, diseases stay away, death stays away and health is improved.

Things to do to facilitate excretion

While urinating, the right side of the lower abdomen should be held by the left hand, and vice versa during bowel movement. Until excretion is completed, it is important that the mind remain undistracted. If bowel movement is hindered, one should lie down on one's left side for sometime and breathe through the right nostril and then determinedly expel the stools. The same should be done for hindrance in urination, by lying down on the right side and breathing through the left nostril and then determinedly expelling the urine. After these secretions, phlegm, and dirt from the eyes, nose, mouth and navel and the dirt from the hands and legs must be cleaned out without any residue in hot water.

The rule of eating betel in the morning

People with the habit of consuming betel in the morning should use areca nuts in larger quantity than betel leaves and slaked lime and they should spit out the initially secreted saliva. The rest of the saliva should be swallowed until the sweet taste exists. The moment the taste changes, the betel should be spit out.

Completion time of digestion/indigestion

On waking up early in the morning, if the body feels light and energetic and the mind remains sharp, then it implies digestion is complete. If the body is heavy, mind is sluggish and exhausted, it implies that the digestion did not take place properly.

General indications of indigestion

Constipation or diarrhoea, body pain, *abāna vāyu* (the gas released through anus from the body) getting stuck in the intestines, irritation in the stomach, sensation of heaviness in the body, giddiness, etc.

Brushing the teeth

Family men should use the twig of any of the following trees having astringent, bitter or pungent taste:

punnai (celophyllum inophyllum),
asoku (saraca indica),
neem (azadirachta indica a.juss)
fig (ficus racemosa)
banyan (ficus bengalensis),
itthi (ficus gibbosa),

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kadamba (anthocephalus cadamba)
       karungāli (diospyros melonoxylon),
       kurukkatthi (hiptage medoblata),
       shenbakam (michelia champaca.L.],
       jaumoon (syzygium cumini L. skeels),
       nāyuruvi (achyranthes aspera var .rubro-fusca hook),
       pūlāru (phyllanthes reticulates),
       ape-flower tree (mimusops elengi),
       maruthu (terminalia arjuna w & a)
       mango (mangifera indica L)
       wood apple (limonia acdissima Lswingle),
       babul (plant acacia).
Monks should use the twig of the following trees for brushing:
       karungāli (diaspyros melonoxylon),
       nocchi (vitex negundo),
       perungumizh (gmelina arvorea L]
       peruvākai (albezzia lebbeck. benth.)
       peech (pongamia pinnata (L) pierre),
       maruthu (terminalia arjuna).
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yarcum (calotropis gigantea R.Br.)

The tip of the twig should be gently smashed and used to brush the teeth early in the morning without hurting the teeth or the gums.

Powder, leaf and twig can be used harmlessly to brush the teeth. The diseases due to the three humours that affect the teeth and root stay away. Moreover, since the above-mentioned materials used for brushing are astringent in taste, the teeth stay strong as a mountain, till death.

The medicinal properties of twigs for brushing

There is an old saying that goes 'the twigs of the banyan and acacia strengthen the teeth'.

Uses of twigs of various trees and plants:

- Acacia teeth solidify
- Neem Teeth are cleaned well
- $P\bar{u}l$ Vigour for enjoyment is increased
- Banyan increases prosperity
- *Nāyurivi* increases attractiveness

Things to be done after brushing

After brushing, *karisālai* (eclypta prostrata L) must be chewed and its juice should be rubbed on the teeth. Then the mouth should be rinsed. The dirt from the gaps of the teeth should be removed by gargling and rinsing l6 times.

After this, the following preparations must be consumed:

- Karisālai leaf or potralai kayyān (wedilia galandulacea) leaf l part
- Climbing brinjal leaves (solanum trilobatum L), bristly bryony creeper leaves (mukia scavrilla) and cumin seeds 1/4 parts each.
- All the above must be ground into a powder, and to 1 varāgan (4.2 gms) of this powder, 280 ml of water and 280 ml of milk should be added.
- All this must be boiled to a thick consistency and this can be consumed after adding a little unrefined sugar.

Advantages of eating this paste

- Controls ayyam.
- Removes nervous debility.

- Protects the potency of the blood.
- Body gets a glow.
- Anaemia and anasarca stay away.
- Keeps away the diseases occurring due to the variations in the three humours of wind, fire and phlegm.
- Lung diseases are cured.
- Lifespan increases.

Things unfit to be used for brushing the teeth

Brick powder, sand, charcoal, ashes of spathe of areca, hay,etc., fingers, bark and twigs of withered trees, etc.

People who should avoid brushing with twigs

People suffering from the following diseases should avoid brushing their teeth with twigs:

Indigestion, vomiting, asthma, TB, fever, dehydration, mouth ulcers, chest pain, headache, earache, eye infection, paralysis, etc.

But such people can instead brush their teeth with powder containing substances that control or cure the disease and clean the teeth and gum as well.

l. The powder of the following plants can be used by the asthmatics and TB patients.

karisalānganni (eclipta prostrata),

pirappangkizhangu (calamus rotang],

kuppaimēni (acalipha indica),

nocchi leaves (vitex negundo L),

yarcum leaves (calotropis gigantea (L.)R.Br),

barks of karungāli (diospyros melonoxylon).

2. The following to be used by fever patients:

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bark of neem (azadirachta indica A.juss)

maruthu (terminalia arjuna W&A)

karuvēl (acacia arabica willd)

māvilangu (cralaeva magua lour dc)

powder of the leaf of pallip pūndu (striga aciatica [L] ktze]

arasu (ficus religiosa L)

yarcum (calotrophis gigantea (L.) R.Br.)

nocchi (vitex negundo l)
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- 3. For patients with mouth and tongue ulcers, the powder of the *kudiyōṭṭip pūndu* (argemone mexicana), *kuppaimēni* (acalypha indica), and the bark powder of *karuvēl*, *nāval* and *arasu* can be used.
- 4. For patients with indigestion, the bark powder of *maruthu*, and the leaf powder of yarcum can be used.
- 5. For patients with any kind of disease, kalnār (asbestos) can be used.

Collyrium for the eye

It is good to use any one of the ointments like savvirānjanam (also called surumā) that gives a pleasant feel to the eyes.

The best and the brightest among the five senses, the eyes, can get affected by increase in *ayyam*. In order to prevent this, one should use *rasānjanam* made by using decoction having *maramanjal* (berberis aristata.DC) as its chief ingredient, or collyrium made from *karisālai* at least once a week. Using the right snuff for the nose, and decoction that is good for gargling, using fumigation and eating betel are good practices.

Oil application

Taking oilbath strengthens the five senses and also the head, knees, legs and tone. It promotes hair growth and relieves headache. It is good to take oilbath when the body is getting dry, or when itching, irritation or dirt increases. It is best to take oilbath daily, by which, body pain desappears, ageing is postponed, eyesight is improved, body strengthens and lifespan is increased. It also promotes good sleep and softening of skin. Lassitude, phlegm, variation in the three humours, toothache and altered taste sensation are eliminated.

Places where a lot of oil should be used

Oil can be liberally used for the head, legs and ears. Medicinal oils can be administered four drops in the nose and six drops in the ears. After rubbing oil vigorously onto the head, body and soles, one should take a dip in hot water and dry the body off water and sweat using a dry cloth.

Some people use excess oil on the legs, ears or eyes. But it is best to use oil in excess only on places where the individual benefits by doing so.

The right kinds of medicinal oil, when rubbed onto the soles, would remove eye problems. When they are applied on the eyes, ear problems are removed. When used as drops in the ears, problems in the head are removed. When applied to the entire body through an oilbath, all the problems in the body can be got rid of .

People who take headbath at least once in four days or twice in a week using medicinal oils prepared according to the relevant directions given in 'medicinal oil remedies', enjoy good health.

Appropriate time in each month for a medicinal oilbath

- 2nd half of April, May, 1st half of June 5 a.m.
- 2nd half of June, July, lst half of August 8 a.m.
- 2nd half of August, September, October, November, first half of December 4 a.m.
- 2nd half of December, 1st half of January,1st half of February 7 a.m.

2nd half of February, March, 1st half of April - 3 a.m.

Taking medicinal oilbath as prescribed above helps in maintaining good health.

Cow's ghee headbath

This benefits infants, children, the middle aged and the old. This removes body heat, mental disorders, fainting, sinusitis, dehydration, etc. If oil, the combination of three oils (gingely oil, coconut oil and castor oil), and cow's ghee are used to take headbath at least twice a week, then diseases troubling the body stay away.

Characteristics of headbath taken with pancha karpam

Regular practice of this keeps away diseases that cause obesity or emaciation.

Types of powders used for removing oil from the scalp and the body

Powdered leaves of *usilam* (albizia amara roxb) for persons having ulcers on the body; oilcakes of mahua for persons with scabies; *ponnankāy* (sapindis emarginatus) and soapnut powder for medicinal oilbath; greengram for cow's ghee bath; and the powder of the roots of canthum parviflorum (*kārai* plant) for pig and crow ghee bath.

Things suitable for consumption while taking headbath

Tender beans, tender drumstick, climbing brinjal, dried black nightshade, cundai berries, greengram, pepper, cumin seeds, fenugreek, cinnamon bark, cardomom, nutmeg, sugar, cow's ghee, quail, partridge, salamander, etc. can be consumed after taking oilbath. In addition, tender sponge gourd, snake gourd, brinjal and gooseberry, greens, asafoetida, dehydrated salt, warm butter milk, mild sour taste, thāmbūlam (betel leaf, areca nut and lime), meat of rabbit, fresh water fish, ayirai, thēli and shark, karuvāli (a kind of sparrow), wild rat, goat, etc., can also be taken.

Things unsuitable for consumption while taking headbath

Squash gourd, pumkin, mango, coconut, stem of greens, tuber of Indian kales, bitter gourds, brinjal, cluster beans, fruit varieties, starchy food, hyacinth beans, sesame seeds, horsegrain, bengalgram, blackgram, mustard, tamarind, onion, milk, curd, saltish stuff, tobacco, jaggery, cold water, daytime sleep, heat of the sun, sexual intercourse, excessive wind, meat of crab, fish, hen, sheep, pig, bison, etc., should be avoided.

When patients use certain oils to take headbath, diet according to their diseases is usually recommended. They are of two types - *icchā* diet and salt free diet.

Abstinence from sexual activity with diet restriction (icchā diet)

Bitter gourd, mango, brinjal, cluster beans, squash gourd, fig (grandiflora) leaves, food articles that induce sluggish digestion, mustard, etc., should be avoided. Indulgence in sex/masturbation should be avoided.

Salt-free diet

While using mercury-based medicinal oils, salt-free diet should be followed for a certain period. For the same subsequent period, without drug, diet alone should be followed. Later, one should take bath using bishop's weed $(\bar{o}mam)$ with milk as a paste and cow's ghee. Till then there should be no intake of salt.

People unfit for oilbath

People with diseases of the *ayyam* (the phlegm humour), those who have taken emetics, laxative, diuretics and enema, and people with indigestion, etc., should avoid taking headbath. But curative oilbath is allowed.

Virtues

All our actions end in good or bad consequences. It is obvious that bad actions cause sorrow and good actions cause happiness. Hence, if all our actions are good, they provide pleasure to all living beings. Though this applies to all men, doctors whose job is to save lives should abide by this principle

more than anyone else. Every good action is governed by virtue. Hence it is important that we strictly perform virtuous deeds.

Association with good people

One should avoid mixing with bad people, and also strive to mix with good people, love them and be associated with them.

Bad habits to be avoided

Lying, complaining about another person, angry outbursts and unnecesary talk are the four wrong things in speech. Stealing, fruitless deeds and killing are the three evil actions. The thought of killing, lust for sex and coveteousness are the three wrong things of the mind. One should completely destroy these ten evil things arising from mind, speech and body.

Helping people in adversity

According to our capacity, we should help people who are suffering from poverty, disease and mental affliction.

Showing kindness towards animals

We should protect even the smallest living things like ants, houseflies, worms, etc., and consider their life as worthy as ours.

People worthy of worship

Celestials, cows, brahmins, elderly people, people who are superior to us by intelligence or culture, doctors, kings and guests are to be worshipped.

Helping beggars

One should never send back a person who begs for alms. Such people should not be shown disrespect or indifference.

Doing good even to bad people

We should consider doing only good to even our enemies who harm us.

Mental stability

Our mind should always remain calm and undisturbed, in both poverty and prosperity.

Jealousy

For no reason should we at any time be jealous of a person, who has attained a higher status. We must regret our lack of taking determined initiatives that were the main reason for the progress of others.

Speaking pleasant words

Our speech should be pleasant, crisp, consistent and capable of expressing our thoughts with clarity.

Types of bedding

- l. Flower bedding: Those who sleep on the flower-beds of *mullai* and *malligai* (jasmine varieties] would enjoy increase in appetite, increase in semen, interest in sex, and a healthy body. Body heat produced on account of medicine intake will disappear.
- 2. Silk cotton bedding: Excess body heat dissappears on this bed.
- 3. Cotton bedding: Those who sleep on this bed will have increase in semen, blood, desire and heat.
- 4. Carpet bedding: Carpets of white, red, yellow and black colour will remove cold, shivering, excess *ayyam*, anaemia, swelling and various toxins. There will be increase in *pittham* and semen.
- 5. Woollen bedding: Woollen sheet is used for preventing fever with shivering. It will remove chillness, cold and excess bleeding. White, green, blue and violet-coloured woollen gives limited heat.
- 6. Screw pine mat bedding: This removes vomiting, giddiness, anaemia, pittha disease, ovarian tumour, polyurea, etc.

- 7. Bulrush mat bedding: It removes digestive upset and intensity of fever. Promotes cooling of the body and good sleep.
- 8. Rattan mat bedding: It causes piles, dysentry, fever, heaviness of the head, chillness, etc.
- 9. Date palm leaf mat bedding: It eradicates *vātha*-predominant peptic ulcer and generalised oedema. Causes appetite and bright complexion, produces excess body heat.
- 10. Small date palm leaf mat: Body dries up. It also removes excess body heat, *vātha* disease, excess *pittha* and excess *kaba*.
- II. Bamboo mat bedding: It produses dribbling of urine, excess *pittha* and excess body heat.

Pillow

The pillow should be of needed length and appropriate height so that it can stay between the neck and the shoulder. When one keeps a pillow made of silk cotton beneath his head for sleeping, it benefits him from head to toe. Headache that aggravates during the day and during the night will be eradicated.

Types of handfans

1. Handfan made of peacock feather

Using handfans made of peacock feathers helps to cure delirium, stomach ache, dizziness, excess *pittha*, hiccups, sweating, and excess *vātha*. Intelligence increases.

2. Handfan made of cuscus grass roots

This will remove madness, burning sensation in the body and thirst. Produces happiness.

3. Handfan made of palmyra leaf

This will remove *vātha* diseases, *kaba* diseases, excess *pittham*, altered taste sensation, etc.

4. Handfan made of white hair of the yak

This will remove sweating, tiredness, fainting, forgetfulness due to fainting, dryness, hate, etc. This will cause desire in sex and beauty.

Discipline (self-protection)

We should never reveal information to anyone about those who are inimical towards us, those to whom we have enmity, the nature of blame we and others are subjected to, the aversion that any person of a higher status might have towards us. Letting out such information will weaken our defences.

Reading others' minds and acting accordingly

We should acquire the ability to read a person's innermost thoughts and act accordingly so as to make them happy.

Ruling the senses

The senses should never be suppressed too much nor let to act beyond the limits. They should be maintained in a balanced state.

We should never do things that are removed from virtue, wealth and happiness. The actions we perform should not be beneficial to some and harmful to others. In all cases, our actions should be impartial and justifiable.

Hair, nails and moustache should not be allowed to grow long. Places where dirt accumulates should be kept clean.

It is good to take bath daily, apply perfume, wear simple and clean clothes and carry gems and important herbs. It is good to chant useful *mantras*.

While walking, it is good to carry an umbrella and wear sandals. It is important to mind our steps while walking. Unless there is some unavoidable work, it is best to stay at home at night. If needed to be out in the dark, then

one should wear a turban, carry a stick and go along with a companion. Walking across certain things like trees worshipped in villages that are dear to spirits, venerable elders, creepers, dirty people, husk, ashes, dirt-covered eatables, places strewn with pebbles, places filled with tiles, places for worship and graveyard should not be done. Also one should not try to swim across a flooding river.

Dr G. Ganapathy

Trans. Dr P. Jayaprakash Narayanan

Medicine

maruppathu udalnoy marunthenal ākum maruppathu uļanoy marunthena sālum maruppa thininoy vārāthirukka maruppathu sāvaiyum marunthenal āmē

This verse holds that the thing which cures a disease, the thing which prevents a disease or the one that protects body and soul from diseases is medicine. From this it is clear that the siddhars have had well-defined principles and practices regarding medicine.

Diseases can affect both body and soul. Medicines are used to cure diseases and also they prevent diseases. Not only this, medicines also protect man from death. This is the basic principle of siddha medicine.

Books on siddha medicine also call medicine avizhdham (undoing). It is so called because it removes diseases which affect body and soul.

Types of medicine

Thirumular has classified medicine into 3 types:

- l. Vīra medicine
- 2. Vinnor medicine
- 3. Nāri medicine

Certain other works have a different set of names to these medicines:

- 1. Asura medicine
- 2. Dēva medicine
- 3. Makkal medicine

Using parpam and chendūram of rasam and gandhagam, medicines can be prepared, which are called heavenly or dēvar medicine.

Using herbs, *chūranam*, *kudinīr* and *vadagam* are prepared, and they are called *nāri* or *makkal* medicine. *Vīra* or *asura* medicines are those that include vegetable stimulants, surgery, bandaging and *cuttikai*.

This classification apart, there is another one used in siddha medicine:

- 1. Internal medicine, and
- 2. External medicine

Heavenly $(d\bar{e}var)$ medicine and human $(n\bar{a}ri)$ medicine come under internal medicine. Asura $(v\bar{i}ra)$ medicine comes under external medicine.

Siddha medical treatises have classified internal medicines into 32 types and external medicines into 32 types. What follows is a description of these types:

Internal medicine

1. Surasam

Ginger or things like ginger, herbal leaves, roots, barks, flowers, or unripened fruits are ground in a stone mortar, squeezed and filtered. It is then taken in a mud vessel and boiled. It is called *surasam*.

2. Juice

Leaves, roots, barks, flowers, or unripe fruits or all the above together are crushed or ground, squeezed and filtered to get juice.

3. Kudinir (decoction)

Dried or wet ingredients are partially powdered. Required amount of water is added and boiled. They are boiled until they are reduced to $\frac{1}{2}$. $\frac{1}{4}$, $\frac{1}{6}$ or $\frac{1}{8}$ or $\frac{1}{8}$ or $\frac{1}{16}$ or

4. Karkam (paste)

Purified iron powder or iron ore powder is mixed with dry or wet ingredients. They are ground in a stone mortar into a solid paste. Such preparations are called *karkam*.

5. Kali

Rice or blackgram, fried and ground to flour, or flour got from other seeds can be used. This flour is mixed with water and the required amount of sugar or jaggery is added. This mixture is poured into a mud vessel and heated until they come to a jelly-like substance. Then a small amount of ghee is added to make it non-sticky. This is called *kali*. As it is dry outside and jelly-like inside, it is called *utkali*.

6. Adai

Some leaves are added to rice flour, ground and made into cake-like things. They are put into a mud vessel and ghee is added. It is heated and taken. This is called *adai*.

7. Chūranam (powder)

New and purified ingredients are fried where needed, powdered and filtered individually. They are used in required amounts. This is called *chūranam*.

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8. Piţţu

Purified ingredients are powdered individually and taken. Equal amounts of milk and water are mixed to this powder. In a deep mud vessel, equal amounts of milk and water are taken. A cloth is covered and tied to the mouth of the vessel. The above mixture is spread over this cloth. It is then closed with the upper vessel and heated until steam comes out. This is called *pittu*. This *pittu* is taken in a vessel and mixed with the required amount of jaggery.

9. Vadagam

Drug substances are powdered and filtered individually, required amounts of which are mixed with jaggery. In a deep mud vessel equal amounts of milk and water are taken. The mouth of the vessel is covered and tied with a cloth. The above mixture is placed over the cloth as in *pittu* preparation. It is then covered with an upper vessel and heated until the milk gets reduced. Before it gets cooled, this *pittu* is ground in a grinder and is made into pills. This is called *vadagam*.

10. Vennei (butter)

Required amounts of ingredients are powdered and taken in an iron spoon. Twice the amount of ghee is added to the above and heated. When these substances mix well with the ghee, they are poured into a vessel containing water. It is then churned with a wooden stick. The butter comes over the vessel.

ll. Syrup (manappāgu)

Decoction from any one among the root, flower, fruit, climber, raw drugs or a fruit juice is taken in a mud vessel. Required amount of sugar is added and placed over the stove and heated. When fragrance comes out, it is removed from the stove. Required powders of drugs are sprinkled over and mixed well to get manappāgu.

12. *Nei* (ghee)

Any one or more of the things such as leaves, tuber juices, decoction or karkam are mixed with cow's ghee, put into a mud vessel and heated. It is removed when it comes to the consistency of ghee and filtered. This is called ghee.

13. Rasāyanam

The ingredients are powdered and the required amounts of sugar and ghee are added. It is mashed well to get *rasāyanam*.

14. Lēghiyam

Decoction types or juices are taken individually or in a blend. Required amount of sugar is added and boiled in low fire until the juice gets reduced to a semi-solid consistency. When fragrance comes out, required powders of drugs are added slowly and mixed, adding ghee and honey in that order. When the needed consistency is got, it is taken out. It is called *lēghiyam*.

15. *Ennei* (oil)

The oil obtained from *el* (sesamum indicum) is called *ennei*. Fatty products obtained from bark, seed, tuber, etc., also come under oil types.

Naming of oil by the individual ingredients:

- When *elnei* is added to any individual substance or a blend, then the oil is named after that dominant substance only. Eg. *vallārai nei*.
- Naming of oil by the special substance added to it. Eg. gandhaga sudar thailam.
- Naming of oil by the special substance added and the method used to prepare it. Eg. sivanār vēmbu kuzhi thailam.
- Naming of oil by its use. Eg. mēga nei.
- Naming of oil by the number of drugs used in it. Eg. ainkūṭṭu nei.

There are twelve types of such oil preparations. They are:

15.1 Kothi nei (boiled oil)

The seeds of castor plant (ricinus communis) are fried, powdered and mixed with water. When it is boiled, *kothi nei* is obtained.

15.2 Urukku nei (melted oil)

When we melt butter and white of egg, we get urukku nei.

15.3 Kuzhipuda nei

Sēnkoṭṭai (semecarpus anacardium) and sivanār vēmbu (indigofera aspalathoides) are put into a porous pot. It is closed with an upper vessel. The mouth is covered with a mud-smeared cloth. A pit is dug and a vessel is placed inside the pit. The above-mentioned pot is placed over this vessel. By the process of applying heat, the oil gets collected in the vessel. This is called kuzhipuda nei.

15.4 Thinir nei

Aromatic substances like sandalwood are powdered, taken in a pot and mixed with water. They are put in a cloth and filtered which is *thīnīr nei*.

15.5 Sūriyappuda nei

Sesame (sesamum indicum) seeds are mixed and ground with certain ingredients. When this paste is placed in the high sunlight, the above oil is obtained. It is also called *āthaya nei*.

15.6 Man nei (earth oil)

The oil that bubbles out spontaneously from a dry land.

15.7 Mara nei (tree oil)

Oil obtained from the cut of a tree.

15.8 Silai nei (mountain oil)

The oil flowing from high mountains. It is also called malai nei.

15.9 Nirnei (water oil)

When punugu saṭṭam (unctuous substance of the civet-cat) is crushed well and soaked in water, this oil is obtained.

15.10 Āvi nei (vapour oil)

This oil is obtained when sāmbirāni (styrox benzoin), maṭṭuppāl, (ailanthus balsam), etc are put in a hot mud vessel and a plate filled with water is placed over that.

15.ll. Sudar nei

Add the needed oil to substances like *gandhagam* (sulphur) and grind them into a paste. Spread the paste on a new cloth, which is dipped in water and taken. This cloth is tied around an iron rod. When one end is lit, the oil is obtained at the other end.

15.12. Pori nei (machine oil)

Sesame, etc. are ground and squeezed in an oilpress, and we get what is called machine oil.

The above- mentioned oils are used as medicines in 5 different ways:

Hair oil : Oil applied on head
 Internal oil : oil taken internally

Massage oil : oil used for external application (pidi nei) : over the body for massage

> Thulai oil : oil is sent into the body

through the nine openings

present

Silai oil : Oil applied through deep

wounds or ulcers.

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16. Pills (mātthirai)

Raw ingredients are ground with things such as leaf juice or ginger juice or any decoction or breast milk. They are made into pills and dried. *Mātthirai* also means measurement. As this medicine is present in a particular measurement, it is named *mātthirai*. It is also named *urundai* (ball) or *kuligai* (pill).

17. Kadugu

Some drugs are mixed with ghee-like oil products and heated. During a state when all ingredients come together to a thick consistency, we get *kadugu*.

18. Pakkuvam

Gall-nut, etc., are soaked in starch water of rice. After it is soaked well, it is put in buttermilk, lemon juice, ginger juice, or any of leaf juices, and the needed drug powders are added to it. This is one method.

Lemon is made to *pakkuvam* (right consistency) by heating it with *ainthuppu* (the five kinds salt, viz., *kari uppu, kal uppu, vedi uppu, indu uppu* and *valaiyal uppu*). This is another method.

19. Thēnūral

Ginger, gall-nut (terminalia chebula) and emblic myrobalam (phyllanthus emblica) are soaked in water. Holes are made into them using a needle on the surface. Then they are soaked in sugar syrup or honey. This is called *thēnūral*.

20. Thinir

This is of two types. Take the ingredients in a metal vessel called *vālai*, add water and heat it. This is called *thīnīr*.

Salt types are burnt in a $v\bar{a}lai$. This is another method. It is called pukai $n\bar{i}r$ (or) $dr\bar{a}vagam$. Both these are called $satthin\bar{i}r$.

21. Mezhugu

It is of two types: Araippu mezhugu, and surukku mezhugu. Some mercurial products or some salts are individually or with substances ground with certain juices or honey to the consistency of wax. This is called araippu mezhugu.

Add any one herbal juice or oil drop by drop to some mercurial substances or toxicants placed over an oven. When it starts melting, replace it in a stone mortar and grind it to the consistency of wax. This is called *surukku mezhugu* (condensed wax).

22. Kuzhambu

Certain juices, together or separately are mixed with sugar and certain drug powders. They are heated and taken in a jelly-like state.

Kuzhambu can also be prepared by grinding certain ingredients with ghee-like substances.

23. The sublimate (padhangam)

Put salt and brick powder into a mud vessel; over that, place mercury or mercurial compounds in a crucible. This apparatus is covered with salt. It is closed by an upper vessel. Its mouth is closed with mud-smeared cloth and heated with the required amount of heat. After the required time is over, remove it from the stove and take the medicine which is deposited in the upper vessel. This is one method.

Some toxicants are ground with certain leaf juices. It is then put into a crucible with an upper lid having a pore in its centre. Pour mercury in that crucible. Put salt in a vessel and place that crucible over the salt and close it with an upper lid. Make seven layers of mud-smeared cloth for seven days, with one mud-smeared cloth per day. Apply required amount of heat for a particular duration. After it gets cooled, open carefully and take the medicine deposited in the upper lid. This is another method.

24. Chendūram

Metals or toxicants are ground well with leaf juice or *uppupugai nīr* or seinīr. Then by calcination or heating or frying, it is ground until it becomes red. It is then kept in sunlight and taken. This is called *chendūram*.

25. Nīru (vennīru or parpam)

Metals, toxicants or *ubarasam* are ground well with leaf juice, or *uppupugai nir* or *seinir*. It is also made by applying heat, calcination, frying, or blowing to a white coloured *parpam*.

26. Kattu (mātthiraikkal)

One of the methods is adding any one of the *pugainīr*, *seinīr*, leaf juice, decoction, honey, breast milk, *kuzhi puda nei* drop by drop to toxicants placed on an oven to get *kaṭṭu*. Another method is grinding *parpam* or *chendūram* with juice or breast milk and making it into *kaṭṭu* (*mātthiraikkal*).

27. Urukku

The toxicants or metals are bound with their antagonistic and synergic substances and placed in a crucible. Close it with an upper lid and cover it with mud-smeared cloth, place it on the charcoal fire and blow it to melting. After it is cooled, *urukku* is taken from it.

28. Kalanku

Mercurial compounds are condensed by adding leaf juice or *seinir* or *pugainir* and heat application is done. Then it is melted by blowing in charcoal fire into mercurial balls. They are then added with gold or zinc, and after cooling, *kalanku* is obtained.

29. Chunnam

Mercury, toxicants and metals, individually or together, are taken in a stone mortar. They are triturated with juice or *seinir* or *pugainir*. They are then

placed in a crucible and covered with mud-smeared cloth and dried. They are blown in the charcoal fire, and when cooled *chunnam* is obtained.

30. Karpam

Leaves, roots, salts, metals, and *uparasam*, taken according to the respective disease with correct doses, duration and diet restriction is known as *karpam*.

It is of two methods. One is preparing medicines daily for use and the other is preparing them in advance and storing them. Medicines from leaves, roots and drug substances must be prepared daily. Medicines from metals and *uparasam* can be previously prepared.

31. Satthu

Magnet, iron powder and *uparasam* are added to some toxicants and triturated with *venkaru* (white of egg) *seinir*. It is placed in a crucible and covered with mud-smeared cloth and dried. Then it is blown in charcoal fire for three times to get *satthu*. It is then ground with gold, mercury and sulphur and burnt in a container to get *satthu* medicine.

32. Guru kuligai

Vālai mercury is tied up with some substances and it is made into beads. This is called *guru kuligai*.

Methods of preparation of internal medicines

Siddhars have classified the methods by which to prepare the above mentioned 32 types of internal medicines. They are:

- ➤ Making into ash
- Grinding
- Squeezing
- Mixing

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- > Frying
- > Removing
- Melting
- Drying
- Freezing
- Mixing
- Breaking
- Cutting
- Rounding
- ➤ Moving
- > Crushing
- Burning
- ➤ Wetting
- Heating
- Scraping
- > Hardening
- > Rubbing
- Making into a paste
- > Taking off

Shelf life (life-time) of internal medicines

Siddhars have ascertained the shelf life of each and every internal medicine from the time or day it has been prepared to the duration it can be kept and used. (This shelf life of siddha drugs has been modified by drug and cosmetic act)

	Medicines	Shelf life (life-time)
1	Surasam, juice, decoction, paste, adai,	3 hrs (1 <i>sāmam</i>)
	uṭkali	
2	Powders, pittu, vadagam, butter	3 months
3	Manappāgu, nei, rasāyanam, lēghiyam	6 months
4	Oil, tablets, kadugu, pakkuvam,	1 year
	thēnūral, thinir	
5	Mezhugu, kuzhambu	5 years
6	Rasapadhangam	10 years
7	Chendūram	75 years
8	Parpam, kaṭṭu, urukku, kalangu	100 years
9	Chunnam	500 years
10	Karpam, satthu, guru kuligai	More than 500 years

External medicine

Like internal medicine, external medicine is also classified into 32 types. They are:

1. Kaṭṭuthal

Leaves, barks and (required parts of) certain birds are taken in required amounts and are ground, mashed, fried or steamed with sour juice, for bandage medicine. Bandaging is done with *pāshānam* (arsenic) too.

2. Pa<u>rr</u>u

Pa<u>rr</u>u medicine is prepared either from the juices of leaves, barks and roots or by grinding or heating certain medicinal substances.

3. Fomentation

Caustics, brick powder, powder of horsegram, bishop's weed (trachispermum ammi), sand, leaves—any one among the above-mentioned things can be fried and tied up in a cloth and applied over the diseased part.

4. External application (pūcchu)

Boiled leaf juices or certain oils are applied as external medicine.

5. Steam exposure (vēdhu)

Certain substances can be powdered, placed over a cloth and made into a wig. The wig is kept in a mud plate soaked in neem oil. We must cover ourselves with a cloth fully and light the wig. Smoke comes out and it must be inhaled, as a result of which our body will sweat. This is one type of steam exposure.

Hot water or decoction of chaste tree leaves (vitex negundo), or turmeric powder can be used for steaming.

Vapour that comes from heating the brick stone can also be used for steaming.

6. Medicated bundle (pottanam)

Certain substances are powdered, placed over a cloth and tied up. This pouch is dipped in neem oil or any other oil and heated. The pouch is used to foment the diseased part. This is called *pottanam*.

7. Massage (thokkanam)

The pain due to the combination of *mukkuṭram* in the body can be cured by massaging. It is of two types. Massaging with hand without rubbing oil over the body, and the other one is rubbing oil over the body and massaging.

8. Fumigation (pugai)

Peacock feather, cumin seeds, etc., are rolled up in a cloth and made into a wig. When it is lit, smoke is produced.

Hoof shavings of animals, horn shavings of cow, buffalo, etc., dead skin of cobra, excreta of pig – all these can be ground and put into fire to produce fumes.

Agatthiar kuzhambu, kaushikar mai, etc., are applied over a cloth and made into a wig. It is dipped in castor oil (riccinus communis) and is lit to produce fumes.

9. Mai

Certain medicinal substances are placed on *anjanakkal* (plumbi sulphuratum sulphide of lead) and ground using any leaf juice. It is then dried. Honey is added to it and again it is finely ground.

Certain substances are charred and mashed into a paste with honey.

When carissa flower (carissa carandus) juice, any decoction or honey is added to a substance and boiled, we get this *mai*.

10. Podi thimirthal

Horsegram powder or turmeric powder is, separately or mixed with camphor, rubbed over the body, dried and shed down. This process is called *podi thimirthal*. Certain leaf powders are also used for this purpose.

11. Kalikkam

Certain medicinal substances are ground with certain juices and are made into tablets. It is rubbed in honey or breast milk or any juice, and poured into the eyes. This method is called *kalikkam*.

12. Nasiyam

Certain medicinal substances are ground with certain juices and are made into tablets. When needed, they are tied up in cloths and soaked in breast milk or any juice and squeezed into the nose. This is called *nasiyam*. Some leaves or flowers are also used for *nasiyam*.

13. Blowing (*ūdhal*)

Certain leaves are mixed with a salt substance and chewed in the mouth. Then air is blown into ears, etc., of the patient. This process is called $\bar{u}dhal$.

14. Nāsikāparanam

Some substances or roots are dried in shade, finely powdered and filtered. This powder is inhaled through the nose. This process is called nāsikāparanam. The substances or roots are soaked in any juice or milk. Then they are dried in shade and made into powder. It is also used for nāsikāparanam.

15. Ointment (kalimbu)

Certain toxicants are powdered along with astringents like kāycchukkaṭṭi (acacia catechu), kadukkāypū (terminalia chebula), and māsikkāy (curcus infectoria). Then it is ground with cow's butter to get ointment.

16. Plaster (silai)

Some toxic substances are ground with water or juices and made into a gel. A soft cloth is dipped in this and applied over the wound.

17. Lotion $(n\bar{i}r)$

Some substances are soaked in water, then this water is filtered and used. Or decoction can be made of these substances. Certain toxic substances can also be mixed and kept in a liquid form. It is used for washing wounds.

18. Pessary (vartthi)

Certain toxic or non-toxic substances are powdered. Then any juice is added to this powder to make a gel. Soft cloth is dipped in this gel and made into a pessary.

19. Cauterization (suttikai)

Tree bark or needle is heated and placed over the diseased part. This process is called *suttikai*. It is also called *sittikai*, *sudukai* (cauterization).

20. Probe (salākai)

It is a small, thin instrument. Its tip is blunt like the stalk of horse-radish leaf (butea monosperma). It is used to measure the depth of wounds. It is also used to know the obstruction in the urinary tract.

21. Paste (pasai)

Kungiliyam (dammar), when melted with wax or castor oil, yields this paste. When needed, this paste is melted and smeared on cloth and applied over the wound.

22. Poultice (kali)

Seeds like flax seed (lepidium sativum) are mixed with rice flour and ground with cow's milk or water. When it is taken in a mud pot and mixed, we get poultice. It is used to bandage wounds.

23. Powder (podi)

Vengāram (borax) or some astringents are made into powders. These powders are used to spray over wounds.

24. Breaking (muricchal)

Breaking is setting right any dislocation in legs and hands/ arms.

25. Incision (kiral)

It is to incise the vesicle, acne or boil to expel the pus, blood, or fluid present in it.

26. Kāram

This medicine is prepared by using certain toxicants. It is used to cure wounds.

27. Leech application

When there is a swelling filled with impure blood, leech is left over that area and made to bite. It sucks the blood and falls down. Swelling is reduced.

28. Surgery (aruvai)

It involves surgical treatment procedures.

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29. Splint application (kombu kattal)

When there is any fracture or breakage in bones, splints are tied over that area to make the bones join together. This process is called splint application (kombu kaṭṭal).

30. Suction (urinjal)

The pus and blood present over the wound is sucked out by mouth using certain instruments. This method is called suction (*urinjal*).

31. Venesection (kuruthi vangal)

When there is excessive blood in a patient's body, it can be reduced by making venesection. The extra blood gets expelled out. This process is called blood-letting therapy (*kuruthi vāngal*).

32. Enema (picchu)

In constipation, to evacuate the bowel, water is flushed out through a tube into the anus. This method is called enema (*picchu*).

Shelf life (life-time) of external medicine

External medicines all are not medicinal products like internal medicines. Among the external medicines, there are medical procedures like massage. leech therapy, surgery, splint application (kombu kaṭṭal), suction (urinjal), venesection (kuruthi vāngal), and enema (picchu) which are done without any medicines. Medicines which are used in kaṭṭuthal, paṇu, fomentation (oṭradam), external application (pūcchu), fumigation (vēdhu), and poṭṭanam are prepared instantly and used. Mai, kalikkam, and nasiyam alone need medicines prepared previously and stored for use. Their shelf life has also been determined and classified by the siddha physicians. It is given in the following table:

Type No.	Medicine	
Shelf life		
1.	Nāsikāparanam, lotion, pessaries, powder	3 months
2.	Ointment, plaster	6 months
3.	Mai, kalikkam, nasiyam, pasai, pūcchu	l year.

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Herbal Medicine

Introduction

In the modern world, treatment done by herbs takes an important position. But it is a big question mark whether we are using it in a right way.

In the early periods, herbal medicine was widely used in India and our neighbouring country China. These countries use this medicine in large quantities nowadays also. Western countries have realized the worth and importance of herbal medicines and started using them in their treatment. The WHO has also started a Centre for Traditional Medicines.

While handling herbal medicines, their quality, taste and the target diseases can be known only from books on siddha medicines. What follows is an account of these herbal medicines.

Human anatomy and pathology

Human anatomy has been briefly described by our siddhars. According to them, human body is made up of

Pancha bhūthas : earth, water, fire, air, space

Seven udal thathus: body fluids, blood, muscle, fat, bones,

bone marrow, sperm / ova

Three thāthus : vātha, pittha, kaba

Three kunas : satthuva, rajō, thamō

If all these things are blended with each other in right proportions, our body will not be afflicted by any disease.

For example, if fluids in our body are on the increase, there manifest the following symptoms:

- > Decreased body heat
- > Increased salivation
- > Reduced activity
- > Asthma, bloating
- > Cough, extended sleep
- > Loosening of body
- > Heaviness of body

If the body fluids are on the decrease, the following symptoms manifest:

- > Roughness of skin, body pain
- > Tuberculosis, tiredness, allergy to loud sounds

Similarly, taste is formed by the combination of two of the *pancha bhūthas*. If this taste present in our body is in excess, there is a chance of the three *thāthus* getting affected. It shows that when *thāthus* get affected, human body becomes diseased.

For example, sweet taste is formed by the combination of the *bhūthas* of earth and water. If this sweet taste is increased in our body, diseases of fat, sputum and *kaba* are formed. Changes like obesity, lowered appetite, urinary disease, cervical spondilitis will also occur.

Similarly, the taste that increases *vātha*, the taste that increases *pittha*, the taste that increases *kaba* are the causes for diseases in our body. Here the herbal medicines play a major role by protecting us from the diseased condition.

Medicinal qualities of herbs

Siddhars have observed that each and every herb has its own taste, virulency, vibhāgam and prabhāvam. That is, when a herb is chewed, taste is the first quality felt. The changes that occur after digestion constitute vibhāgam, whether it produces cooling effect in our body or heat is its virulency. The best changes it produces in our body are called prabhāvam.

The things present on this earth must be characterized by only two qualities. One is the heating effect and the other is the cooling effect.

It is to be noticed that among the six tastes, three tastes increase the heating effect and the other three tastes increase the cooling effect.

Among the six tastes, the taste that gets increased will affect its respective *thāthu*. The foremost aim of the herbal treatment is to protect our body by using herbs in order to bring this affected *thāthu* to its own state.

For example, if we take sweet taste, it increases the activity of the body, serving as a general tonic for the diseased body, improves fairness, quenches thirst, helps in the growth of skin and hair, improves the quality of the voice and gives energy to the body.

By taking the sweet taste through the herbs such as almonds, dates, liquorice, etc., the benefits described above accrue to our body. Similarly, all the herbs are classified according to their uses.

Herbs with mixed tastes

A few herbs have more than one taste, which are capable of curing diseases. For example,

- Cloves, fenugreek and onion, which have both sweet and acrid taste, are used for *vātha* diseases.
- Liquorce (glycirrhiza glabra), which has both sweet and bitter taste, can cure *pittha* diseases.

- > Orange, which has both sweet and sour taste, is helpful in *vātha* diseases.
- Gall-nut (terminalia chebula), which has all tastes expect saltish taste, is praised more than a mother in curing all diseases.

Similarly, on the basis of taste alone, we can protect ourselves from diseases and prevent diseases through herbal medicines. And now, we can study the medicinal properties produced by the herbs in our body.

Medicinal actions of herbs

It is true that every herb has more than two medicinal actions. For example, the herb that has alternative action produces the following changes in our body:

- Blood purification
- Detoxification
- > Developing immunity
- > Antiseptic action
- > Healing boils, ulcers and cancerous wounds
- > Curing pain, boils and skin thickening

In the same way, every herb has its own actions.

Preparation and uses

In the next stage, we have to observe the procedures of preparation and usage of herbs. Even though there are several important types in it, we can list out some of the simple methods.

Juice

Raw herbs are collected and crushed or pressed immediately. They are then placed in a transparent cloth and squeezed to get the juice.

Eg: garlic, ginger, lemon, onion

Karkam

Raw herbs are ground into a paste-like form. Dried herbs are mixed with water and then ground to paste.

Decoction

A whole dried plant or a part of the plant is collected and ground into one or two units. Add water in the quantities of 4, 8, 16, 32 parts for one part of the dried plant. Boil until the water is reduced to the ratio of 4:1, 8:1 or 16:1. Filter the decoction and then drink it 15 to 30 times depending upon the disease.

Here we need to observe the type of vessel used in the herbal medicine preparation as prescribed in ancient books.

- Mud vessel is best for all diseases.
- Iron vessel is good for *vātha* diseases.
- Silver vessel is good for *pittha* diseases.
- Copper vessel is good for kaba diseases.

Chūranam

A whole plant or certain parts of raw herbs are collected, dried and then ground into powder which is filtered by a fine cloth. It is given with adjuvants like honey, ghee, sugar, milk and hot water to get cure from diseases.

Pills

Chūranam is ground using decoction and is made into pills in required quantities. It is used depending upon the disease.

Types of oils

Add 4 parts of sesame oil to 1 part of herbs and then mix 16 parts of water with it. Gently boil about 4-8 hours until the water gets evaporated and then filter it. This is one of the types of oil.

These are used as hair oil, massage oil, and also for wounds, ulcers, besides being used as nasal drops.

Oils can be differentiated according to the mukkutram and used.

Like this, other preparations like *manappāku*, ghee, *lēghiyam*, *rasāyanam*, *piṭṭu*, *vadakam*, and *vennei* are also used as medicines.

It is the duty of the siddha doctors to know the basic principles about the herbal medicines, their proper uses and the right choice of the herb with its specific taste in relation to the disease.

The chapter "Medicine" in this book contains a detailed discussion of herbal medicines.

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Metallic Drugs in Siddha Medicine

Alchemy is defined as the branch of medicine which deals with the splitting of a metal into separate particles and making them into a compound by adding another matter to it. Commonly, it indicates the attempt to convert a base metal into gold.

"Vātham keṭṭāl vaidhyam". This saying means a failed alchemist will turn into a good physician. Usually, a good chemist or his followers become good physicians. Alchemy (rasavātham) is considered to be a skilled fine art. The process of making metallic drugs involves melting, sublimation, amalgamation, calcination, etc. It is very clear that siddhars excelled in the art of preparing medicines from the metals. They have explained synergist and antagonist (sathru and mithru) substances. They have converted toxins like mercury and its compounds, arsenic, copper sulphate, etc., into good medicines, removing their toxicity by a special process of purification.

The parpams (calcined powder) and chendūrams (calcined powder red in colour) were prepared from metals like iron, mercury, etc. While the herbal medicinal preparations could be used for a period of one year, metallic preparations are used without loss of potency for many years. One of the great advantages of metallic preparations is that they exert their potency even in very small doses and they are potent enough to treat chronic disorders.

Certain metallic preparations are effective in alleviating skin disorders and pains of various types. Classifications of metals, salts, toxicants, secondary minerals, and toxicity and their managements are described in the following paragraphs.

Minerals (thāthus)

The mineral kingdom is classified into metals, salts, toxicants, and secondary minerals. They are:

1.	Metals	-	11 kinds

2. Salts - 25 '

3. Toxicants - 64 "

4. Secondary minerals - 120 "

Totally they comprise 220 kinds

Metals - 11

l. Gold, 2. Silver, 3. Copper, 4. Zinc, 5. Steel, 6. Iron, 7.Bronze, 8.Brass, 9. *Tharā* (an alloy of 8 parts of copper to 5 of tin), 10. Lead, and 11. Tin.

These metals are further classified into natural metals and synthetic metals.

Natural metals

1. Gold, 2. Silver, 3. Copper, 4. Steel, 5. Iron, 6. Lead, 7. Tin, 8. Zinc.

Synthetic metals

1.Bronze, 2. Brass, 3. Tharā (alloy of copper and tin in the ratio of 8:5)

Natural metals are those metals available in nature. Synthetic metals are man-made alloys of natural metals.

Classification of metals on the basis of their affinity to the five primordial elements (pancha bhūtha ulogankal)

l. Gold - man(earth)

2. Lead - water

3. Copper - fire

4. Iron - wind

5. Zinc - space

Three types of metals

Gold, silver and copper

Five types of metals

Gold, silver, copper, lead and bronze

Seven types of metals

Gold, silver, copper, lead, bronze, thara, iron

Eight types of metals

Gold, silver, copper, bronze, tharā, lead, zinc, iron

Nine types of metals

Gold, silver, copper, tharā, bronze, zinc, tin, lead, iron

Thiri logam

Combination of iron, mica and magnet

Panchalogam

Combination of gold, silver, copper, magnet and iron

Salts -25

Kārasāram or salts are classified into natural salts and synthetic salts. Natural salts are ten. Synthetic salts are fifteen.

Natural salts -10

1. Camphor, 2. Alum, 3. Fuller's earth, 4. Glass-gall 5. Crystal, 6. Borneo camphor, 7. Common salt, 8. *Ponnambar* (a kind of ambar), 9. *Mīnambar* (a kind of ambar), and 10. Foam (from the sea).

Synthetic salts - 15

1. Rock salt, 2. Potassium nitrate, 3.Borax, 4.Copper sulphate, 5. Impure potassium carbonate, 6. Ammonium chloride 7. Compound of salt petre, salt ammonia and common salt, 8. *Egambara sāram*, 9. *Kenthi uppu* (impure chloride of sodium, black salt and salt obtained from sulphur mixed with other ingredients), 10. *Thilam* salt (extracted from sesame plant), 11. Sulphur salt, 12. Nitra glass gall, 13. *Sindhu uppu*, 14. Impure sodium chloride, 15. *Kāsi uppu* (mixture of three salts-fuller's earth, nitre and sal ammoniac).

Classification on the basis of five primordial elements:

l. Kalluppu (crystalline salt) - Earth

2. *Satthi sāram* - Water

3. *Vediuppu* - Fire

4. Alum - Wind

5. Earthen salt - Space

(fuller's earth)

Five salts

1. Common salt, 2. Satthi sāram, 3. Potassium nitrate, 4. Aluminium, 5. Fuller's earth

Toxicants -64

64 toxicants (*pādānams*) are classified into natural toxicants 32, and synthetic toxicants 32.

Classification of five toxicants on the basis of five primordial elements:

1. Yellow orpiment - Earth

2. Mercuric chloride - Water

3. Gowri - Fire

4. Arsenic - Wind

5. Lingam - Space

Let us look into some of the processes of these metallic preparations.

Mezhugu

Classified into two types, viz., araippu mezhugu and surukku mezhugu.

Araippu mezhugu

Araippu means grinding. Araippu mezhugu is prepared by grinding some of the mercurial substances with grocery items or without grocery items using honey, to the consistency of wax.

Surukku mezhugu

Some mercurial substances or toxicants are boiled with herbal juice or medicated oils till they attain a wax form, and then ground in a stone mortar. (E.g.) Aya mezhugu.

Kuzhambu

These are the medicines prepared by boiling certain drugs with herbal juice or grocery items till they attain the consistency of gel. E.g. Sāthi sambīra kuzhambu.

Sublimation

In this process, mercury is ground separately or with mercurial substances. Then common salt and brick powder are mixed and put into a mud pot. Then the above-said mercurial preparation is kept as it is or put into a crucible closed with a slit with holes. Again the brick powder and salt combination is put over that. The mud pot is covered with another pot and sealed with a mud-smeared cloth. The apparatus is placed on an oven for a specific period and specific heat is applied. Then the apparatus is carefully removed from the oven and the substance inside the upper pot is collected. E.g. *Rasa pathangam*.

Chenduram (red calcined powder)

In this process, the main ingredient, a metal or toxicant, is ground by using either herbal juices or some specific solvents. Then it is exposed to heat application. The heat application may be in the form of calcination, burning on an oven or exposure to sunlight. This is done till the preparation turns reddish.

Burning on an oven - Pūrnachandrodhya chendūram

Frying - Ayavira chendūram

Grinding - Chandamārutha chendūram

Exposure to sunlight - Suyamākkini chendūram

Niru, venniru or parpam (powdered form)

In this process, a metal, toxicant or a secondary mineral is ground with the juices of herbs or other medicinal solvents and are made into whitish powder after having been exposed to heat application like *pudam*. Sometimes the heat application is made with a blower.

Colour of parpam

niriruntha paṭika lellaam niramathu veluppē yākum vērintha veluppai yallāmal vēruniram parpamanru kūrinthat thaṅka mātthiram kulam poyyā niramu manjal vārinthap paṭiyē yallāl marrellā maruttut thāmē.

From this verse, it is obvious that calcined gold is yellow in colour while other powders are white.

Kattu

Some toxicants are made into solid matter by treating them in heat adding seinir, drāvagam, leaf juice, mother's milk, decoction, pit oil, milk or honey and tying them up by drawing the strings. Kaṭṭu is also called mātthirai.

Satthu

Substances like magnet, iron powder and secondary minerals are mixed with arsenic and triturated with the white of egg, dried and kept in a crucible and blown for 3 times. To the end product, gold, mercury and sulphur are added and triturated and processed with *pudam*.

Gurukuligai

In this process, mercruy is made to solidify. The shelf life of the above-said medicinal preparations is as follows:

Mezhugu, kuzhambu – 5 years; rasapathangam – 10 years; chendūram – 75 years; Nīru, kaṭṭu, urukku, kalangu – 100 years; Chunnam – 500 years; karpam, satthu, gurukuligai – several years.

These medicines should not be used beyond their prescribed shelf life. The above-mentioned medicines are used as internal medicines. Apart from these preparations, medicines being used for external application are also prepared from metals and minerals.

Urukku

In this preparation, minerals like arsenic or metals are mixed together or their antagonists are added to them. They are put into crucibles and closed by a lid and sealed with mud cloth. Then they are melted using a blower and solidified.

Kalangu

In this process, first mercury is treated in heat using seinir, drāvagam or juice. This is exposed to heat using a blower of charcoal fire till it becomes beady. During the melting stage, gold and zinc are added and preserved after being cooled.

Chunnam

In this process, mercury or minerals like arsenic are either individually or together ground in a mortar using leaf extract, and organic and inorganic solvents, made into balls, dried, put into a crucible closed by a lid, sealed with mud cloth, dried and exposed to heat by a blower, cooled and used.

Karpam

Leaves, roots, metallic or mineral preparations are administered with a prescribed diet regimen, with the dosage of medicine increased or decreased according to prescription.

Some of these are readymade preparations. Some are prepared daily. Readymade preparations are metal and mineral drugs, which are described in *Agattiyar chendūram 300* and in some other siddha literature.

Herbal preparations are described in *Thērar Yamaga Venba* and in some other siddha literature.

Ointment

Some arsenics are powdered along with astringents like *kāycchukkaṭṭi* and then ground with cow's butter.

Plaster

Arsenics are ground using water or leaf extract, then smeared over a linen which is applied to the ulcer for dressing. Ointment and plaster are potent for six months.

Lotion

Some are prepared by soaking the ingredients in water. Some are prepared as decoctions. Some arsenics are ground in water and kept in liquid form. Lotion is used to wash ulcers.

Pessaries

Some arsenics are made into powder, then ground with leaf juice and made into a gel. A linen is soaked in this gel and made into a wick. These are applied to sinuses and intractable ulcers.

Powder

Ingredients like borax or some astringents are powdered and sprayed on ulcers.

Lotion, pessary and powder are potent for three months since the day of preparation.

Paste

Ingredients like resins of dammar tree are mixed with wax or oily products and melted by proper heat application and preserved. They are potent for one year.

Caustics

They are the combination of some toxic drugs used to heal or cause ulcers.

Mercurials

Mercury, mercuric chloride, mercurous chloride, mercuric sulphide (*lingam*), rasa chendūram-all these five mercurials are collectively called pancha sūdham. These mercurials can be modified by the process of purification and then made into parpams and chendūrams and other types of useful medicines to treat various diseases. If they are not properly purified, not properly processed and administered in proper doses, they produce toxicity.

Mercury

When impure or sub-standard drugs of mercury are used or when they are used beyond the prescribed time limit, they may cause toxicity.

Antidote for mercurial toxicity

Any one of the following preparations will be useful in combating the toxicity of mercury:

- Juice of azima tetracantha (vellaimuṭ sangu) or the juice of the leaves of mithippākal
- Decoction of the root bark of Indigofera tinctoria (avuri vērp paṭṭai)
- Decoction of the root bark of sacred basil (tulasi- ocimum sanctum)
- Decoction of root of cynodon dactylon (arugu)
- Burnt reed of bottlegourd (surai-lagenaria siceraria)
- Decoction of acacia nilotica (karu vēlam paṭṭai) is useful as mouthwash
- Decoction of calotropis gigantea (erukku koppulik kudinīr)

Viram (mercuric chloride)

Mercuric chloride is soluble in water, so it will produce toxicity immediately after its intake. This is used in suicide and homicide also.

Antidote for mercuric chloride

The following formulae are useful in combating the toxicity of mercuric chloride.

- Frequent administration of egg albumin being dissolved in water or milk
- Coconut water
- 20 ml of the juice of tribulus terrestris (sirunerunchil) twice a day.
- The paste prepared from the root bark of indigofera tinctoria (nilivērppattai) mashed in hot water.
- 20 ml of the juice of veronia cinerea (neisatti greens).
- Toddy from coconut tree

Pūram (calomel)

It does not dissolve easily in water. Excess intake results in toxicity.

Antidote for the toxicity of pūram (calomel)

- Decoction of curculigo orchioides (nilap panai kizhangu)
- Paste of the bark of Indigofera tinctoria (avuri vēr)
- Juice of sacred basil (*tulasi*-ocimum sanctum).
- Castor oil
- Juice of the leaf of bitter gourd (pākal ilai sāru-momordica charantia).

Lingam (cinnabar)

Improper purification and processing of cinnabar will result in toxicity.

Antidote for the toxicity of lingam

- Nutmeg (myristica fragrans) 4 grams
- Cubeb (piper cubeba) 4 grams
- Bark of the root of red cotton (gossypium arboretum) 4 grams
- Rock-candy 35 grams
- Water 850 ml

The first three ingredients are powdered well to which 850 ml of water is added. This is boiled and reduced by 1/8 basis. Rock-candy is added to this decoction which is administered morning and night.

Sulphur (kanthagam)

Sulphur is not so toxic. But improper purification, processing and prolonged intake may result in toxicity.

Antidote for sulphur toxicity

- Roots of cassia auriculota (āvārai vēr) l part
- Root of gynandropsis gynandra (thaivēlai vēr) l part
- Root of Indigofera tinctoria (avuri vēr) l part
- Dried ginger l part
- Cotton leaves l part
- Mesua nagassarium (sirunāgappū) 1 part

Prepare a decoction and eat it.

Grind lotus seed with tender coconut and take.

Prepare a decoction of piper nigum (pepper), indigofera tinctoria (avuri), cuminum ciminum (cumin seeds), and consume it.

We have seen the toxicity of and antidote for *pancha sūdham*. Like this, the intake of metallic drugs with improper purification and processing would produce toxicity. Antidotes for these things of toxicity are described in our siddha texts.

Iron

Taste-predominantly astringent, to some extent sour and bitter.

Astringency - Wind + Earth = Wind

Sourness - Earth + Fire = Fire

Bitterness - Wind + Space = Wind

Nature - Heat = Fire

Class - Kārppu (pungency)

Since *kārppu* is the manifestation of wind and fire, medicines being prepared from iron are useful in combating *kaba* diseases. When iron preparations are administrated to patients of *vātha* diseases, they have to be combined with adjuvants that could balance *vātha*. Similarly, they may be administered to *pittha* diseases combining with adjuvants potent enough to balance *pittha*.

General property

Iron is an important ingredient of the drugs being administered to treat anaemia, jaundice, leucoderma, dyspepsia, obesity, degeneration, oedema and sluggish liver.

Anaemia

Anaemia is caused due to distorted *kaba*. So anaemia can be treated with iron which possesses the taste of pungency that balances *kabam*.

When anaemia manifests as the disorder of *kaba* and *vātha*, the drugs effective to control *vātha* may be added to iron.

The distortion of *kaba* and *pittham* may also cause anaemia. So when iron drugs are administered in such conditions, drugs effective in controlling *pittha* may also be mixed.

Leucoderma

In this disorder, *vātham* is distorted followed by the distortion of *ayyam*. So when leucoderma is treated with drugs, adjuvants effective in controlling *vātha* may be added to iron.

Oedema

Since ayyam is distorted in this disorder, it will be remedied by drugs containing iron. Oedema is a manifestation of distortion of vātha and kaba. So when iron preparations are used to treat this disease, drugs effective in balancing vātha may also be added.

Oedema may manifest due to the distortion of *pittham* and *ayyam* also. In such cases, drugs effective in balancing *pittha* may be added to iron.

Mantham (sluggish liver)

Mantham is a manifestation of distorted vātha. So when iron preparations are administered, drugs effective in balancing vātha may be added.

Sometimes mantham manifests as a result of distorted vātha and pittha. In such cases, when iron is administered drugs possessing properties to balance vātha and pittha may be mixed with it.

Jaundice

Jaundice is a manifestation of distorted *pittham* and *kabam*. So when iron preparations are administered, drugs effective in balancing *vātha* may be added to them.

Dyspepsia

This is the manifestation of distorted *vātha*. So when iron is administered, drugs effective in balancing *vātha* may also be added.

Conclusion

The greatness of the siddha system is mainly based on metallic and other mineral preparations. If well-processed *parpam* and *chendūram* and other related preparations are administered with appropriate dosage management, they will be useful in curing many chronic and even intractable diseases.

Food

Introduction

Food, along with air and water, is an essential need for human beings. Food, which alleviates human appetite, undergoes certain processing inside the body. In the food passage, it undergoes a series of processes and gets split into micro particles.

Food undergoes certain physiochemical changes for the body to assimilate it, and turns into energy factors for the sustenance of the body. This process is known as digestion. While modern scientists identify these factors in terms of protein, fat, carbohydrate, enzyme, etc., siddha science explains them in terms of taste and its characteristics. The factor which regulates this process in the human body is known as the fire of hunger. Food in the form of energy is being burnt by the fire and sent to the various organs and cells for their upkeep and strength.

The assimilated nutrients are taken in by the cells of the body which are regulated by *prāna vāyu*, *viyana vāyu* and *samāna vāyu*.

Functions of food

- > Primarily, it provides energy to the body.
- > It promotes the growth of the body cells protecting the organism.
- Animals largely take organic items as their food. They contain minerals also.

Traditional food

From ancient days, people have been using sugar, ghee, fat, alcohol, milk, egg, meat, fish and vegetables as their food.

They have assessed the quality of food by their individual properties and their benefits. Every food item is perceived to contain three properties. They are *satthuvam*, *rasatthvam*, and *thamotthuvam*.

Food and bioactivity

Foods contain factors capable of stimulating the bioactivity of the body. The body takes the *vātha* humour from the food by which to perform the functions of *vātha* like running, speaking, etc., as also maintaining the mind and its activities in a balanced state.

Pittha is the humour extracted from food which maintains the body fire (the inherent heat of the body) which is otherwise known as jadarākkini. This body fire is responsible for the bio-combustion of the nutrients in the body.

The food factors which maintain and activate *kaba* humour give shining to the body, mental strength, physical strength, etc. They help promote the lubrication of the joints and thereby facilitate mobility.

The humour of the body, therefore, feeds on the humours contained in food besides giving things like taste. So the food one takes must be fit to maintain a balanced state of *vātham*, *pittham* and *kabam*.

Food and the five basic elements (bhūthas)

Among the five basic elements (*bhūthas*), (*vāyu*-wind; *thī*-fire, *nīr*-water; *man*-earth; and *vin*-sky), *vāyu* derives its strength from the food items which are astringent in taste and separates the *thāthus* of the body.

The element $th\vec{i}$ feeds on food items which are pungent in taste and gives shape to the $th\tilde{a}thus$ created by $v\tilde{a}yu$.

The element mir derives its strength from the sweet taste of the food and it protects the factors created by thi through its moisture.

The element man derives its strength from the sour taste of the food and salt and it modulates the moisture in various tissues of the body and thereby protects them.

The element vin derives its strength from the food factors which are bitter in taste and helps the things developed by vāyu, thī, nīr, and man to expand in their positions.

Various properties of a food item

- 1. Taste
- 2. Essential physiochemical properties
- 3. Affinity with *uyir thāthu*
- 4. Characteristics
- 5. Waste

Among the above factors, except physiochemical factors and waste, others cannot be seen by eyes. But one can perceive them by their functions.

Sweetness - appreciated by the tip of the tongue

Bitterness - felt just behind the tip of the tongue

Sourness - felt by the lateral part of the tongue

Astringency - felt by the hind part of the tongue

Relationship between udal thathus (body humours) and tastes

Astringency - produces blood

Saltishness - promotes growth of bones

Sweetness - helps the growth of muscles

Sourness - promotes growth of fat

Bitterness - helps the development of nerve power and

strength

Pungency - activates salivation and other digestive juices

If salt is moderate in one's diet, it helps digestion and prevents constipation. If it exceeds the limit, it results in skin disorders and expedites greying of hair. If sweet items are taken with moderation, they control the vitiation of *pittha* and help to stabilize the functions of *vāyu*. Sourness in moderation regulates *vāyu*.

Seasons and food

Early dew and late dew seasons - Sweet and pungent food.

Kabam will develop.

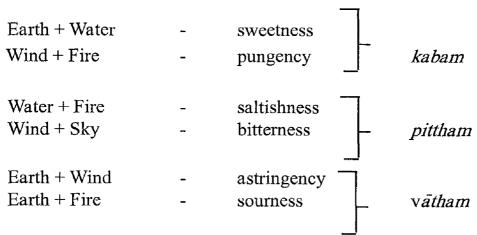
Hot season - Saltish and bitter food items.

Pittham will develop.

Rainy and cold seasons - Sour and astringent food. Vatha

will develop

Relationship between the five basic elements, tastes and the three kuṭrams (vātham, pittham and kabam)



Starch, fat, and pungent items in food are in the ratio of 7:3:2

Daily energy requirement of a man

The energy derived from food is called *sūdu*, *kānkai*, *anal* and *kànal* which all mean heat. The energy provided is measured in terms of calorie. The daily requirement of an individual varies according to age, sex and physical activity.

A man who has no intense physical work requires 2400 calories; additionally, he may need 500 to 1000 calories per day.

Below one year	<u>.</u>	100 calories
One year to 3 years	-	900 calories
3 years to 5 years	-	1200 calories
5 years to 7 years	-	1400 calories
7 years to 9 years	-	1700 calories
9 years to 12 years	-	2000 calories
12 years to 21 years	-	2400 calories

Men

Light work	-	2400 calories
Moderate work	-	3000 calories
Hard work	-	3600 calories

Women

Light work	-	2100 ca	alories
Moderate work	_	2500 c	alories
Hard work	-	3000 c	alories
Pregnant women	-	2100	calories
Suckling mothers	-	2700	calories

Satvic food (or) food with dominant kaba factor

This type of food is available from plants.

Food with rajo (pittha) character

15% of the body is constituted by protein and 65% by water. Animals cannot survive without protein. Protein plays an important role in the growth and development of the body and it helps replenish the tissues. It adds red colour to blood. It plays a role in preventing diseases and healing wounds.

Food with thamo character (vatha items)

Fatty items, items hard of digestion and those items which produce more wind in the gastrointestinal tract and cause lethargy are grouped as food items with *thamōkunam*. As such, they may be taken in moderate quantities.

The following food items contain fat as follows:

Cashewnut - 46.9%
Groundnut - 40.1%
Meat - 18.3%
Egg - 13.3%
Peanut - 5.3%
Milk - 4.6%

The fat present in egg and milk is good since it is easily digestible.

Balanced diet

It is essential that the diet must possess properties that provide strength, energy and resistance against diseases. As such, it must be a balanced diet possessing satthuva, rajō and thamō properties and six tastes at a balanced level.

Some food items and their utility

Greens

Greens are good for the production of blood. They contain vitamins and minerals. To get full benefit from the greens, they must be consumed raw without heating.

Fruits

Fruit items, one or the other, must be taken every day. They include fig, guava, papaya fruit, jack fruit, date fruit, mango, etc.

Nuts

They contain properties to strengthen the body. They have fat and vitamins. After breakfast, one may take almonds, cashewnut, groundnut, and wallnut.

Ghee

Ghee from cow's milk is preferable.

Oil

An adult's daily requirement of oil is 60 ml.

Egg and milk products

One should take at least 240 ml of milk everyday. Taking milk before going to bed is good. One egg may be added to daily routine diet.

Meat and fish

Liver, kidney and fish are rich in energy value.

Sugar

Daily intake of sugar should not exceed two tablespoons.

Beverages

Milk, buttermilk, coconut water and palm juice are good.

Salt

5 grams of salt is sufficient for daily use.

Water

To take at least ten cups of water.

Snacks

Balls of sesame seeds, groundnut and greengram, and unhusked pigeon pea, peanut, garden pea, greengram and chowlee bean are good.

Ailments due to indigestion

Indigestion may cause diarrhoea, dyspepsia, etc. Excessive intake of food results in liver disorders, diabetes, etc.

Food items which are very hot and astringent cause abdominal pain. Items which result in formation of flatulence may cause piles. Items containing pittha properties may cause bleeding disorders, jaundice, fever, etc. Food items

containing kaba properties will cause asthma, fever, bronchitis, laryngitis, wheezing, sinusitis, etc.

Food items which regulate three humours and combat ailments

The vitiation of *vātha* results in constipation, piles, etc. This has to be corrected. Intake of water before retiring to bed will be useful in such a condition. Dried grapes may be soaked in water and taken along with warm water; it will facilitate easy motion in the morning. In the morning, instead of tea, a decotion of coriander, ginger and sugar may be taken in empty stomach.

After lunch, one must take a fruit. Fruits are rich in vitamins. Little quantities of garlic, asafoetida and fenugreek seeds may be added to the dhal for the lunch—which may help to balance the three humours. At the end, buttermilk may be taken which will help good digestion and enhance urine output. This will regulate *pittha*.

Importance of greens

Commonly, greens are rich in iron content. If they are cooked with tamarind, the vitamins are intact. Arukirai is easily available. Sirukirai (amantharus gangalians aticas) is a good laxative. This will reduce the druginduced heat in the body. Sēmpukkirai cooked with tamarind will cure piles. If climbing brinjal (solanum triblobatum) is taken cooked, it will cure kabam. It is rich in calcium. Vallaikkirai will cure diabetes; the leaves of drumstick tree would enhance the power of the eyesight.

Modern food style and its harmful results

Nowadays, people lead a machine life and they take fast foods. Such foods cause indigestion, and dysentery, dyspepsia, etc., will follow in the course of time. The commonly occurring hypertension is attributed to the excessive oil and pungent spices in fast food items. $P\bar{u}ri$, pongal, etc., available in fast food stalls, are hardly digestible due to the mixing of dalda oil. Western food items containing mushrooms and Chinese cuisines are not acceptable to the environment of ours and as a result, many become diabetic patients.

Thirukkura! on food

marunthena vēnṭāvām yākkaikku arunthiyathu aṛrathu pōṛri yunin. (942)

[No need of medicine to heal your body's pain if you eat after digestion.]

arrathu arinthu kataippititthu māralla

thuyakka thuvarap pasitthu. (944)

[Knowing the food digested well, when hunger prompts you with constant care, eat what is suitable and right.]

Things to follow while eating

Before taking solid food, one should take a bowl of water. This will help to wet and lubricate the esophagus. Begin with sweet items, that may be followed by saltish, sour, pungent items, greens, and at the end, curd with sour and astringent things like pickles.

Things to avoid after food

Wash the mouth fourteen times. Take fruits. Take warm water or some other beverages. After this, betel chewers may chew pealed betel leaves. Brief walk is essential after night meals. Hard work, bathing, playing, riding the vehicle, swimming, exposure to sunlight, excessive talk, deep thinking, etc., have to be avoided for one hour after a meal.

Food items which may cause skin allergy

Corn, ragi, green banana, bitter gourd and certain fishes are identified as allergens known to produce skin allergy. It has been accepted in the West too.

Food toxicity

Incompatibility of ingredients, wrong processing and untimely meals may cause food toxicity.

Karpam

Introduction

Medicine in the siddha system is that which not only cures illnesses of body and mind, but also the one which prevents the occurrence of diseases as well as secures against ageing and helps to keep the body young and beautiful.

Karpam or rejuvenating medicine is classified as one among the 32 types of internal medicine, which is described as follows:

Certain varieties of leaves, roots or any other raw drugs, or metallic and non-metallic preparations or any other salts and extracts of these substances are to be consumed as prescribed in doses of increasing or decreasing order and for specified duration with necessary restrictions of diet and living habits.

There are two varieties in this. Certain rejuvenating medicines have to be prepared everyday and consumed immediately. Certain other rejuvenators have to be prepared in such other forms of medicine that they, once prepared, can be consumed for a number of days. Herbal medicines from leaves and roots have to be prepared daily. Metallic and mineral preparations can be used for more number of days.

A verse from a siddha text describes the uses of karpam as follows:

karpatthai yunṭāl kāyam azhiyāthu karpatthinālē kānalām kayilaiyai karpatthinālē kānalām sōthiyai karpatthinālē kālaiyum kaṭṭiṭē.

[On consuming karpam, body will not decay; With the help of karpam, we can see Kayilai, the abode of Siva; With the help of karpam, we can see the divine light;

With the help of karpam, circulation of air in the body will be regulated.]

Hence rejuvenative therapy not only secures the body against illness and ageing but also helps us realize the Omnipotent.

The purpose of birth is to realize and reach the Omnipotent. It will take a long duration of time and age to realize and reach Him. Till such time, one should keep the body protected from destruction. For keeping the body healthy and free from decaying, siddhars have explained several ways and means, which constitute the rejuvenators.

uṭampār azhiyin uyirār azhivar thiṭampaṭa meygngnānam sēravum māṭṭār uṭampai vaḷarkkum upāyam arinthē uṭampai vaḷartthēn uyir vaḷartthēnē

-Thirumanthiram-724

[When body gets destroyed, the life force gets destroyed.

It will not promptly reach the Omnipotent, the real thing.

After knowing the ways and means to keep the body fit

People will nurture the body well and nurture the life force properly.]

Siddhars and their rejuvenating herbs

Different siddhars took different types of herbs for rejuvenation. They are as follows:

Tirumūlar - Eclipta alba (karisālai)

Kālānki - Spaeranthus indicus (karantai)

Ānanta Nāthar - Carum rozburghianum (bishop's weed)

Kōrakkar - Cannabis sativa (kanja)

Sivayōgi - Eclipta alba (*karisālai*)

Rāmadēvar - Black phyllanthus emblica (karunīli)

Vāmamuni - Coldenia procumbens (seruppatai)

Konkanar - Wedelia chinensis (porkaiyān)

Patānjali - Coldenia procumbens (seruppaṭai)

Bōkar - Corallocarpus epigaeus benth

(kollankōvai)

Maccamuni - Centella asiatica (vallārai)

Rejuvenators: a classification

Rejuvenators prevent decay and destruction of the body and also help its healthy growth. In this healing, siddhars have explained not only medicines having the action of rejuvenation, but also the methods of rejuvenating the mind like good thoughts (iyama), good deeds (niyama), breathing exercise (prānāyāma), controlling of all the five senses (dhāranai), concentration of mind or meditation (dhyānam), and becoming one with the Almighty (samādhi). Yōga exercises have also been included here to keep the muscles and different organs of the body in good condition.

As such, rejuvenators have two major classifications in general. They are rejuvenating medicines and rejuvenating yoga methods. Rejuvenating medicines are further classified into two. They are rejuvenating medicines of general nature (pothu karpam) and rejuvenating medicines of special qualities (sirappu karpam).

General rejuvenating medicines are consumed by healthy persons to keep the body tissues and organs free from decay and destruction and to maintain their functions properly without any abnormalities. This type of rejuvenators enhances the strength and youthfulness of the body. It prevents greying of hair (narai), shrinking of skin (thirai), and ageing (mūppu). Lifespan can be prolonged.

Rejuvenating medicines of special qualities cure the illnesses caused by the defective functioning of the seven types of body tissues (*udal kaṭṭukaṭ*) and three vital forces (*uyir thāthukkaṭ*) and then give strength to the body.

Rejuvenating medicines: another classification

According to the nature of raw drugs used in rejuvenating medicines, they are classified into three:

- 1. Rejuvenator from herbal drugs
- 2. Rejuvenator from metal and mineral substances, and
- 3. Rejuvenator from animal products.

Rejuvenators from herbal drugs are again classified into two varieties. One is the rejuvenating medicines prepared from single herbs. Another type is the medicines which are prepared from combinations of several drugs. They may be in the form of powder (*chūraṇam*) or jamlike medicine (*ilagam*) or in the form of sticky blackish powder (*rasāyanam*), etc.

Rejuvenators of metal and mineral origin will be prepared in the form of calcined medicines like *parpam*, *chendūram* and *chunnam*.

Herbs of rejuvenating nature are 108 in number according to siddhars. Karuvūrār Vātha Kāviyam is the work which explains these 108 herbs. The other siddha works in which rejuvenating herbs are dealt with are Tēran Yamaga Venbā, Bōgar Karpa Vithi, Thirumūlar Thirumanthiram, Tēran Karical, Tēran Kāppiyam, Saṭṭai Muni 100, etc.

In these works, the names of the rejuvenating herbs, their methods of preparation, uses and all other necessary details are well explained.

Rejuvenating effect of black-coloured herbs

Black varieties of certain herbs do have very good effects of rejuvenating action. Some of them are:

karuntulasi - Black ocimum basilicum

karunocchi - Gendarussa vulgaris

karuūmatthai - Datura discolor

karuvizhi - Black stroemia tertrandra

karunelli - Phyllanthus reticulatus

karumaruthu - Shorea robusta

karuppu sitthiramūlam - Plumbago auriculata

Ordinary herbs can be grown as black varieties and their rejuvenating effects can be increased. In siddha literature, the process of doing this is described.

Cērānkoṭṭai (semicarpus anacardia) is a nut used for rejuvenation. When this nut is used as manure for growing other herbs, the latter will attain black colour.

The marking nut (semicarpus anacardium) should be cut into small pieces and put into a pit of one foot deep in the ground and closed with mud. Water should be poured regularly in the pit so that it always remains wet. Within 3 months the nuts get decayed and absorbed by the walls. The soil in that place becomes dark. At this stage, the root portions of *arukan* grass (cynodon dactylon) should be planted in that area and water should be poured. *Arukan* grass will grow over-luxuriantly within a period of six months. The area is then dug after pouring water to the plant. In the seventh month, the plant will get mixed with the soil very well. In such a type of soil, if we sow the seeds of any plant or herb, it will grow as a black variety. If we put cut pieces of marking nut in the pit, we can sow the seed within three months. If we put the whole nuts, the sowing of seed should be done only after a period of 7 months.

In this cultivation process, the following herbs can be grown:

1. Avuri - Indigofera tinctoria

2. Karisālai - Eclipta alba

3. Karāntai - Spaeranthus indicus

4. Vallārai - Centella alba

5. ciruceruppațai - Glinus lotoides

6. Katrāzhai - Aloe indica

7. Nilappaṇai kizhanku - Orchioides gaetin

8. Kollan kovai - Corallocarpus epigaeus benth

9. *Tulasi* - Ocimum basilicum

10. Sivanār vēmbu - Indigofera aspalathoides vahl

11. Kotivēli - Plumbago zeylanica linn

The black colouration of plant will be obtained slowly. In the first yield, the black colour will be one fourth. In the second yield, it will be half. In the third yield, it will be three fourths; In the fourth yield, it will become complete black. 10 to 12 feet deep pit may be dug and may be filled with marking nuts and then closed with mud. In this processed soil, *karunocchi, karunelli*, black *kanja*, and *karunkoṭivēli* can be grown.

When to take rejuvenation medicine and its effects

When rejuvenation therapy is done to children in their childhood years, they will maintain the same childlike appearance throughout. If it is taken in adolescent age, the same will be maintained. If it is done at the age of 50, the person will become young as if in the age of 16 years. If it is done at the age of 80, the person will not become further old and maintain the same condition.

Dietary restrictions to be adopted at the time of rejuvenative therapy

In *Bōgar Karpam 300*, the rules and regulations to be followed are explained as follows:

While consuming rejuvenators, tamarind, salt, oil, alkali substances, undesired animal flesh, fish, buttermilk, mustard, very spicy food, asafoetida, sexual union, excessive sleep and remaining lazy should be avoided. Breathing exercises and meditation should be done.

A small meal cooked with milk and ghee may be consumed, as a one time meal in a day. Greengram, fruits and honey may also be added. As for meat, chicken, mutton and the flesh of deer, quail and partridge may be taken.

If there is any compulsive need to take salt, consolidated salt (*uppu kaṭṭtu*) may be taken.

As already stated, tamarind should be avoided. Instead of tamarind, pulivārai (yellow wood-sorrel-oxalis corniculata), sīyakkāy kozhuntu (tender leaves of soap pod wattle-acacia sinuata), gooseberry, and pacalaikkīrai (purslane-portulaca, quadrifida) may be added. Bean varieties, tender coconut, sugar cane and cold water should be avoided.

The method of chewing thampulam (betel and areca nut)

For making thāmpūlam, the chunnam (alkali powder) of karpūra silājat (asphalt mineral pitech), alkali powder of pavalam (coral pavala chunnam), alkali powder of cippi (cippi chunnam, pearl shell), alkali powder of egg shell (muttai ōtu chunnam) can be used.

The method of taking bath

Cow's ghee can be used for taking bath, for application on the head and body during the period of rejuvenation therapy. Once in 15 days, this special bath should be taken. Greengram powder may be used in the place of soap while taking this bath.

Pancha karpa vithi (Process of fivefold rejuvenators)

Pepper, turmeric, dried gooseberry, *kaṭukkāy* (gall-nut-terminalia chebula) and seeds of neem should be taken in equal quantities and ground with black cow's milk and made into a paste. It should be applied over the head. After 20 minutes, hot water bath should be taken. Once in 15 days, this type of bath should be taken.

Vazhalai Vangal (removal of toxicity material from the throat)

Cow's ghee and the juice of eclipta alba (karisālai) should be mixed together. The mixed oil should be taken on the forefinger and applied on the upper portion of the uvula and the throat. By this application, the kaba which gets accumulated abnormally in the throat and sinus area of head will be removed. On removal of this kaba, the entrance of suzhumunai (a channel running in the middle of the body) opens and the mathiyamuthu (elixir of life) will secrete from the central portion of the head and come to the throat. When this elixir of life is consumed, the body will get rejuvenated. This elixir is called yōga muppu. Since consumption of yōga muppu or elixir of life is an important aspect of rejuvenation, the opening of the entrance of suzhumunai is considered an important thing in the rejuvenative therapy.

Malam kazhatral (removal of sticky old faeces)

Removal of prolonged sticky faecal matter from the walls of rectum and large intestine is called *malam kazhaṭral*. For this, castor oil should be taken on the ring finger and applied inside the anus. The finger should be rotated in the anus in such a way that the old sticky faecal matter comes out. The toxic $\bar{a}ma$ factor in the intestine will get removed by this procedure.

Rejuvenating the eye by anjana application process

During the time of rejuvenative therapy, some ointment-like preparation (anjanam) should be applied over the eyes. This procedure is described in Bogar's treatises.

Red type of terminalia chebula (*ceńkaṭukkāy*) should be burnt and its carbon of one *pagōda* weight should be taken. Copper sulphate should be heated in a well- sealed mud pot and then powdered. The powder of one *pagōda* weight should be taken. Then *cāmbirāni* (styrex benzoin) of one *pagōda*, *anjanakkal* (antimony) of one *pagōda* and butter weighing one *palam* (35 gm) should be taken. All the above things should be put in a copper vessel and ground. Again one *palam* (35 grams) butter and one *pagōda* (4.2 grams) *kōrōjanai* (cow's bile) should be added to the above paste and ground well for about 6 hours. This ointment then should be put in a container made of the horn of bull. The ointment

should be applied to the eyes externally (anjanam), both morning and evening of the day for a period of one year.. By this process, eyes get beautified and glittering.

Rejuvenation through nose by snuff application process

The roots of *sunțai* (solanum trilobatum) should be dried in the shade and powdered. The powder should be filtered through a thin cloth in order to get it in a nice form. This should be kept in containers made of coconut shell. A pinch of this powder should be inhaled through nasal cavities. By this process, the dirty particles accumulated on the nasal mucosa will come out along with mucus. Since the sinus gets cleaned, the *suzhumunai nādi* will get opened. The six *āthāras* (nerve plexuses) will perform their functions perfectly. At the time of medication, we can see the light of the cosmos in between the eyebrows.

The names of certain herbal rejuvenators described in siddha literature are given below:

Theran Maha Karisal

örithazh tāmarai karpam		-	hybanthus enneaspermus
pepper	"	-	pipper nigrum
dried ginger	**	-	dried zingiber of ficinale
cardamom seed	"	-	eletaria cardamomum
cumin seeds	**	-	cuminun, cyminun
ginger	"		zingiber of ficinale
cow's thorn	**	-	tribulus serrestris
gall-nut	"	-	terminalia chebula
cloves	"	-	syzygium aromaticum
jujube	"	-	ziziphus manuritiana,
			Zizyphus jujube
emblic myrobalan	**	-	phyllanthus emblica
dried ginger,pepper,	**		
long pepper		-	dried zingiber of ficinale
			pipper nigrum
			pipper pungum

chilli

-			
sivan vetri (thumpai camūlam) karpam-			karpam leaves aspera
banyan aerial roots karpam		=	fieus benghalensis
purple Indian water lily	**	-	nymphaea alba
mountain neem	***	-	melia azebarach
vilvāthi	"	-	aeglemarmelos
2. Thēran Kāppiyam			
dried ginger karpam			dried zingiber of ficinale
cumin seeds	"	-	cuminun cyminum
mustard	"		mustard
garlic	**	***	allium sativum
sweet flag	"	-	aeorus calamus
jujube	"	-	ziziphus jujuba
poṇṇānkāṇṇi	29	-	alternanthera, sessilis
bitter lime	"	-	curcuma zedoaria
pomegranate	"		punica granatum
climbing brinjal	"		solanum trilobatum
wild lime	"	-	citrus aurantium
lemon/lime	"	-	citrus limon
atthi	73	-	ficus glomarata
nunā	"	-	movinda tinetora
black nightshade	"	u	solanum nigrum
Indian pennywort	33	-	centella asiatica
mūkkiraṭṭai	"	-	boerhäbia, diffusa
sarsaparilla	"	_	hemidesmus indicus
ātonṭai	>>	-	capporis, zeylanica
sunțai	77	-	solanum torrum

amaranthus gangeticus

mango	karpam	_	fruit of mangifera indica
<i>caṅkam</i> barks	***	-	bark of azima tetraeantha, fam
Indian beech	25	-	pongamia pinnata merr derris indica
white crab's eye	97	-	white Aloe barbadensis, mill
azhincil	77	-	alangium salvifolium, wang
thavasu murunga	ai "	-	rungia parviflora nēs
cāranai	95	-	trianthema decandra
kuppaimēni	,,	-	acalypha indica
cow's thorn	,,	_	tribulus terrestris
nilāvārai	77	_	cassia senna
kīzhānelli	>>	-	phyllanthus amarus
basil	>>	_	ocimum basilieum
clearing-nut	"	-	strychnos potatorum
wood-apple	,,	-	limonia acidissima
kalā	"	-	carissa carandas
maruthu	***	-	terminalia arjuna roxb
jaumoon	22	-	syzygium cumini, skēls
vishnu karantai	"	-	evolvulas alsinoides
verpēnthi	"	-	sida acuta (pon musuttai)
ōrithazh tāmarai	, ,,,	u-	tonidium suffrutiocosum, ging
karisālai	"	-	eclipta alba
malabar nut	**		justicia beddomei, bennet
cardamom	>>	<u></u>	eletaria cardamomum
paranki chakkai	, ,,	_	smilax china
cloves	***	-	syzygium aromaticum
coriander	55	-	coriandrum sativum
bishop's weed	***	-	trachyspermum voxburghianum
			craib

ginger " - zingiber officinale
emblic myrobalan " - phyllanthus emblica
gall-nut " - terminalia chebula

Thēran Yamaga Venbā

yarcum karpam azhincil, citheviyar cenkazhunir karpam ginger, honey paddy flour, ghee kizhānelli, Indian hemp, bottle gourd, karcchūr karpam gall-nut karpam jaumoon karpam tārottam karpam cumin seeds karpam banyan milk karpam yellow wood sorrel karpam nocchi karpam vallai creeper karpam mūkkirattai karpam Indian acalypha karpam climbing brinjal karpam ponnānkāni karpam sērānkottai karpam neem karpam palm *karpam* clearing-nut karpam aloe karpam emblic myrobalan karpam õrithazh tāmarai karpam

cardamom karpam

basil karpam

black nightshade karpam

bael karpam

wood-apple karpam

vātkōrai karpam

kitti kizhanku karpam

tuber of bulrushes karpam

amukkāra kizhanku karpam

vālai karpam

kānān karpam

sirukirai karpam

potato karpam

sarsaparilla karpam

utthāmani karpam

banyan karpam

āyilpaṭṭai karpam

kalippirattai karpam

lemon karpam

lotus karpam

piramatantu karpam

kalyāna pūsani karpam

kāmēshwara karpāvizhtham

Sattai Muni 100

gall-nut karpam

pepper karpam

karantai karpam

gulancha karpam

100 year old neem karpam
Karisālai, Indian acalypha, seruppaṭai karpam
sivanār neem, vāluzhuvai karpam
climbing brinjal karpam
anṭa karpam

Bogar Karpam 300

gall-nut karpam varikkumari karpam pepper karpam sivakarantai karpam venkarantai karpam karunkarantai karpam kottai karantai karpam sivappu karantai karpam vishnu karantai karpam vellai vishnu karantai karpam sun-flower karpam ōrithazh tāmarai karpam vițattalaivēr karpam gulancha karpam neem karpam black neem karpam sarkarai neem karpam porralai kaiyān karpam karu karisālai karpam kilimūkkumaram karpam sivanār vēmpu karpam

white climbing brinjal (tūtulai) karpam
pirammi karpam
kalpirammi karpam
emblic myrobalan karpam
karunelli karpam
karpūravilva karpam
palāsu karpam
white nīrmulli karpam
sennāyuruvi karpam
black basil karpam
karuvīzhi karpam

Karuvūrār Vātha Kāviyam - 700

kuzhal ātantai karpam

kumari karpam
azhukanni karpam
nākatāli karpam
Indian pennywort karpam
pākusivāyvilānkam karpam
long pepper, vāy viṭanga karpam
jackfruit nut oil extract karpam
kīzhānelli karpam
climbing brinjal karpam
kaiyān karpam
nāru karantai karpam
wild bottle-gourd karpam
neem karpam
neem karpam

vēnkai tree karpam jõthipul karpam sāyāviruṭcham karpam karunelli karpam

The herbs above have to be consumed in the proper way as prescribed in the literature. If done so, the said benefits can be gained.

Yoga aspect of rejuvenation (karpa yogam)

Yoga is the term derived from the word yug which means union or combining together. There should be concentration of mind without having any distraction from the five sense organs. The main aim of concentration should be to reach the Almighty. Siddhars even while living in the world were able to unite with the Omnipotent. This way of practice is called yoga.

Yoga -types

1. Yoga by karmam or the deeds of the individual (karma yoga)

Performing deeds without expecting any benefit is called *karma yōgam*. Work is worship. This is emphasized in a proverb: Work is as important as eyes for an individual. The individual visualizes the Almighty by his routine work itself. This type of *yōga* is commended in *Bhagavat Gita*.

2. Yōga by prayer (bakthi yōga)

It is to relieve the life force or anmā from the body and get it united with God through regular prayer.

3. Yōga by intellectual power (gnāna yōga)

To get united with God by one's intellectual power or wisdom is known as *gnāna yōga*.

4. King of yogas (rāja yoga)

One who practises steps of yoga starting with universal moral commandments (iyama) by one's deep concentration of mind raises the serpent power, which is lying dormant in mūlāthāram, which passes through the nerve plexes of the spinal cord, and brings it to the place called sahasrārttham in the

head, where the elixir of life (*mathi amuthu*) is secreted. By this practice, he consumes the elixir of life and achieves self-realization also. This type of practice of yōga is called king of yōgas or rāja yōga.

The eight steps of rāja yōga are as follows:

- 1. Universal moral commandments (iyama)
- 2. Self-purification by discipline (niyama)
- 3. Postures (āsana or āthana)
- 4. Rhythmic control of breath (prānāyāma)
- 5. Withdrawal and emancipation of the mind from the domination of senses and exterior objects (*pratthiyākāra*)
- 6. Concentration (dhāranai)
- 7. Meditation (dhyāna)
- 8. Samāthi A state of super-consciousness brought about by profound meditation in which the individual aspirant becomes one with the object of his meditation, *Paramāthma* or the Universal Spirit

The first three stages, *iyama*, *niyama* and *āthana*, are open or external practices.

The next two, *prānāyāma* and *pratthiyākāra*, pertain to the practice of respiration and control of mind. Hence they are called inner or internal practices.

The last three stages, *dhāranai*, *dhyānam* and *samāthi* speak about the life force or *ānmā* which tries to unite itself with the Omnipotent. Hence these three are called inner *ānmā* practice or *antharāthma* practice.

The details about these eight steps or stages of *rāja yōga* are well explained in Tirumūlar's *Thirumanthiram*, in chapters *Samāthi pātham*, *Sāthana pātham*, *Vipūthi pātham* and *Kaivalya pātham* of *Yōga Sūtra*. *Thirumanthiram* (552) says:

Iyama, niyama, ennilā āthanam Nayamuru prānāyāmam, pratthiyākarām Sayamiku hāranai dhyānam samāthi Ayamurum aṭṭānga māvathu māmē. [Iyama, Niyama, and Asana numberless Pranayama wholesome and Pratyahara alike, Dharana, Dhyana and Samadhi to triumph— These eight are the steely limbs of Yoga.

Pathanjali Siddha in his Sāthanapādham, stanza 29, states as follows:

Yama niyama āsana prānāyāma pratthiyā hārahārana dhyāna samāthayō.

By the practice of rāja yōga, one can raise the serpent power from mūlāthāram—a place in the lower part of spinal cord—and consume the elixir of life (mathi amudhu) secreted in the central portion of the head. By this practice, one achieves the goal of self-realization which is the supreme happiness. Hence this practice of yōga is included in rejuvenation.

Siddhar Sivavākkiar says as follows:

mūlanāṭi thannilē muļaitthezhuntha jōthiyai nālunāzhi ummuḷḷē nāṭiyē yirunthapin pālanāki vāzhalām parampiramma mākalām ālamunta kantarānai ammaiyānai unmaiyē

[The serpent power arising from mūlāthāram, Which is kept inside the body by practice, Keeps the youthfulness and achieves self-realization. This is true by God's promise.]

Siddhar Bathragiriyār laments:

āru āthāram kaṭantha ānanthap pēroliyai pērurukak kantu perriruppa thekkālam

[The brightest light which gives ultimate happiness Obtained after passing through six āthāras

Is to be seen by everybody – but when?]

Apart from rāja yōga, exercises pertaining to the body are explained in a literature called *Haṭayōga Prathipikā*. Though king of yōga and physical discipline (haṭayōga) are two variants, since the body and life force are essential to reach the Almighty, both of them will help if practised together.

Life force lives in the physical body. The Almighty which is the cause and effect of life force also lives in the body. When the physical body dies, the life force also goes. So it cannot unite with the Almighty. Hence it is essential to keep the physical body fit enough to keep the life force inside the body.

Yōga is the oldest form of meditation, the practice of controlling the mind. In a seal obtained from Mohanjadaro excavation, the statue of a sage sitting in yōgamudra āsana is seen. There are many pieces of information about yōga in Vedas and Upanishads. Even in the Jain and the Buddhist philosophies, yōga and meditation are a routine practice. More details about rejuvenation and yōga are given in Siddha Medicine Vol III.

Dr K. Rajeswari

Muppu

Introduction

Muppu is a substance which is formed by blending salts of the three basic elements (bhūtham), viz., wind, fire and water. It is considered a rejuvenating medicine. Muppu prevents ageing process in body. Muppu is considered a great medicine obtained from fuller's earth called vazhalai.

Classification of muppu

The medicines to which *muppu* is added will have great potency. This type of *muppu* is called medical *muppu* (*vaidhya muppu*).

The *muppu* which converts base metals into higher metals like gold is called chemical *muppu* which is related to iatrochemistry. Mastery of this discipline is one of the great achievements of the siddhars.

The third type of *muppu* is called *yōga muppu* which is to be obtained by *rāja yōga*, a supreme kind of *yōga* practice. *Yōga muppu* is called elixir of life (mathi amudhu). This muppu can be obtained by arousing the serpent power which lies at mūlāthāram and passing it through other āthāras or nerve plexus known as swāthiṭṭānam, manipūrakam, anāgatham, visuddhi and āgnai and making it stay at sahasrārttham, a place at the centre of the head. By this process, elixir is secreted at that place. This is called *yōga muppu*. When this elixir after secretion goes to mouth, it is consumed as food. If this food is made available

for consumption, nothing else is needed to our body. It comes to be used as food and rejuvenating medicine and prevents death.

There are many other secretions in the body which help to prevent death and decay of the body.

Secretion of elixir

There are certain secretory organs in the body which secrete certain forms of elixir. These secretions, when secreted in the body in proper form and quantity, will help the growth of tissue, prevent decay of tissues and keep the body young throughout and ensure longevity of life. These glands are the equivalents of ductless glands spoken of in modern science. These are the glands which prevent ageing process if properly maintained.

The functions of these ductless glands can be regulated by breathing exercise. These glands protect the body and the life force. Thirumular says:

udalir kiṭantha uruthik kudinirk kadalir sirukinaru ērramiṭṭā lokkum udalil oruvazhi onruk kiraikkil nadalaip patāthuyir nātalu māmē.

-Thirumanthiram-845

[The powerful secretions in the body
Are like waters drawn from a well;
If the secretions are directed in ways prescribed,
The life force will be protected from any danger.]

irāru kālkon tezhuntha puraviyaip pērāmal kaṭṭi perithuna vallirēl nirā yiramum nilamāyi ratthānṭum pērāthu kāyam pirān nanthi yānaiyē [The horse of air with twelve legs

When controlled and consumed

Will jump over thousands of feet in land and water;

Body will not get decayed; it is a promise on God Nandhi.]

The secretions and hormones of ductless glands control the functions of important organs of the body like brain and nerve cells and also the heart. At the time of ageing, connective tissues form in the vital organs and other important organs of metabolism, because of which the activities in these organs get reduced and symptoms like dementia appear. According to Thirumūlar, only when the cells of organs of higher functions are not reduced in numbers will the body be free from destruction.

The cells of ductless glands perform higher functions in the body. These cells are therefore called cells of higher status. From these cells of higher status, a type of muppu called sivakkudilai nir is secreted. This muppu controls the metabolic activities of the body. It also controls the functions of the nervous system. The muppu or hormones of pituitary, thyroid, para thyroid and adrenal glands and the secretions of sex organs are the causative factors of many modified activities in the body. According to Thirumūlar, the functions of these organs must be properly maintained and the hormones properly secreted throughout life. Then the body will always be young and energetic. Consequently, the life force in the body will be free from danger. Ageing will not occur.

Thirumular observes that the eight steps of yoga (attanga yogam) including breathing exercise will help to achieve this:

uļļatthin uļļē uļapala thīrtthankaļ mellak kuṭainthu ninrāṭār vinaikeṭap paḷḷamum mēṭum paranthu thirivarē kaḷḷamana muṭaik kalviyi lōrē [Many holy secretions are available inside our body; Not utilising them properly spoils the regular activities, Causing many ups and downs and purposeless wandering— These are people ill-minded and unlettered.]

vīra marunthenrum vinnōr marunthenrum nāri marunthenrum nanthi yaruļseythān āthi marunthen rarivār akaliṭam jōthi marunthithu solla vonnāthē

- Thirumanthiram - 850

[Medicine of high potency and medicine for godly people, And medicine of good origin blessed by Nandi– It is known as the foremost medicine.

It is like a light of lamp and no words to praise.]

thelitharum inthac civanīr parukil olitharum ōrāntil ūnamon rillai valiyurum eṭṭin manamum oṭuṅkum kalitharum kāyam kanakama thāmē

- Thirumanthiram - 846

[If the *sivanir* of clear nature is consumed
Brightness comes within a year with no harm or side effects;
Concentration of mind will occur.
The body will be like gold.]

Here *sivanīr* means the secretion called *mathi amudhu* or elixir of life. It can be obtained by *rāja yōga*. Sivavākkiar, another siddhar, states that it can be obtained by breathing exercise:

uruttharittha nādiyil oṭuṅki ninṛa vāyuvai
karutthināl irutthiyē kapāla mēṛra vallīrēl
viruttharum pālarāvar mēniyum sivanthiṭum
arultharittha nātharpātham ammai pātham unmaiyē

[If the air lying dormant in mūlāthāram or uruttharittha nādi
Is raised to head by concentration of mind,
Old men would become young and the body
would become bright and red:

It is a promise on Siva and Pārvathi.]

Thirumular confirms this:

ēṣṣi iṣakki irukālum pūrikkum kāṣṣaip pitikkum kanakkaṣi vārillai kāṣṣaip pitikkum kanakkaṣi vāļarukku kūṣṣai uthaikkum kuṣiyathu vāmē.

- Thirumanthiram - 571

[The air wanders in inspiration and expiration;
Nobody knows the how of utilizing or catching the air.
For those who know the way of catching the air
It would be the sign of preventing death.]

There is again Avvaiyar's averment:

ūru mamirthatthai yunṭiṭap pārkkil kūrum pirapparuk kalām .

- Avvaik kural

[If the elixir of life secreting in the head is consumed Rebirths can be prevented.]

Thirumanthiram states that there is a place at the top at suzhumunai where the elixir of life (mathi amudhu) is secreted. This elixir tastes saltish and sour. It will be like milk, honey and ghee. When it secretes, the body will reach its perfectness (siddhi).

unṭanir unakkuļ pāynthiṭil sanṭanillai sākkāṭeythuvathillai.

- Gnānavettiyān

[The elixir consumed passing inside the body,

There is no disturbance or disease in the body and no death.]

The method of raising the serpent power from lower end of spinal cord (mūlāthāram) is called anthidhāranai. Through this practice, yōga muppu can be enjoyed.

Avvaikkural puts it thus:

sūriyan kaṭantha suṭaroliyaik kanṭāl maranam pirappillai viṭu.

[The light which is brighter than the sun, If seen, there is no death and no rebirth And self-attainment is achieved.]

The elixir of life or *mathi amudhu* is called by other names like *karavāp* pāl, kāyāppāl and *amirtham* by the siddhars. Rāmalinga Adigal observes that one should always have the appetite to eat this elixir. Here is what he says:

"Do have the appetite (pasitthiru)". One who consumes this elixir would be free from disease. He would have a light and soft body like the stem of lotus. He would lead a prolonged life, says Sivayōgasāram.

Kudhambai Siddhar describes the elixir of life as mango milk:

mānkāyp pāluntu malaimēliruppōrukkuth thēnkāyppāl ēthukkaṭi - kuthampāy thēnkāyppāl ēthukkaṭi. [Mango milk is there for those who are given to high order of life. No need of coconut milk for them.]

Uses of muppu

Though siddhars have practised and described yoga muppu and muppu secreted in the body elaborately, they have talked about vaidhya muppu also, that is muppu used in medical practice.

In the preparation of medicine, this *muppu* is used in preparing calcined powders like *parpam*, *chendūram* and *chunnam* from inorganic materials in an easy and guided manner. The potency of medicines prepared with the help of this *muppu* will get increased. When this *muppu* is given along with other medicines, the given disease will get cured quickly. When this *muppu* is consumed alone, it will act as a rejuvenative medicine, by which one can lead a healthy life and will be freed of ageing process.

Bogar 7000 speaks about this muppu as follows:

vaļamutanē muppuvaik kanṭapōthu
vākuṭanē yēmatthuk kuruthiyāccu
vaļamaiyuṭan vayitthiyamum vāthayōgam
palikkumaṭā muppuvin mārkkatthālē
iļamaiyuṭan mūppakalu muppuvālē
ezhiluṭanē nīyumoru sitthanāvāy
naļapathiyum muppuvai unṭapōthu
naraithirai mārrumallō irāsanāmē.

[When muppu is found out effectively

It is certain about perfection of immunity;

Effective practice of medicine and alchemy

Can be achieved by the way of this muppu.

Youthfulness is maintained and ageing gets arrested by this muppu.

You will become a siddha with handsome appearance.

Even King Nalan took this muppu in his accursed state

His ugly form with greying and shrinking

Got changed, he became the good-looking king.]

thiyccaluṭan uppukku thiṭcai seythu thiṛamutanē kāyatthuk kuruthi pannu pāyccaluṭan muppuvaith thinṛāyānāl pāṅkuṭanē thēkamathu iṛukunthānē.

[Get the salt processed with heat,

Get the body strong and fit;

When muppu is consumed with full effort and confidence

Body and tissues will get tightened in a perfect manner.]

Kākapusundar speaks about this muppu as follows:

āccaṭā udampiluḷḷa viyāthiyellām anuppōla unṭiṭavē paranthupōkum vāccatā thēkasitthi athikamāccu.

[Of course all the diseases in the body Flee away when an atom of *muppu* is consumed; Rejuvenation of body gets increased.]

nērappā anuppõla sarakkukkelläm niccayamāyp pūsiyunthān pudatthil pōtu vīrappā nīgumaṭā navalōkanthān vēthaiyakanga vitthaiyellām kaikkuḷḷāccē.

[Even for atom-like substances

Apply over them perfectly and put them for heating in pudam;

All the nine metals will get calcined effectively,

The technique of alchemy gets achieved.]

Like medical *muppu* which is useful in medical practice, the *vātha muppu* (alchemy *muppu*) is useful in converting the baser metals into higher metals like gold. This alchemy *muppu* will be used in rare preparations of high chemical reactions like *kazhangu* and *urukku*.

Other forms of muppu

Siddhars had different schools of thought with regard to preparation of medical and alchemical *muppu*. Different substances were started to be used in such preparations. They were as follows:

- ❖ Properly processed fuller's earth (pūnīru) alone is called muppu.
- Urea (amuri), rock salt (kalluppu) and potassium nitrate (vediuppu) in a mixed form is called muppu.
- * Muppu is a substance obtained from the cranium (skull) of the first child.
- ❖ Muppu is obtained from amniotic fluid mixed with some other substances.
- Muppu is obtained from the distilled oil of excreta with perchloride of mercury (viram).
- * Muppu is the one which is obtained from egg shell and from andakkal (a stone which falls from the sky).

The following term are seen interspersed in the siddha original literatures describing *muppu*. The meanings of these words are described in different ways by different siddhars. Only when the correct meanings of these words are known can the correct form of *muppu* be prepared.

pūnīru, vazhalai, andakkal, amuri, savukkāram, anda odu, suddha gangai, kulavikūdu, sāhākkāl, vēkātthalai, adi, nadu, mudi, ēgamūli, vēngai,

vālaippen, manonmani, sāgāmūli, mudikkanal, adippunal, nadukkāl, vanni picam, brahmakkal, vellaikkal.

Agatthiyar, Bōgar, Macchamuni, Konganar, Pathanjali and Thiruvalluvar are some of the siddhars who have written about *muppu* preparations in such words of hidden meaning.

The preparation of muppu according to Konganar is as follows:

Induppu (rock salt), sõrruppu (sodium chloride) and andakkal (stone of sky) are to be ground with white of egg and put to pudam in the usual procedure. A chunnam (calcinated powder) will be obtained in this process.

This *chunnam* is to be mixed with the milk of yarcum (calotrophis) to make a *seinir* (a specific alkaline solution used to prepare *parpam*, *chendūram*, *chunnam* etc). With the help of this *seinir* (victory water), all the 64 varieties of minerals can be made into *chunnam* (alkalinated powder).

Another siddha states that medical *muppu* is prepared by combining together *pūnīru*, andakkal and kallupppu.

Pūniru

It is a substance available in areas where washerman's soil, fuller's earth (*uvarman*), is found. In the months of *Māsi*, *Panguni* and *Chitthirai* (March, April and May) on the full moon day, a water-like substance comes out like a fountain from within the soil and forms a kind of salt after reacting with the surrounding soil. During the day, the places where *pūnīru* comes out will be seen like frozen whitish area.

The places where pūnīru is available

Pūnīru will not be available in all areas. It will be available only in places where washerman's soil is found in layers. Agatthiyar 12,000, a siddha work of literature, states that this type of soil is available at Thirupparankundram, Kannivādi, Dindugul, Thirupparanam, Thiruvānaikkā, Thiruchendūr, Kiliyanūr,

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Villianūr, Mannārkudi, Pasumalai, Sathuragiri, Thirumangalam, Mugavai, Velliangiri and the Vaigai river basin, Dharmapuri, Sivagangai, Kandi and Kathirkamam of Ceylon and in the northern part of Benaras where the Ganga river flows.

Procedure for obtaining pūnīru

The pūnīru (washerman soil - uvarman) which is taken at the correct time alone will be useful for medicine. In the months of Māsi, Panguni and Chitthirai (March, April and May) l0 days after the new moon day we have to collect pūnīru at night hours. With the help of glass spoons pūnīru should be collected from places where it comes out from the earth and preserved in glass vessels or mud pot. Pūnīru comes out from the earth as watery discharge. This discharge after coming out from within the earth forms flowerlike layers on the ground. When it reacts with atmospheric air, it takes whitish salt-like appearance.

This soil along with $p\bar{u}n\bar{i}ru$ has to be collected in quantities needed and has to be brought, going on the way to the right side of the temple of Amman and returning by the left of the temple then. This salt must be taken for the preparation of muppu devoutly, thinking that one is collecting this as if it were exclusively meant for purposes of charity.

 $P\bar{u}n\bar{i}ru$ should be mixed with twice its quantity of soft water and then filtered through a white thin cloth in a mud pot. The impurities will stay on in the cloth. After removing the impurities collected in the cloth, the filtered quantity should again be filtered. Filtration should be repeated again with a thick cloth. After the removal of all impurities, a clear fluid will be obtained. This fluid should be boiled or dried to get a salt.

First salt

In this salt, oily content should not be present. To remove the oily content, it should be dissolved in water in which the ashes of oyster shell are mixed or supernatant clear fluid obtained from lime water. This is called *sakthi uppu*, *vālai uppu*, mother salt, and *annai umainātha uppu*. This salt can be converted

into a form of *chunnam* and used as medicine. Salt which is obtained after the purification of $p\bar{u}n\bar{i}ru$ in this way is called the first salt.

Intermediate salt

Andakkal, or the sky stone, is called the intermediate salt or second salt. This stone will be like the limestone which is available in the soil where pūnīru is obtained. This type of stone will be available in this soil when it is dug out for about 2 to 3 feet deep. The shape of the stone will be like that of dried ginger of a bigger size. These stones are otherwise called Brahma stones. Andakkal will contain impurities like kōrai and savvu. These impurities should be removed.

Third salt

The third salt is *kalluppu*. This is white in colour. This salt is obtained from the sea. This is otherwise called *pārai uppu. vāri, mappu,* and *thirābōgam* are its synonyms.

kānavē kalluppu enrithanai virpār
kaṭaliliyē pāraikkuļ vaļarntha uppu
thōnavē paļinkukkal pōnrirukkum
thuvarppuṭanē puḷippirukkum marunthukkākā
- Vasittar Muppu Vaitthiya Sūtthiram

[See, this salt is sold as kalluppu,

This salt grows as rocks in the sea.

See that it is like shining stone,

Having astringent and pungent taste;

It cannot be used for medicine.]

Obviously, the correct form of *uppu* is to be selected.

All the above three salts are to be collected and made into the *chunnam* form of medicine. This is one of the procedures for the preparation of *muppu*. There are many other procedures like this.

Sākākkāl, vēkātthalai and pōkāppunal are the three vital ingredients of muppu. These three are explained in different ways by different siddhars. As such, a clear understanding of what constitutes muppu looks elusive. Nevertheless, a thorough study of all siddha original works and dictionaries like Nigandu texts may help us understand the correct meaning and procedures of preparation of muppu. Even Rāmalinga Adigalār had struggled a lot to find out the true significance of muppu.

Paṭṭṭṇatthār, Patthiragiriyār, Idaikkāṭṭu Siddhar, Pāmpāṭṭi Siddhar, and Azhuganni Siddhar are some important siddhars who have described *muppu.* Agatthiyar Gnānam, Kākapusandar Gnānam, Gnānasaranūl, and Karuvūrār Pūjāvithi are some of the literatures in which muppu is dealt with.

In the word $s\bar{a}k\bar{a}kk\bar{a}l$, the meaning of $k\bar{a}l$ is air. In $v\bar{c}k\bar{a}tthalai$, the meaning of thalai is said to be sahasrāram which is found in the head all above the six $\bar{a}th\bar{a}ras$. It is also called amuri or mathi amudhu. However, the words thalai and $k\bar{a}l$ are the jargons which point to the prevention of death and the prolongation of life.

Dr V. Subramanian

Glossary

abānan – downward air

aimbhūtham (pancha bhūtham) – five primordial elements

aithigam – tradition

akankāram – ego

anāgatham – cardiac region

anarpittham – gastric juice

andam – cosmos

animā – becoming as thin as an atom

anjanakkal – antimony, plumbi sulphuratum

sulphide of lead

annamaya kōsam – physical body

anthakaranam – inner seat of thought, feeling and

volition, consisting of four aspects, viz., manam (mind), buddhi (knowleddge), siddham

(wisdom) and akankāram (ego)

anumānam – inference

apā vam – perception

arasu – pipal (ficus religiosa l)

arugu – harialli grass (cynodon dactylon)

Glossary 275

arutthāpatthi	_	presumption
asoku	_	asoka tree (saraca indica)
atti		country fig (ficus glomerata)
avaraikkāy		field bean
avathāram	_	incarnation (of God)
avuri	_	Indigo plant (indigofera tinctoria)
ayyam		<i>kabam,</i> phlegm
azhincil	_	sage-leaved alangium (alangium salvifolium, wang)
ākkinai		midpoint of the eyebrows
ālōsakam		aqueous humour
āmam (sīdham)	-	coldness
āmavātham		indigestion-caused rheumatism
āsanam		posture
<i>āṭāthōdai</i>	-	malabar nut
āthāram	_	one of the six nerve-plexuses in the body (dynamic tattvik centre)
āthonṭai		thorny caper (capporis zeylanica)
āvārai		tanner's senna (cassia auriculata)
<i>bhūtha</i>	-	one of the five primordial elements
buddhi		knowledge
cāranai	-	purslane-leaved trianthema (trianthema decandra)
cenkadukkāy	-	red species of chebulic myrobalan (terminalia chebula)
cērānkoṭṭai	 '	marking-nut
chendhūrum		calcined powder red in colour

2,0	Diadia ivi	
chūranam	_	powder
chunnam		alkali powder
cippi	_	shell
ciruceruppaṭai	-	a prostrate shrub (glinus lotoides)
cunțai		turkey berry (solanum torvum)
dhāranai		control of mind
dhyānam		meditation
el		sesame (sesamum indicum)
ennei	_	oil
eruvāy	_	anus and ureter
erukku	_	yarcum; madar (calotropis
		gigantea)
etti		strychnine tree (strychnos nux
		vomica)
<i>ēlarisi</i>	_	cardamom
gnāna siddhi		attaining the supreme wisdom that all are one
gnānēndhiriyam	_	sensory organs
ilaikkalli	_	five-tubercled spurge
ilanthai	_	jujube
ilavangam	_	cloves
ilingam	_	mercuric sulphide (cinnabar)
induppu	_	rock salt
inji	_	ginger
irāja pilavai		carbuncle
iracam	_	mercury
iraikudal, amarvāsayam	_	a place where the digested food

settles

iraippu	_	bronchial asthma
itthi		white fig (ficus gibbosa)
iyalpu	_	natural inference
isatthuvam	_	ability to create anything one likes
iyamam	_	good habits
jadarākkini	_	inherent heat of the body; body fire
janni, sanni	_	toxaemia
kadalai		bengalgram
kadamba		common cadamba (anthocephalus cadamba)
kadugu		mustard
kadukkāy (kaṭukkāy)	_	gall-nut, chebulic myrobalan (terminalia chebula)
kalā	_	carissa
kalimbu	_	ointment
kalladaippu		urinari calculus
kalluppu	-	crystalline salt
kambu		bulrush millet
kandankatthari		a thorny plant with diffuse branches
kanja	_	Indian hemp (cannabis sativa)
kanmēndhiriyam (karumēndhiriyam)	_	organs of motor action
karantai	_	Indian globe-thistle (spaeranthus indicus)
karappān	_	eczema
karisālai		a plant usually found in wet places (eclipta alba)

karimā	_	the power of making oneself heavy at will
karma siddhi	-	attaining the supreme state by rendering service without attachment
karpūra silājat	_	asphalt mineral pitech
karu ūmatthai		purpie stramony (datura discolor)
karu vēlam		black babul (acacia nilotica)
karumaruthu	-	brown-hard-felted-backed- leaved winged myrobalan (shorea robusta)
karunai	_	yam
karunelli	-	small papery-downy glabrate elliptic-oblong -obtuse- or - acute-leaved feather-foil (phyllanthus reticulatus)
karungāli		Coromandel ebony of Mysore (diospyros melonoxylon)
karunocchi	_	willow-leaved justicia (justicia gendarussa)
karunthulasi	_	purple-stalked basil (ocimum basilicum)
karuppu sitthiramūlam	_	Cylon leadwort, a climber (plumbago auriculata)
karuthal		inference
karuvāy	_	cervix uterus and penis
karuvizhi		stroemia tertrandra
kastūri	_	zedoary
kaţrāzhai	_	aloe (aloe indica)
katthari	-	brinjal

kākkaṭṭān	-	mussell-shell creeper
kāndal (kāṭchi)	_	observation
kārai	_	a low shurb with sharp axillary spines met with in scrubby jungles and common waste places (canthium parviflorum)
kārāmani	_	chowlee bean
kāsam	_	tuberculosis
kāsinikkīrai		chicory leaves
kāychukkaṭṭi		a compound of catechu formed
		with the juice of young coconuts, areca-nuts and other spices
kēlvaragu	_	ragi
kicchili	_	bitter lime
kizh nokkukkal	-	abāna vāyu functioning in downward movements
kīzhānellī	-	a small plant with slender green main branches (phyllanthus amarus)
kodivēli	_	Cylon leadwort (plumbago zeylanica linn)
kollan kōvai	-	a climbing shrub (corallocarpus epigaeus benth)
kollu	-	horsegram
kotthavarai		cluster bean
kotthumalli		coriander
kozhuppu		lipid; fat
kōrai		bulrushes
kõrojanai		cow's bile
kōsam		body

manam

200	Diadia IV	
kudaicchal		gnawing pain
kudal piţippu		spasm in stomach
kudal vātham		lumbar spondylosis
kudinir	_	decoction
kudiyōtti pūndu		argemone mexicana
kumaṭṭal	_	nausea
kundalini	_	serpent power lying dormant at the base of spinal column
kunkiliyam	_	dammar
kunmam	_	chronic dyspepsia
kuppaimēni	_	Indian acalypha (acalypha indica)
kurinji	_	mountain and its surrounding areas
kurukkatthi		common delight of the woods (hiptage medoblota)
kuruthi vāngal	_	venesection (blood-letting therapy)
kuṭṭam	_	leprosy
kutthal		pricking pain
kuyyam	_	a centre in between the anus and the penis
lahim a		attaining an extremely small size
madhumēga nōy		diabetes mellitus
magōtharam		ascites
mahimā	_	attaining an extremely big size
malakkattu		constipation
malakkudal , malavāsayam	_	large intestines
malligai	_	a jasmine variety

mind

murungai

manatthakkāli	_	black nightshade
manipūrakam	_	epigastrium
manjal kāmalai	_	jaundice
manjal	_	turmeric
mantham		indigestion, sluggish liver
maramanjal	_	tree turmeric (berberis
		aristata.dc)
marudham		agricultural fields and surrounding areas
marukkārai	_	emetic-nut (catunaregum spinosa)
maruthu	_	arjuna (terminalia arjuna)
māsikkāy	_	galls (quercus infectona)
māthulai		pomegranate
māvilangu	_	round-berried cuspidate-leaved
		lingam tree (crataeva magua lour
		dc)
milagu		pepper
moccai	_	hyacinth bean
mudakku vāyu	_	rheumatism
mugulam	_	medulla oblongata
mukkunam	_	the three fundamental qualities of
		satthuvam, irasatham and
		thamōtham
mullai	-	forest and its surrounding areas
mullangi		radish
mullikkāy	_	Indian nightshade
munnaikkirai		leaves of fire-brand teak
munthiri paruppu	_	cashew

horse-radish

nilakkadalai

musumusukkai	_	bristly bryony creeper
musuṭṭai	_	bindweed leaves
muṭakaṭrān	_	balloon vine
mutthōdam	_	disorder of the threefold humours
mūkkiraṭṭai	-	spreading hogweed (boerhaavia, diffusa)
mūlāthāram	_	a nerve-plexus in the body, described as a four-petalled lotus, situate between the base of the sexual organ and the anus
mūlakkanal (mūlākkini)	_	internal heat having its seat in the mūlāthāram
nadukkam	_	tremor
nannāri		sarsaparilla
naramput talarcci	_	neurosis
naritthalai vātham	_	gonorrhoeal arthritis
navāccharam		ammonium chloride
nāratthai		wild lime
nāval	-	jaumoon-plum (eugenia jambolana)
nāyuruvi	_	a plant growing in hedges and thickets (achyranthes aspera var. rubro – fusca hook)
nei	_	ghee
neisaṭṭi (senkazhunir)	_	purple Indian water-lily (vernonia cinerea)
nellikkāy	_	emblic myrobalan
nerunji	_	cow's thorn
neydhal	_	coastal region

groundnut

nilappanai	-	moosly or weevil root (curculigo orchioides)
nilavākai		Tinnevelly senna (cassia senna)
niyamam		good activities
nīli	_	three-leaved chaste tree (indigofera tinctoria)
nīrkkōvai	_	coryza
nirkudal	_	bladder
nocchi		five-leaved chaste tree (vitex negundo l)
nōy mudhal nādal	_	pathological investigation
nõy nãdal	-	clinical diagnosis
nunã	_	Indian mulberry (morinda tinetora)
орри	_	comparison
oṭradam	_	fomentation; poultice
ozhipu	_	inference by elimination
<i>ōmam</i>	_	bishop's weed (carum rozburg
		hianum, trachyspermum voxburghianum craib)
õrithazh tāmarai	-	a pasture weed (hybanthus enneaspermus,onidium suffruticosum, ging)
pacchaik karpūram	_	borneo camphor
pakka vātham		paralysis
palā	_	jack fruit
pallippūndu	-	a flowering parasitic plant (striga aciatica [l] ktze)
panankizhangu	_	palmyra root

201	Diddin 112	
pancha bhūthas		the five primordial elements: earth, water, fire, air, space
parabhramam	_	super-consciousness
paranki chakkai	_	China-root, a climbing shrubby plant (smilax china)
parpam	_	metallic calx; calcined thing
pasalaikkirai		purslane
pasi inmai	_	anorexia
pasu(ciṭrarivu)		individual soul
paṭṭāni		peas
pathi(pērarivu)	_	universal wisdom
pavalam		coral
pavutthiram	_	fistula
payaru	_	greengram
pāgal		bitter-gourd
pālai	_	desert-like arid region
pāndu	_	anaemia
pārisa vāyu		hemiplegia
pāsam(sadapporul)	_	matter
pāshānam (pāṭānam)	_	arsenic, toxicant
perungumizh	_	coomb teak (gmelina arborea l)
peruvākai	_	siris (albizzia lebbek. benth)
pērarivu	_	universal wisdom
pērurakkam	_	coma
pēyppudal		wild snake-gourd
pilatthal	_	excruciating pain
puliyēppam	-	belching
pindam	_	human body
piramēgam	_	syphilis

pirandai	_	square-stalked vine
pirappam kizhangu		tuber of cyperus (calamus rotang)
picchu		enema
pirkku	_	sponge-gourd
poṇṇānkaṇṇī	-	a plant growing in damp places (alternanthera sessilis)
ponnānkāy	-	trijugate—leaved soapnut (sapindus emarginatus)
porkaiyān	-	Ceylon verbesina (wedelia chinensis)
porul		presumption
porumal	-	flatulence; bloating
poṭṭanam		medicated bundle
poţţiluppu		potassium corbonate
poṭralai kayyān	_	Ceylon verbesina (wedelia galandulacea)
pōdhagam		lymph
prātthi		the supernatural power of realizing all one desires
prakāmiyam		capacity to accomplish by will- power anything desired
pranāyāmam		breathing exercise
prānan		respiratory air
prāna vā yu	-	oxygen
prāsakam		bile
prathiyākāram	-	control of senses
pudalankāy		snake-gourd
pugai		fumigation
puliyārai	_	yellow wood sorrel

punku	_	Indian beech
punnai	_	mast-wood (calophyllum
		inophyllum)
puṭru valarcci	_	neoplasm
puzhukkați	_	alopecia; baldness
pūcchu	_	external application; plastering
pūlā		phyllanthus reticulatus
pūndu		garlic
pūniu		fuller's eartn
pūram	_	mercurous chloride (calomel)
pūsani	_	squash-gourd
ranjakam	_	hemoglobin
rasatthuvam	_	the quality of passion manifested
		in one's activity, zeal, courage,
		pride, etc., one of mukkunam
rasavātham	_	alchemy
samāthi		state of tranquillity
sanavātham		migraine
sandhigam	_	synovial fluid
sarkkarai nōy		diabetes
sathakuppai	_	dill
satthuvam	_	goodness or virtue, one of
satthuvam	_	goodness or virtue, one of mukkunam
sāmpal pūsani	_	
	_ _ _	mukkunam
sāmpal pūsani	- - -	<i>mukkunam</i> ash-gourd
sāmpal pūsani sāthikkāy	- - - -	mukkunam ash-gourd nutmeg

procumbens)

shenbakam	_	champak (michelia champaca.l.)
siddham	_	wisdom
sirukīrai	_	potherb
sirunāgam	-	ironwood of Ceylon (mesua nagassarium)
sirunerunchil	_	a prostrate herb found in waste places (tribulus terrestris)
sivanār vēmbu	-	wiry indigo (indigofera aspalathoides vahl)
sivathai		Indian jalap
sīdham (āmam)		coldness
silai	_	plaster
sinthil	_	gulancha
sīragam	_	cumin seeds
sīthalaccuram	_	pneumonia
siyakkāy	_	soap pod wattle
sōbai	_	dropsy, oedema
sõkai	-	dropsy; anaemia
sõlam	_	jowar
sõmpu	_	fennel
sukku	_	dried ginger
suraikkāy	_	bottle-gourd (lagenaria siceraria)
suṭṭikai	_	cauterization
suvāsakāsam	_	dyspnoea
swāthiṭṭānam		umbilical region
tavasu murungai		tranquebas gendrausa (rungia parviflora nees)
thaivēlai	_	black vailay leaves (gynandropsis

gynandra)

thamõtthuvam		the subtle quality of darkness or ignorance manifested in torpor, sleep, lust, anger, etc., one of mukkunam
thannirviṭṭān	-	climbing asparagus
tharā		chickweed
tharppanam	_	libations of water to gods, risis and manes
thazhuthāzhai (vāthamaṭakki)		windkiller
tālagam	_	orpiment
thāmbūlam		betel leaf, areca nut and lime
thānri	-	belleric myrobalam
thēṭrān	_	clearing-nut
thīṭṭu		pollution
thōdam		disorder of the humours of the body; defect in the functions of the bile, phlegm or wind
thokkanam	_	massage
thūthuvēlai	-	climbing brinjal leaves
thumpai		white dead nettle
thurusu	_	copper sulphate
tinai	_	millet
tulasi	_	sacred basil (ocimum sanctum)
tuvari	_	pigeon pea
udal thāthus (seven)		body fluids, blood, muscle, fat, bones, bone marrow, sperm / ova
udhānan	_	ascending vāyu, upward flow of air
unmai	_	probability
urai		textual authority

urinjal	-	suction
urulaikkizhangu	_	potato
usilam		black sirissa (albizia amara roxb)
uyirkkāl (prānavāyu)	_	oxygen
uyirppadakkam	_	insensibility to surroundings, the soul ceasing its functions
ūdhal		oedema
valaiyaluppu	_	glass-gall; sandiver
vali nõy		neuromuscular disorders
vallārai	-	Indian penny-wort (centella asiatica, centella alba)
varagu	_	common millet
vartthi		pessary
vasalai	_	purslane
vasampu	_	sweet flag
vasitthuvam		ability to attract anyone
vātha karshanam		hernia
vālmilagu	_	cubeb
vãnthi	-	vomiting; emesis
vāzhaitthandu	_	plantain spadix
vellaippūndu	_	garlic
vellarikkāy	_	cucumber
vellavarai	_	country bean
veluppu nōy	_	anaemia
venkāram	_	borax
venkāyam	_	onion
venkunri	_	white crab's eye
venkuṭṭam		leucoderma, vitiligo
venthayam		fenugreek

vēdhu – fumigation, steam exposure

vēr – root

vignānamaya kōsam – body of biochemistry

vilā – wood-apple

vilvam – bael

vishnu karantai – Indian globe thistle, seed basil–

(evolvulas alsinoides)

vinthu – semen

visuddhi – throat region

vitakarappān – eczema

viram – mercuric chloride

yānaikkāl – elephantiasis

yerukku – yarcum; madar (calotrophis

gigantea l.)

yōga siddhi – power achieved by practising

yōga

mélex

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Tamil Valarchi Kazhagam (The Tamil Academy)

- The Tamil Academy was established by the then Minister for Education Thiru T.S. Avinasilingam in the year 1946 with the sole objective of the development of the Tamil language.
- Thiru Avinasilingam's illustrious Chairmanship from 1946 to 1982 earned the Academy its distinct character.
- Thiru C. Subramaniam, who had been a minister at both the Centre and the State had guided the Academy as Chairman from 1982.
- Dr V.C. Kulandaiswamy has been the present Chairman, serving from 1990.
- During 1947-68, the Academy brought out the 10-volume Encyclopaedia in Tamil with M.P. Periasamy Thooran as the Chief Editor, the first of its kind in an Indian language.
- Under his editorship, the 10-volume Children's Encyclopaedia in Tamil had been published by the Academy during 1968-76. A revised second edition of this work in 10 volumes was brought out in 1988.
- Then on, the Academy took up publication of scientific works, and the period from 1991 to 1993 saw the publication of four works of this kind.
- The Academy then turned to bringing out books on medical science in Tamil, which saw the publication of 12 volumes on allopathic medicine under the title Medical Encyclopaedia during 1994-2003. An Index to this Encyclopaedia was published in 2006.
- Following this, under the scheme of publication of Siddha medical works, the Academy has brought out 7 volumes on the subject during 2003-2007. The eighth volume on children's medicine is in progress.
- These eight volumes on Siddha medicine are being translated into English with financial assistance from the Government of India.
- A new project on science and technology was started in 2008, under which 7 volumes were intended to be brought out on the following fields:
- Hydrology, Water Resources and Water Resources in Tamil Nadu, Agricultural Science and Agricultural Technology, Space Technology and Satellites, Nuclear Science and Atomic Energy, Biology and Biotechnology, Environmental Science, Computer Science and Information Technology
- So far, four volumes have been published, which are:
- Volume I Part-1: Hydrology, Part-2: Water Resources, Volume II Part-3 Water Resources in Tamil Nadu, Volume III Part-1 Agriculture, Volume IV Part-2: Horticulture, Part-3: Forestry
- Translation of Siddha medical works into English in 8 volumes is in progress. Already we have published Siddha Medicine Volume I: History, Siddha Medicine Volume III: Special Areas and Siddha Medicine Volume V: Diseases Related to Pittha. The book on hand, Siddha Medicine Volume II: Fundamentals is the fourth publication under this scheme.